



Water Services Operating Licence Audit



*Water Services Licence Audit and Asset Management
Review*

The City of Kalgoorlie-Boulder

Audit Report

Prepared By

Opus International Consultants (PCA) Pty
Ltd

Ian Thew
TAM Work Group Manager

Perth Office
2/186 Main Street, Osborne Park, WA 6017
PO Box 174, Osborne Park, WA 6917
Australia

Approved for
Release By

Michael Skeggs
Business Manager, Perth

Telephone: +61 8 9440 1555

Facsimile: +61 8 9440 1255

Date: 19 July 2011
Reference: WAKB0002/Final _V4
Status: Final

© Opus International Consultants (PCA) Pty Ltd 2011

Contents

1	Introduction.....	1
1.1	Background	1
1.2	Objectives and Scope of Audit and Review.....	1
1.3	Documents Reviewed.....	2
1.4	Risk Assessment	2
1.5	Personnel Interviewed	2
1.6	Time Frame of the Audit and Review	3
1.7	Previous Audit.....	3
1.8	Assessment and Compliance.....	3
1.9	Audit Time Input.....	5
2	Previous Audit Recommendations	5
3	Operating Licence Audit.....	5
3.1	Summary Table of findings of Operating Licence Audit	6
4	Asset Management System Review.....	10
4.1	Summary Table of findings of the Asset Management System Review	10
5	Conclusions	15
6	Compliance Statement	16
	Appendix A PREVIOUS AUDIT RECOMMENDATIONS WITH CURRENT STATUS	18
	Appendix B TABLE OF OPERATIONAL LICENCE FINDINGS.....	27
	Appendix C TABLE OF ASSET MANAGEMENT SYSTEM REVIEW FINDINGS	43
	Appendix D RISK ASSESSMENTS	57
	Appendix E RECOMMENDATIONS.....	62
	Appendix F POST IMPLEMENTATION PLAN.....	78
	(Produced by the City of Kalgoorlie – Boulder).....	78

1 Introduction

1.1 Background

The City of Kalgoorlie-Boulder (the City) has been issued an Operating Licence for the provision of sewerage services and non-potable water supply services in the City. The City is currently providing sewerage and non-potable water supply services under an Operating Licence issued by the Economic Regulation Authority (the Authority) dated 15th May 2009.

The City's sewerage system consists of approximately 207 kilometres of sewerage pipes, three pump stations and one Wastewater Treatment plant location (containing an IDEA plant and oxidation lagoons in case of fail and as storage for treated effluent).

The requirements of the City's Operating Licence No.4 Version OL2 and dated 15 May 2009 require operational audits and asset management system reviews to be undertaken every 24 months. The primary role of this audit is to provide the Authority with an assessment of the effectiveness of measures taken by the City to maintain those quality and performance standards that are referred to in the City's Operating Licence.

The City, with the approval of the Authority, commissioned Opus International Consultants Ltd (Opus) to conduct the 2011 operational audit and review of their asset management system. This audit was to cover the period between 1st December 2008 and 31st December 2010. This report will document the findings of the audit/review.

1.2 Objectives and Scope of Audit and Review

The purpose of the operational audit was to ensure that the City was complying with the performance and quality obligations set down in its current Water Services Operating Licence and the obligations of its agreed Customer Charter. To do this Opus focused on the systems and effectiveness of the processes used to ensure compliance with the standards, outputs and outcomes required by the licence.

The Water Services Licensing Act 1995 also requires the City to provide and maintain an asset management system. It is a requirement that the system sets out the measures to be taken by the City for the proper maintenance of its assets and for undertaking, maintenance and monitoring of its water services works.

The purpose of the asset management system review was to assess the measures that the City has in place for the proper management of its assets used in the provision and operation, and where appropriate the construction or alteration of assets covered under its licence.

The asset management system review focused on the asset management system and the City's asset management plans.

1.3 Documents Reviewed

The following documents relating to the water services operations and asset management were reviewed during the course of the audit;

- The City's Standard Operating Procedures;
- The City's Asset Management Plan;
- The City's current Water Services Licence;
- The City's Customer Charter;
- The City's Annual Report;
- The City's Water Treatment Plant Operating and Safety Procedures;
- The City's electronic Document Management System (*which included, as built drawings/plans, correspondence between the Authority and the Licensee, and complaints documentation*); and
- The City's electronic Asset Management System.

1.4 Risk Assessment

A risk assessment was undertaken as part of the Audit Plan, this identified the following elements as high risk. A copy of the risk assessment is included in Appendix D of this report.

1.4.1 Operational Audit

- Accounts Records;
- Provision of Information;
- Customer Service Charter;
- Customer Complaints;
- Sewerage Services; and
- Obligations to Customers, Availability and Connection of Services

1.4.2 Asset Management System Review

- Asset Operations;
- Asset Maintenance; and
- Contingency Planning.

1.5 Personnel Interviewed

The following personnel were interviewed or spoken to relating to the management, maintenance and operation of the water systems including;

City of Kalgoorlie-Boulder

- | | |
|-------------------|---|
| • Keith Boase | Manager Sustainability and Waste Services |
| • Mark Properjohn | Environmental Coordinator |
| • Emil Saule | Waste Technical Officer |

1.6 Time Frame of the Audit and Review

The audit and review covered the period from 1st December 2008 to 31st December 2010.

1.7 Previous Audit

The previous audit of June 2009 was reviewed and the recommendations and non-compliance issues are discussed later in this report. The City's Operating Licence has however been amended since the previous audit.

1.8 Assessment and Compliance

The licensee's effectiveness in complying with the requirements of its Operating licence was assessed using the tables taken from the Authority's Audit Guidelines August 2010 and shown below;

Effectiveness	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 of internal controls to maintain compliance
Compliant	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
Non-Compliant	2	Does not meet minimum requirements
Significantly Non-Compliant	1	Significant weaknesses and/or serious action required
Not Applicable	N/A	Determined that the compliance obligation does not apply to the licensee's business operations
Not Rated	N/R	No relevant activity took place during the audit period therefore it is not possible to assess compliance

Table 1. Operational/performance compliance rating scale

The licensee's effectiveness in complying with the key components of the Asset Management Review has been assessed by combining the outputs from Tables 2 and 3 shown on pages 4 and 5.

Rating	Description	Criteria
A	Adequately defined	<ul style="list-style-type: none"> Processes and policies are documented Processes and policies adequately document the required performance of the assets Processes and policies are subject to regular reviews, and updated where necessary The asset management information system(s) are adequate in relation to the assets that are being managed
B	Requires some improvement	<ul style="list-style-type: none"> Process and policy documentation require improvement Processes and policies do not adequately document the required performance of the assets Reviews of processes and policies are not conducted regularly enough The asset management information system(s) require minor improvements (taking into account the assets that are being managed)
C	Requires significant improvement	<ul style="list-style-type: none"> Process and policy documentation is incomplete or requires significant improvement Processes and policies do not document the required performance of the assets Reviews of processes and policies are significantly out of date The asset management information system(s) require significant improvements (taking into account the assets that are being managed)
D	Inadequate	<ul style="list-style-type: none"> Processes and policies are not documented The asset management information system(s) is not fit for purpose (taking into account the assets that are being managed)

Table 2. Asset management process and policy definition adequacy ratings

Rating	Description	Criteria
1	Performing effectively	<ul style="list-style-type: none"> The performance of the process meets or exceeds the required levels of performance; Process effectiveness is regularly assessed and corrective action taken where necessary.
2	Opportunity for improvement	<ul style="list-style-type: none"> The performance of the process requires some improvement to meet the required level; Process effectiveness reviews are not performed regularly enough; Process improvement opportunities are not actioned.
3	Corrective action required	<ul style="list-style-type: none"> The performance of the process requires significant improvement to meet the required level; Process effectiveness reviews are performed irregularly, or not at all; Process improvement opportunities are not actioned.
4	Serious action required	<ul style="list-style-type: none"> Process is not performed, or the performance is so poor that the process is considered to be ineffective.

Table 3. Asset management performance ratings

1.9 Audit Time Input

The professional resources utilised during the operational audit and asset management review were as follows;

- | | |
|---|----------------------|
| • Preparation of Audit Plan and Risk Assessment | 12 hrs |
| • Operational Audit and Asset Management Review | 20 hrs |
| • Preparation of draft report | 15 hrs |
| • Preparation of Final Report | 6 hrs |
| | <u>53 hrs</u> |

2 Previous Audit Recommendations

During the previous audit undertaken by GHD in 2009 a series of recommendations were made. These recommendations have been audited as part of this process and their current position is shown in Appendix A.

3 Operating Licence Audit

The operational licence audit findings are shown in Appendix B.

3.1 Summary Table of findings of Operating Licence Audit

Licence Clause or Schedule	Operating Licence Reference	Compliance Rating (5=Compliant with no further action required/1=significantly non-compliant)					
		5	4	3	2	1	N/R
Compliance	Cl.5						
	5.1	♦					
	5.2						♦
Accounting Records	Cl.15						
	15.1	♦					
Reporting	Cl.18						
	18a						♦
	18b						♦
Service and Performance Standards	Cl.20						
	20.1	♦					
Provision of Information	Cl.21						
	21.1	♦					
Publishing Information	Cl.22						
	22.1	♦					
	22.3						♦
	22.4						♦
Notices	Cl.23						
	23.1	♦					

Licence Clause or Schedule	Operating Licence Reference	Compliance Rating (5=Compliant with no further action required/1=significantly non-compliant)					
		5	4	3	2	1	N/R
	23.2						♦
Correct Operating Area	Sch 2	♦					
Customer Provisions	Sch 3						
Customer Service Charter	Cl.2						
	2.1			♦			
	2.2	♦					
	2.3	♦					
	2.4		♦				
	2.5	♦					
	2.6		♦				
	2.7	♦					
Customer Complaints	Cl.3						
	3.1	♦					
	3.3						♦
	3.4		♦				
	3.5						♦
	3.6						♦
	3.7						♦

Licence Clause or Schedule	Operating Licence Reference	Compliance Rating (5=Compliant with no further action required/1=significantly non-compliant)					
		5	4	3	2	1	N/R
	3.9		♦				
Customer Consultation	Cl.4						
	4.1	♦					
	4.2	♦					
	4.3						♦
Customer Contracts	Cl.5						
	5.2						♦
	5.4						♦
Customer Surveys	Cl.6						
	6.1						♦

Licence Clause or Schedule	Operating Licence Reference	Compliance Rating (5=Compliant with no further action required/1=significantly non-compliant)					
		5	4	3	2	1	N/R
Service and Performance Standards	Sch 4						
Customer Service Standards	Cl.1						
	1.1	♦					
	1.2			♦			
Sewerage Services	Cl.2						
	2.1a				♦		
	2.1b	♦					
Information Requirements	Sch 5						
Benchmarking and Performance Monitoring information	Cl.2						
	2.1	♦					
	2.2	♦					
	2.4	♦					

Licence Clause or Schedule	Operating Licence Reference	Compliance Rating (5=Compliant with no further action required/1=significantly non-compliant)					
		5	4	3	2	1	N/R
Other Provisions	Sch 6						
Obligations to Customers, Availability and Connection of Services	Cl.2						
	2.1		♦				
	2.2	♦					
	2.3						♦

4 Asset Management System Review

The Asset Management System review findings are shown in Appendix C.

4.1 Summary Table of findings of the Asset Management System Review

AM System Process	Performance Rating				Process and Policy Definition Adequacy			
	1	2	3	4	A	B	C	D
Asset Planning								
Planning process and objectives planning.			♦					♦
Service levels are defined.	♦				♦			
Non asset options			♦					♦
Lifecycle costs are assessed.		♦				♦		

AM System Process	Performance Rating				Process and Policy Definition Adequacy			
	1	2	3	4	A	B	C	D
Funding options are evaluated.			♦					♦
Costs are justified and cost drivers identified.		♦				♦		
Likelihood and consequences of asset failure		♦				♦		
Plans are regularly reviewed			♦					♦
Asset Creation and Acquisition								
Full project evaluations		♦				♦		
Evaluations include life cycle costs		♦						♦
Sound Engineering/business decisions		♦						♦
Commissioning tests and documented and undertaken.				♦				♦
Legal/Safety obligations assigned and understood		♦				♦		
Asset Disposal								
Under utilised/performing assets reviewed		♦						♦
Reasons for under utilisation/performance is critically examined		♦						♦
Disposal alternatives evaluated		♦						♦
Replacement Strategy		♦				♦		

AM System Process	Performance Rating				Process and Policy Definition Adequacy			
	1	2	3	4	A	B	C	D
Environmental Analysis								
Opps and threats to system are addressed		♦					♦	
Performance Standards are measured/achieved		♦				♦		
Compliance with statutory/regulatory requirements	♦					♦		
Achieve customer service levels		♦				♦		
Asset Operations								
Operational Policies/procedures linked to service levels	♦				♦			
Risk management prioritises tasks			♦					♦
Assets documented in asset register		♦					♦	
Operational costs measured and monitored		♦				♦		
Staff receive appropriate training		♦				♦		
Asset Maintenance								
Policies/procedures linked to service levels		♦				♦		
Regular inspections of assets are undertaken	♦				♦			
Maintenance plans completed on schedule			♦					♦
Failures analysed and plans adjusted where necessary.		♦						♦
Risk management prioritises tasks			♦					♦
Maintenance costs measured and		♦				♦		

AM System Process	Performance Rating				Process and Policy Definition Adequacy			
	1	2	3	4	A	B	C	D
monitored								
Asset Management System Information								
Adequate system documentation for users			♦					♦
Input controls include appropriate validation of data entered			♦					♦
Security access controls appear adequate		♦				♦		
Physical security access control appears adequate		♦				♦		
Data Backup procedures appear adequate		♦				♦		
Key computations related to performance reporting are accurate		♦				♦		
Management reports appear adequate to monitor licence obligations.		♦				♦		
Risk Management								
Risk management policies exist and are applied			♦					♦
Risk are documented in a risk register			♦					♦
Probability and consequences of failure are regularly assessed			♦					♦
Contingency Planning								
Contingency plans are documented, understood and tested			♦				♦	

AM System Process	Performance Rating				Process and Policy Definition Adequacy			
	1	2	3	4	A	B	C	D
Financial Planning								
Financial plan states financial objectives and strategies to achieve objectives		♦				♦		
The financial plan identifies the source of funds for capital expenditure and recurrent costs		♦				♦		
The financial plan provides projections of operating statements and statement of financial position		♦				♦		
The financial plan provides firm predictions on income for the next 5 years			♦				♦	
The financial plan provides for the operations and maintenance, admin and capital expenditure			♦				♦	
Significant variances are identified and corrective actions taken.		♦						♦
Capital Expenditure Planning								
The capital expenditure plan that covers issues to be addressed, actions, responsibilities etc			♦				♦	
The plan provides reasons for capital expenditure and timing of expenditure.		♦						♦

AM System Process	Performance Rating				Process and Policy Definition Adequacy			
	1	2	3	4	A	B	C	D
The capital expenditure is consistent with the asset life and condition identified in the AMP.		♦				♦		
There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.		♦						♦
Review of AMS								
A review process is in place to ensure that the AMP and AMS are kept current.		♦						♦
Independent reviews are performed of the AMS				♦				♦

5 Conclusions

On the 10 March 2011 an audit of the City of Kalgoorlie-Boulder's water services assets was undertaken on site in the City.

Operational Audit

It is evident that the small team that the City has, is committed to improving the service they provide to the residents and businesses of the City. The team has an obvious understanding of their sewerage network, how it functions and where any issues are likely to arise and what is required to deal with such incidents. It is also evident that the team operates efficiently, within current standards and code requirements to provide a service to their customers and residents with minimal risks. There is also evidence of improvement in the number of sewer blockages, and with the City having a refurbishment strategy in place this target should be achieved within the next 12 months. The City must however, ensure that it deals with written complaints in accordance with its licence obligations. It received one written complaint within the audit period and this was not dealt with within the prescribed timeframe.

Asset Management System Review

The Asset Management System review highlighted a number of areas of concern that need to be addressed. The issues relate to the documentation available. The City has created an asset management system and is populating it as more and more data becomes available.

Overall

The City is currently operating within its Licence requirements for the Operational audit. The major deficiencies within the Water Services Licence are related to the Asset Management System. The City has made great improvement since its last audit but still needs to make significant efforts to develop procedures and document these for the day to day management of the asset management system.

6 Compliance Statement

Ian Thew (Asset Management Consultant, Opus, Perth) and Mark Farrey (Environmental Consultant, Opus, Brisbane) have prepared this report.

It is certified that the "Economic Regulation Authority – Audit Guidelines – Electricity, Gas and Water Licences – August 2010" has been followed in conducting this audit and review, and in making the findings and preparing the report.

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

Ian Thew
Asset Management Consultant
Opus International Consultants (PCA) Pty Ltd
Suite 2, 186 Main Street
PO Box 174,
Osborne Park,
Perth
Western Australia
6017

Tel:(08) 9241 2110
Email:ian.thew@opus.com.au

Mark Farrey
Environmental Consultant
Opus International Consultants (PCA) Pty Ltd
Level 1, 2 Mayneview Street
Milton
Queensland
4064

Tel:(07) 3367 4951
Email:mark.farrey@opus.com.au

This page has been intentionally left blank

PREVIOUS AUDIT RECOMMENDATIONS WITH CURRENT STATUS

Previous Operational Licence Audit Recommendations

Recommendation	Current Position	Resolved/ongoing	Further Action Required
Expand current CCTV conditional appraisal of sewer system to create a refurbishment / replacement program to address high rate of sewer blockages.	<i>The City has decided upon a yearly programme of CCTV surveying, which identifies areas requiring repair or refurbishment.</i>	<i>Resolved.</i>	<i>No further action required</i>
Create and document a review procedure for the Customer Service Charter	<i>The City has a full customer charter and a summary customer charter. There is no review procedure in place.</i>	<i>Ongoing.</i>	<i>Write review procedure</i>

Previous Asset Management System Review Recommendations

Recommendation	Current Position	Resolved/Ongoing	Further Action Required
Asset Planning			
Identify and document service levels for assets	<i>The City has service levels defined in its Sewerage Scheme Asset Management Plan.</i>	<i>Resolved.</i>	<i>No further action required</i>
Identify and document likelihood and consequences of asset failures	<i>The City has started to identify risks and consequences in its Asset Management System.</i>	<i>Ongoing.</i>	<i>Complete and integrate into Asset Management Plan. The City has identified all risks and consequences relating to its license but has so far only identified risks and</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Recommendation	Current Position	Resolved/Ongoing	Further Action Required
			<i>consequences for approximately 40% of its physical assets.</i>
Identify and document asset objectives and lifecycle costs for all assets.	<i>The City has identified life-cycle costs and objectives of the assets in both its Asset Management Plan and the Asset Management System.</i>	<i>Resolved.</i>	<i>No further action required</i>
Asset Creation/Acquisition			
Create and implement asset creation and acquisition procedure including the evaluation of all life cycle costs	<i>The City's asset creations and acquisitions are done on a reactive basis. The City has implemented a refurbishment program which removes the major need for new assets to be created or acquired. Any new acquisitions are a result of reactive maintenance and this is then facilitated through the City's term maintenance contract.</i>	<i>Ongoing.</i>	<i>Write a procedure for creation/acquisition of assets and include in the Asset Management Plan</i>
Asset Disposal			
Create and implement asset	<i>The City disposes of</i>	<i>Ongoing.</i>	

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Recommendation	Current Position	Resolved/Ongoing	Further Action Required
disposal procedure based on performance of assets	<i>assets on a reactive basis. The City has implemented a refurbishment program which removes the major need for the disposal of assets due to low performance of an asset.</i>		<i>Write a procedure for disposal of assets and include in the Asset Management Plan</i>
Create and implement replacement strategy for sewer system	<i>The City has identified a refurbishment strategy rather than a replacement strategy.</i>	<i>Resolved.</i>	<i>No further action required</i>
Environmental Analysis			
Identify and document threats the sewer systems create and create emergency response procedures	<i>The current staff is aware of the sewer system and deal with threats from local knowledge. The City has started to identify risks and consequences in its Asset Management System.</i>	<i>Ongoing.</i>	<i>Complete and integrate into Asset Management Plan</i>
Identify and document threats the system environment creates for the sewer system and create procedures for minimizing the threats	<i>The current staff is aware of the sewer system and deal with threats from local knowledge. The City has started to identify risks and consequences in its Asset Management System.</i>	<i>Ongoing.</i>	<i>Complete and integrate into Asset Management Plan</i>
Identify and document performance requirements for all assets including availability of	<i>The City commissioned GHD to produce a state of network report, showing</i>	<i>Resolved.</i>	<i>No further action required</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Recommendation	Current Position	Resolved/Ongoing	Further Action Required
service and capacity.	<i>the sewer network and its condition and capacity.</i>		
Asset Operations			
Create and document a risk management procedure for asset operations	<i>The current staff is aware of the sewer system and deal with threats from local knowledge. The City has started to identify risks and consequences in its Asset Management System.</i>	<i>Ongoing.</i>	<i>Complete and integrate into Asset Management Plan</i>
Identify asset type, location, material, plans of components, an assessment of assets physical/structural condition and accounting data and enter into Asset Management Software	<i>The City's Asset Management System has an asset register within it, which has been populated with the majority of information required. At present only 10% of the information relating to South Boulder WWTP is missing. This is updated as new information becomes available.</i>	<i>Resolved.</i>	<i>Continue to update the asset register as information is received.</i>
Asset Maintenance			
Continue to create and document policies and procedures linked to service	<i>The City has created an Asset Management Plan and has developed some</i>	<i>Ongoing.</i>	<i>The City must develop all procedures to supplement the site work they are</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Recommendation	Current Position	Resolved/Ongoing	Further Action Required
levels for the sewer system	<i>operating procedures.</i>		<i>undertaking</i>
Create, document and regularly review maintenance plan for the sewer system including emergency, corrective and preventative measures	<i>The Asset Management Plan has maintenance planning in it, although this needs to be expanded. There is no procedure for reviewing the document.</i>	<i>Ongoing.</i>	<i>A procedure needs to be written to document how and when the maintenance plan is updated and reviewed.</i>
Undertake risk analysis of maintenance tasks and prioritise maintenance plan based on risk assessment	<i>A generic risk analysis of the sewerage system is available in the Asset Management System. Specific risk assessments are undertaken for specific maintenance tasks.</i>	<i>Resolved.</i>	<i>No further action required</i>
Asset Management Information System			
Create data verification procedure for asset data	<i>Data is input by experienced staff.</i>	<i>Ongoing.</i>	<i>Create a review procedure for inputting of data.</i>
Purchase / Develop Asset Management software and roll over all asset data to one system	<i>The City has implemented an Asset Management System developed by GHD.</i>	<i>Resolved.</i>	<i>No further action required</i>
Risk Management			
Identify risks and create risk management procedures and policies	<i>The City has identified some risks and continues to update the risk register; there is no procedure or policy for this.</i>	<i>Ongoing.</i>	<i>The City must create risk management policies and link them to the Asset Management Plan</i>
Create and document risk register including the treatment and consequences of asset	<i>The City has identified some risks and continues to update the risk register;</i>	<i>Ongoing.</i>	<i>This must be linked to the Asset Management Plan</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Recommendation	Current Position	Resolved/Ongoing	Further Action Required
failure	<i>there is no procedure or policy for this.</i>		
Contingency Planning			
Create and document contingency plans based on risk management for the sewer system	<i>The City is developing contingency plans for its sewerage assets and this is included in the City's Asset Management Plan. This is based on local knowledge.</i>	<i>Ongoing.</i>	<i>Continue to develop local knowledge into defined procedure</i>
Financial Planning			
Create and document 5 year financial plan including predicted costs for operation, maintenance and capital upgrade and expansion	<i>The City has a 5 year financial plan included in the Asset Management Plan; it also has longer term financial control within the Asset Management System.</i>	<i>Resolved.</i>	<i>No further action required</i>
Capital Expenditure Planning			
Continue to create a capital expenditure plan based on the conditions of assets	<i>This is currently done through the City's Asset Management System and is updated regularly as work is undertaken on site.</i>	<i>Resolved.</i>	<i>No further action required</i>
Review of AMS			
Create asset management review procedure to ensure system is reviewed regularly	<i>The system is not reviewed on a planned basis.</i>	<i>Ongoing.</i>	<i>The City must create a review procedure.</i>

TABLE OF OPERATIONAL LICENCE FINDINGS

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
Clause 5	Compliance		
5.1	Subject to any modifications or exemptions granted pursuant to the Water Services Licensing Act 1995, the licensee must comply with any applicable legislation.	<i>After reading the licence requirements and checking the City's document management system it is evident that the City complies with legislation.</i>	5
5.2	The Authority may direct the licensee in writing to do any measure necessary to:		
	a. Correct the breach of any applicable legislation; or	<i>n/a during the audit period.</i>	N/R
	b. Prevent the breach of any applicable legislation occurring again.	<i>n/a during the audit period.</i>	N/R
Clause 15	Accounting Records		
15.1	The licensee and any related body corporate must maintain accounting records that comply with the AASB Standards or equivalent International Accounting Standards.	<i>The financial report is included within the City's Annual General report. It is available on the City's internet site and was viewed during the audit. It is stated by the CEO in the report that all records are in line with AASB standards.</i>	5
Clause 18	Reporting		
	The licensee must report to the Authority:		
	a) If the licensee is under external administration as defined by the Corporations Act 2001 (Cwlth) within 2 business days; or	<i>Not an issue within audit period.</i>	N/R
	b) If the licensee experiences a significant change in the licensee's corporate, financial or technical circumstances upon which this licence was granted which may affect the licensee's ability to meet its obligations under this licence within 10 business days of the change	<i>Not an issue within audit period.</i>	N/R

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
	occurring.		
Clause 20	Service and Performance Standards		
20.1	The licensee must comply with the service and performance standards as set out in Schedule 4.	<i>After checking with the City's document management system both on the audit day and remotely after the audit it is evident that the City complied with the requirements of this clause during the audit period.</i>	5
Clause 21	Provision of Information		
21.1	The licensee must provide to the Authority any information that the Authority may require in connection with its functions under the Act in the time, manner and form specified by the Authority.	<i>The City has provided all information and reports requested. The City has a document management system which documents all requests this was viewed during the audit, and was reviewed remotely after the audit.</i>	5

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
Clause 22	Publishing Information		
22.1	The Authority may direct the licensee to publish any information within a specified timeframe it considers relevant in connection with the licensee or performance by the licensee of its obligations under the licence.	<i>The City publishes all information requested. During the audit period the Authority did not direct the licensee to publish any information during the audit period. The City has a document management system which documents all requests for service this was viewed during the audit and was reviewed remotely after the audit.</i>	5
22.3	If the licensee considers that the information is		N/R

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
	confidential it must; a) Immediately notify the authority; and b) Seek a review of the Authority's decision	<i>n/a during the audit period.</i>	
22.4	Once the Authority has reviewed the decision it will direct the licensee in accordance with the review to: a) Publish the information; or b) Publish the information with the confidential information removed or modified; or c) Not publish the information	<i>n/a during the audit period.</i>	N/R
Clause 23	Notices		
Clause 23.1	Unless otherwise specified, all notices must be in writing	<i>Over the audit period the City's document management system shows that there was 56 items of written correspondence between the City and the ERA.</i>	5
Clause 23.2	A notice will be regarded as having been sent and received:		N/R
	a) When delivered in person to the addressee; or	<i>n/a during the audit period.</i>	N/R
	b) 3 business days after the date of posting if the notice is posted in Western Australia; or	<i>n/a during the audit period.</i>	N/R
	c) 5 business days after the date of posting if the notice is posted outside Western Australia; or	<i>n/a during the audit period.</i>	N/R
	d) If sent by facsimile when, according to the sender's transmission report, the notice has been successfully received by the addressee; or	<i>n/a during the audit period.</i>	N/R
	e) If sent by email when, according to the	<i>n/a during the audit period.</i>	N/R

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
	sender's electronic record, the notice has been successfully sent to the addressee's water licensing email address.		
Schedule 2	Operating Areas		
	The licensee may provide the water services indicated in this schedule and within those areas designated by reference to plan number OWR-OA-028.	<i>The City operates and provides services within the boundaries of this plan.</i>	5
Schedule 3	Customer Provisions		
Clause 2	Customer Service Charter		
2.1	The licensee must have in place a customer service charter that accords with the Authority's review guidelines.	<i>The City has a full service charter in place. It is however, dated June 2008.</i>	3
2.2	The customer service charter;		
	a) Should be drafted in 'plain english'; and	<i>The Customer Service Charter is drafted in plain english.</i>	5
	b) Should address all of the service issues that are reasonably likely to be of concern to its customers.	<i>The Customer Service Charter addresses all reasonably likely concerns.</i>	5
2.3	Different parts of the customer service charter may be expressed to apply to different classes of customers.	<i>The Customer Service Charter has been written to apply to differing classes of customers.</i>	5
2.4	Any proposed amendment to the customer service charter must be forwarded to the Authority for approval.	<i>A summary Customer Service Charter was created during the audit period. This was passed to the ERA for approval and approved on 17/2/10. The full charter will be reviewed post audit. These documents</i>	4

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
		<i>are listed on the City's document management system which was seen during the audit and was reviewed remotely after the audit.</i>	
2.5	The licensee must make the customer service charter available to its customers in the following ways:		
	a) By prominently displaying it in those parts of the licensees offices to which customers have regular access;	<i>The summary customer service charter was available in the reception of the council offices.</i>	5
	b) By providing a copy, upon request, and at no charge, to the customer; and	<i>The summary charter is available at the reception at no cost; it is also available through the post if requested.</i>	5
	c) By sending a current copy, or a summary document approved by the Authority, to all customers at least once in every three year period or as agreed with the Authority.	<i>The summary customer service charter is issued to all customers with the rates bills.</i>	5
2.6	The customer service charter is to be reviewed by the licensee at least once in every three year period or as agreed with the Authority	<i>This has been changed to every 24 months. The summary version has been amended during the audit period, however the full charter needs to be reviewed and amended.</i>	4
2.7	The licensee will provide services in a way which is consistent with its customer service charter.	<i>The City provides services to its customers in accordance with its Customer Service Charter.</i>	5
Clause 3	Customer Complaints		
3.1	The licensee must have in place, a properly resourced process for effectively receiving, recording and (where possible) resolving	<i>The City has a 24 hour complaint line; all calls regarding water services are received and forwarded to the relevant</i>	5

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
	customer complaints within a timeframe of 15 business days.	<i>officer during the day or the on call officer out of hours. Written complaints are dealt with using the City's corporate complaints procedure.</i>	
3.3	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 Department of Water.	<i>n/a during the audit period.</i>	<i>N/R</i>
3.4	Where a dispute has not been resolved within 15 business days the licensee must inform the customer of the option of referring their complaint to the Department of Water.	<i>It appears from the letters on the City's document management system that the option of referring to the Department of Water was not given. This issue is however, dealt with in the City's Customer Service Charter dated August 2010.</i>	<i>4</i>
3.5	Where a dispute is referred to the Department of Water, the Department may;		
	a) Conciliate the dispute; or	<i>n/a during the audit period.</i>	<i>N/R</i>
	b) Direct the licensee or the customer to binding arbitration	<i>n/a during the audit period.</i>	<i>N/R</i>
3.6	During investigation and conciliation, the licensee must make every endeavor to promptly cooperate with the department of Water (or it's representative's) requests, which must include expeditious release of any information or documents requested by the Department of Water and the availability of the relevant staff of the license.	<i>n/a during the audit period.</i>	<i>N/R</i>
3.7	The licensee must, on request, provide the Department of Water with details of complaints	<i>n/a during the audit period.</i>	<i>N/R</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
	made, names and addresses of customers who have made complaints and the manner in which the complaint was resolved.		
3.9	To ensure the effectiveness of this process the licensee must, as a minimum:		
	a) Record details of each customer complaint and its outcome;	<i>The City utilises its document management system to record all complaints. This was seen during and interrogated during the audit and was reviewed remotely after the audit. The one complaint received in writing was resolved to the satisfaction of the customer. It is also evident from checking the City's employee diary that the matter was resolved to the satisfaction of the complainant within the prescribed timeframe. However, due to Christmas holidays the official letter was not sent within the relevant timeframes.</i>	4
	b) 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 necessary decisions to settle customer complaints or disputes, and where applicable, make recommendations to Council as to the payment of monetary compensation; and	<i>The City currently has 2 staff with in the Sustainability and Waste Services team who are conflict and dispute resolution trained and have the necessary authorities required.</i>	4
	c) Make all necessary arrangements to ensure that if possible complaints can	See 3.1.	5

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
	be resolved in the timeframes set out in sub-clause 3.8.		
Clause 4	Customer Consultation		
4.1	The licensee must establish ongoing customer consultation processes which both inform customers and proactively solicit customer opinion on the licensee's operations and delivery of services. The licensee can either:		
	a) Establish a Customer Council and consult with the Customer Council to facilitate community involvement in issues relevant to the exercise of the licensee's levels of service under the licence; or	<i>The City uses part b of this Clause.</i>	N/R
	b) Institute at least two of the following processes:		
	i) Meet on a regular basis with customers to seek comment on issues relevant to the exercise of the licensee's levels of service under the licence.	<i>See below 2 out of 3 are achieved.</i>	5
	ii) Publish a simple newsletter providing basic information about the licensee's operations; and/or	<i>The City issues its summary customer services charter annually with the rates. It also publishes items in the City's newsletter to inform residents. It is also a part of the City's annual report.</i>	5
	iii) Establish other forums for consultation to enable community involvement in issues relevant to the exercise of the licensee's obligations under the licence.	<i>The City regularly liaises with residents when works are required on site. This may range from simple letter drops to site meetings to discuss proposals and solutions.</i>	5

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
4.2	The Authority must be consulted with respect to the type and extent of customer consultation to be adopted by the licensee	<i>The Authority was informed of the City's decision to use the above method by writing on 27th June 2008. This is documented in the City's document management system.</i>	5
4.3	The licensee may, or at the request of the Authority, must, establish other forums for consultation, to enable community involvement in issues relevant to the exercise of the licensee's obligations under this licence.	<i>After speaking with the City's staff and interrogating the City's document management system it is evident that no other forums have been requested by the Authority during the audit period.</i>	N/R
Clause 5	Customer Contracts		
5.2	To enter into agreement the following conditions must be met by the licensee		
	a) The agreement must be approved by the Authority prior to its commencement; and	<i>After speaking with the City's staff and interrogating the City's document management system it is evident that no new contracts have been entered into during the audit period.</i>	N/R
	b) The agreement must not be amended without the prior approval of the Authority.	<i>After speaking with the City's staff and interrogating the City's document management system it is evident that no new contracts have been entered into during the audit period.</i>	N/R
5.4	If the licensee enters into an agreement with a customer that excludes, modifies or restricts the terms and conditions of this licence, the licensee must publish report annually that includes the following:		

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
	a) The total number of agreements entered into, categorised by location and the type of exclusion, modification or restriction;	<i>After speaking with the City's staff and interrogating the City's document management system it is evident that no new contracts have been entered into during the audit period.</i>	N/R
	b) The number of agreements entered into during the reporting period, categorised by location and the type of exclusion, modification or restriction;	<i>After speaking with the City's staff and interrogating the City's document management system it is evident that no new contracts have been entered into during the audit period.</i>	N/R
	c) The total number of agreements entered into, categorised by location and by land use; and	<i>After speaking with the City's staff and interrogating the City's document management system it is evident that no new contracts have been entered into during the audit period.</i>	N/R
	d) The number of agreements entered into during the reporting period, categorised by location and by land use.	<i>After speaking with the City's staff and interrogating the City's document management system it is evident that no new contracts have been entered into during the audit period.</i>	N/R
Clause 6	Customer Surveys		
6.1	The Authority may require the licensee to commission an independent customer survey which must address and conform to the conditions and parameter set out in writing by the Authority.	<i>After speaking with the City's staff and interrogating the City's document management system it is evident that the authority has not requested this during the audit period.</i>	N/R
Schedule 4	Service and Performance Standards		
Clause 1	Customer Service Standards		
1.1	Emergency Response		
	The licensee shall provide an emergency	<i>The City has an officer on 24 hour call</i>	5

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
	telephone advice system such that customers need make only one telephone call to report an emergency and that the customer shall be advised of the nature and timing of the action to be undertaken by the licensee in accordance with the relevant performance indicator/target.	<i>that responds to all calls immediately and assesses the response required by the City's contractor who if required, attends to the incident within one hour of notification of the incident. The City has achieved the required performance indicator target of 90%.</i>	
1.2	Customer Complaints		
	The licensee shall respond to customer complaints in accordance with the relevant performance indicator/target.	<i>The City received 1 written complaint during the audit period. By interrogating the City's document management system and City staffs diaries it is evident that this issue was resolved but not responded to formally within the target period of 15 working days or within the City's corporate target of 14 days.</i>	3
Clause 2	Sewerage Services		
2.1	Sewerage Services		
	The licensee must comply with the relevant sewerage service standards performance indicator/target.	<i>The City has made a marked improvement in sewer blockages since the previous audit. The blockage figures recorded on the Asset Management System for the current audit period are; Jan 2009-Dec 2009 = 118 /100km Jan 2010-Dec 2010 = 75/100km This is however, still above the target of 40 blockages per 100km of sewer.</i>	2
		<i>Within the audit period the number of</i>	5

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
		<i>connected properties according to NWI Audit was 12864. In 2010 29 sewerage overflows were recorded and in 2009 45 were recorded. These figures are above the 90% required to achieve the performance target set.</i>	
Schedule 5	Information Requirements (Reporting)		
Clause 2	Benchmarking and Performance Monitoring Information		
2.1	The licensee will provide the Authority with data required for performance monitoring purposes as set out in the Water Compliance Reporting Manual.	<i>The City has provided information required. All letters sent out are documented on the City's document management system.</i>	5
2.2	The licensee must provide the data required by Schedule 5 clause 2.1 for the previous financial year by 31 October each year.	<i>During this audit period the City has sent the required reports to the Authority on 22/09/09 and 22/07/10. These were seen from the City's document management system.</i>	5
2.4	The data supplied to the Authority in accordance with performance indicators LSS 1 and LSS 2 in the Water Compliance Reporting Manual must also be provided on a monthly and a rolling 12 month basis.	<i>The City has provided these reports to the Authority annually but not monthly during the audit period. However, after consultation with the ERA it is evident that monthly reporting is no longer required. These reports are saved and documented on the City's document management system.</i>	5

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule	Obligation of Licence	Comment	Compliance Scale
Schedule 6	Other Provisions		
Clause 2	Obligations to Customers, Availability and Connection of Services		
2.1	The licensee must set out in writing its 'conditions for connection' and make that information available to all applicants for connection and to people enquiring about connection.	<i>The City has a 'connecting to sewerage' information sheet. The document is however, not on display in the council offices but has to be requested, thus avoiding wasted copies.</i>	4
2.2	The licensee must ensure that its services are available for connection on request to any land situated in the Operating Areas, subject to the applicant meeting any conditions the licensee may determine to ensure safe, reliable and financially viable supply of services to land in the Operating Areas in accordance with the conditions of connection is to be taken as forming an essential requirement of gaining approval for connection to the licensee's schemes.	<i>All building approvals by the City have the sewer connection standards attached to ensure that all land owners and developers are aware of their obligations. The City also has a connection to sewer (SW1) form and procedure in its Standard Operating Procedures Manual.</i>	5
2.3	The licensee may, with the written agreement of the properly owner, discontinue a service to a property where the servicing of the property is not commercially viable.	<i>n/a during the audit period.</i>	N/R

A summary of the above is shown in Table 3.1

This page has been intentionally left blank

**TABLE OF ASSET MANAGEMENT SYSTEM REVIEW
FINDINGS**

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
1	Asset Planning		
	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.	<i>The team understands the requirements but documentary evidence of any objectives are lacking.</i>	D3
	Service levels are defined.	<i>Levels of Service are defined within the City's Asset Management Plan.</i>	A1
	Non asset options are considered.	<i>No documented objectives or procedures in place.</i>	D3
	Lifecycle costs of owning and operating assets are assessed.	<i>The City's Asset Management System does have current costs and projections of costs through the life of the asset. This is still being populated and is not yet complete.</i>	B2
	Funding options are evaluated.	<i>Current staff are aware of funding options although this is not documented.</i>	D3
	Costs are justified and cost drivers identified.	<i>Cost drivers are not identified. Costs are justified through tender process for works. The tender process is documented within the City's operating procedures, and is audited independently.</i>	B2
	Likelihood and consequences of asset failure are predicted.	<i>This is understood by the City's staff and part of the Asset Management System is the risk assessment which considers these points.</i>	B2
	Plans are regularly reviewed and updated.	<i>Plans are reviewed on an adhoc basis, no procedure is in place to define timescales and format etc.</i>	D3

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
2	Asset Creation and acquisition		
	Full project evaluations are undertaken for new asset, including comparative assessment of non-asset solutions.	<i>Evaluation is undertaken for small projects, larger jobs are tendered and tender evaluation is undertaken in line with City procedures. Nontraditional options are considered. The tender process is documented.</i>	<i>B2</i>
	Evaluations include all life-cycle costs.	<i>Life cycle costing is undertaken as part of the Asset Management System. This is not documented.</i>	<i>D2</i>
	Projects reflect sound engineering and business decisions.	<i>Works undertaken during the current audit period show evidence of engineering judgment being employed to determine the best procedure for the works and best value for the City. This is based on staff knowledge and skill rather than documented evidence.</i>	<i>D2</i>
	Commissioning tests are documented and completed.	<i>Commissioning tests have not been undertaken and therefore not documented during the audit period.</i>	<i>D4</i>
	Ongoing legal/safety obligations of the asset owner are assigned and understood.	<i>This is understood by the City and part of the Asset Management System is the risk assessment which considers these points.</i>	<i>B2</i>
3	Asset disposal		
	Under-utilised and underperforming assets are identified as part of a regular systematic review process.	<i>The City feels that it has no underperforming or under-utilised assets; in fact it feels the opposite is true. No documented procedure in place for reviewing the assets.</i>	<i>D2</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken.	<i>The City feels that it has no underperforming or under-utilised assets; in fact it feels the opposite is true. No documented procedure in place for reviewing the assets.</i>	<i>D2</i>
	Disposal alternatives are evaluated.	<i>No sewer lines have been disposed of; items at the WWTP are replaced and disposed of appropriately when required. There is no procedure in place.</i>	<i>D2</i>
	There is a replacement strategy for assets.	<i>The City is currently undertaking a re-lining strategy for its sewer asset this allows the sewer life to be extended thus removing the need for replacement. This becomes a refurbishment strategy as documented in the City's SOP manual.</i>	<i>B2</i>
4	Environmental analysis		
	Opportunities and threats in the system environment are assessed.	<i>As part of the Asset Management System the City has a risk assessment which will cover environmental issues. However, currently the risk assessment is a work in progress and needs completing.</i>	<i>C2</i>
	Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved.	<i>The City endeavors to achieve the required performance standards and in certain circumstances goes above and beyond the obligations of its licence.</i>	<i>B2</i>
	Compliance with statutory and regulatory requirements.	<i>Statutory and regulatory requirements are met.</i>	<i>B1</i>
	Achievement of customer service levels.	<i>Service levels are defined both in the operating licence and in the Asset Management Plan after assessing the</i>	<i>B2</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
		<i>documents in the document management system and the Asset Management System these service levels appear to being met on the whole.</i>	
5	Asset Operations		
	Operational policies and procedures are documented and linked to service levels required.	<i>The City has procedures in place for Sewer Blockages, emergency liquid waste spills, trade waste disposal and it's out of hour's service all in its Standard Operating Procedures dated Feb 2011 and linked to the Summary Customer Service Charter.</i>	A1
	Risk management is applied to prioritise operations tasks.	<i>Risk Management is applied through staff knowledge rather than documented procedure. This is being improved through the implementation of the Asset Management System which includes risk assessments for all assets.</i>	D3
	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.	<i>Asset register exists including condition data within the Asset Management System The accounting data is contained separately but within the same Asset Management System. The data within the Asset Management System is continually being updated as new information becomes available. The process for this is not however documented.</i>	C2
	Operational costs are measured and monitored.	<i>Operational costs are measured and monitored against the budget through the Asset Management System.</i>	B2

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
	Staff receive training commensurate with their responsibilities.	<i>Training is received through the City's corporate budget as required. The training is however in line with needs and responsibilities.</i>	<i>B2</i>
6	Asset maintenance		
	Maintenance policies and procedures are documented and linked to service levels required.	<i>Policies and procedures are defined in the Asset Management Plan and Standard Operating Procedures Manual for all aspects of the sewerage system and WWTP including Sewer Blockages, its AM Plan, emergency liquid waste spills, trade waste disposal and its out of hours service .</i>	<i>B2</i>
	Regular inspections are undertaken of asset performance and condition.	<i>A CCTV inspection programme has been implemented by the City to ensure that it inspects the condition of its assets; this also identifies areas of the system that are not performing, the City also has procedures for checking the Pumping Stations on its system These procedures are documented in the City's AM Plan and its Standard Operating Procedures</i>	<i>A1</i>
	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.	<i>An inspection regime for the sewer system is in place, this then forms the basis of the maintenance works, although it is not documented.</i>	<i>D3</i>
	Failures are analysed and operational/maintenance plans adjusted where necessary.	<i>Failures in both the sewer system and the WWTP are recorded and analysed using the Asset Management System. This procedure is not documented.</i>	<i>D2</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
	Risk management is applied to prioritise maintenance tasks.	<i>Risk Management is applied through staff knowledge rather than documented procedure. This is being improved through the implementation of the Asset Management System which includes risk assessments for all assets.</i>	<i>D3</i>
	Maintenance costs are measured and monitored.	<i>Operational costs are measured and monitored against the budget through the Asset Management System.</i>	<i>B2</i>
7	Asset Management Information System (MIS)		
	Adequate system documentation for users and IT operators.	<i>No user guides have been created for the Asset Management System. The system is currently maintained by experienced users.</i>	<i>D3</i>
	Input controls include appropriate verification and validation of data entered into the system.	<i>The City has a small highly trained team therefore the data input is by experienced staff and checked for errors as input. This procedure is not documented.</i>	<i>D3</i>
	Logical security access controls appear adequate, such as passwords.	<i>The City's computers all have password protection. The Asset Management System is Excel based and is password protected with only the small experienced team that the City employs having access.</i>	<i>B2</i>
	Physical security access controls appear adequate.	<i>The City's computers all have password protection. The Asset Management System is excel based and therefore has limited security but access is limited to a small number of trained experienced staff. There is also security in place to</i>	<i>B2</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
		<i>ensure that only staff with access to the buildings can access these areas of the offices.</i>	
	Data backup procedures appear adequate.	<i>The City's computer system is backed up daily.</i>	<i>B2</i>
	Maintenance costs are measured and monitored.	<i>Operational costs are measured and monitored against the budget through the Asset Management System.</i>	<i>B2</i>
	Management reports appear adequate for the licensee to monitor licence obligations.	<i>The Asset Management System allows instant sight of complaints, number of blockages to date etc. This is used to monitor against the licence obligations.</i>	<i>B2</i>
8	Risk Management		
	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system.	<i>The staff understands the need for risk management and the Asset Management System has risk assessments including risk management in it. However, this is a work in progress and needs to be completed. There are no documented procedures.</i>	<i>D3</i>
	Risks are documented in a risk register and treatment plans are actioned and monitored.	<i>The staff understands the need for risk management and the Asset Management System has risk assessments including risk management in it. However, this is a work in progress and needs to be completed. There are no documented procedures</i>	<i>D3</i>
	The probability and consequences of asset failure are regularly assessed.	<i>The staff understands the need for risk management and the Asset Management System has risk assessments including risk management in it. However, this is a</i>	<i>D3</i>

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
		<i>work in progress and needs to be completed. There are no documented procedures.</i>	
9	Contingency Planning		
	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.	<i>The City's WWTP has a contingency plan in place. Contingency plans for the sewer system are being developed although the staff is fully aware of the system and what is require, the City has a member of technical staff on 24hours call and a plumber on 24 hours call to deal with emergencies as they arise..</i>	C3
10	Financial Planning		
	The financial plan states the financial objectives and strategies and actions to achieve the objectives.	<i>The financial plan is included in the Asset Management Plan. The financial statements include income to 2014/15. The City's budget is available on the City's intranet. The asset Management System has a series of financial spreadsheets. The Asset Management Plan has a statement titled "statement of Financial Management Philosophy and Objectives" which states "to operate the scheme in a financially responsible manner within the limitations imposed by the needs of the scheme and regulatory requirements. It is the intention wherever possible to produce a surplus of income over expenditures (including capital) to</i>	B2

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
		<i>enable sufficient reserves to be set aside for future requirements of the scheme"</i>	
	The financial plan identifies the source of funds for capital expenditure and recurrent costs.	<i>The financial plan is included in the Asset Management Plan. In this there is a section titled 'source of funds' in which the following is stated "all funds for CAPEX, operations, maintenance and administration will be sourced from specified area rates levied under section 6.37 of the Local Government Act 1995, and reserves created from surpluses resulting from rates."</i>	B2
	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets).	<i>The City's Sewerage Asset Management Plan does not hold the balance sheet; it holds financial statements, including profit and loss and cash flow predictions through to 2014-15. The balance sheet is not included as all assets are owned by the City and are reported in the financial statements of the City's General Account. The listed written down value of the sewerage assets is \$16,525,354.00</i>	B2
	The financial plan provides firm predictions on income for the next five years and reasonable indicative predications beyond this period.	<i>The financial plan is included in the Asset Management Plan. The financial statements include income to 2014/15. The Asset Management System has costs through to 2061 for expenditure on the network but not compared to income.</i>	C3

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services.	<i>The financial plan included in the Asset Management Plan includes administration costs required to deliver the service, however these figures appear to be derived from experience rather than hard fact.</i>	C3
	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary.	<i>Where expenses relating to the sewerage system are identified ie. Refurbishment costs, these figures (estimates) are determined from talking with industry professionals and from local knowledge to ensure that the best estimate is given. When the actual cost exceeds this then the City looks at this to determine why, lessons from this are then learnt for future expenditure of the same nature.</i>	D2
11	Capital expenditure planning		
	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.	<i>The Capital Expenditure Plan is available in the Asset Management Plan. It only covers to 2014/15. There is a statement in the plan to state where the funds will be derived from.</i>	C3
	The plan provides reasons for capital expenditure and timing of expenditure.	<i>The Financial plan is broken down into years. The further breakdown is shown asset by asset, year by year in the Asset Management System. This process is not documented.</i>	D2
	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan.	<i>The costs in the Asset Management Plan are taken from the Asset Management System and are therefore consistent to</i>	B2

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Key Process	Effectiveness Criteria	Comment	Effectiveness Rating
		<i>when the plan was developed. The actual costs are monitored and amended through the Asset Management System as are works are undertaken.</i>	
	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.	<i>The actual costs are monitored and amended through the Asset Management System are works are undertaken. This process is not documented.</i>	D2
12	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.	<i>The Asset Management System was last updated on 1 March 2011. The system is updated each time works are completed on site. The Asset Management Plan was updated on 16 Nov 2010, replacing the previous plan dated 1997. The new plan incorporates the removal of 1 WWTP, the addition of an IDEA plant. New sub-divisions and an increase in sewer length of approximately 20km. There is no procedure in place for reviewing the plan.</i>	D2
	Independent reviews (eg internal audit) are performed of the asset management system.	<i>No review procedure is in place.</i>	D4

A summary of the above is shown in Table 4.1

This page is intentionally left blank

RISK ASSESSMENTS

Licence Clause or Schedule	Operating Licence Reference (CI= Clause)	Failure during audit period		Inherent Risk (Low, Medium, High)	Adequacy of Current Controls (S=Strong, M=Moderate, W=Weak) PLEASE SEE NOTE BELOW	Audit Priority					
		Consequence (1=minor, 2=moderate, 3=major)	Likelihood (A=likely, B=probable, C=unlikely)			1	2	3	4	5	n/a
Accounting Records	Cl.15	3	C	High	M		♦				
Reporting	Cl.18	3	B	High	W	♦					
Individual Performance Standards	Cl.19	2	C	Med	M				♦		
Provision of Information	Cl.21	2	C	Med	M				♦		
Publishing Information	Cl.22	2	C	Med	M				♦		
Notices	Cl.23	2	B	Med	M				♦		
Operating Areas Sch. 2											
Correct Operating Area	Cl.2.1	1	C	Low	S					♦	
Customer Provisions Sch.3											
Customer Service Charter	Cl.2	2	C	Med	M				♦		
Customer Complaints	Cl.3	2	A	High	W	♦					
Customer Consultation	Cl.4	2	B	Med	W			♦			
Customer Contracts	Cl.5	2	B	Med	M				♦		
Customer Surveys	Cl.6	2	B	Med	W			♦			
Service and Performance Standards Sch.4											
Customer Service Standards	Cl.1	2	B	Med	W			♦			
Sewerage Services	Cl.2	3	A	High	W	♦					

Licence Clause or Schedule	Operating Licence Reference (CI= Clause)	Failure during audit period		Inherent Risk (Low, Medium, High)	Adequacy of Current Controls (S=Strong, M=Moderate, W=Weak) PLEASE SEE NOTE BELOW	Audit Priority					
		Consequence (1=minor, 2=moderate, 3=major)	Likelihood (A=likely, B=probable, C=unlikely)			1	2	3	4	5	n/a
						1	2	3	4	5	n/a
Information Requirements (Reporting) Sch.5											
Benchmarking and Performance Monitoring information	CI.2	2	A	High	W	♦					
Other Provisions Sch.6											
Obligations to Customers, Availability and Connection of Services	CI.2	3	B	High	M		♦				
Compliance	CI.5	2	B	Med	M				♦		

Table 3. Preliminary Risk Assessment for Operational Audit

Please note: To assess the Audit Priority we have assumed that the “adequacy of current controls” documented in the previous GHD audit in June 2009 is the current control.

Key Process Number	Key Process	Failure during audit period		Inherent Risk (Low, Medium, High)	Adequacy of Current Controls (S=Strong, M=Moderate, W=Weak) PLEASE SEE NOTE BELOW	Audit Priority					
		Consequence (1=minor, 2=moderate, 3=major)	Likelihood (A=likely, B=probable, C=unlikely)								
						1	2	3	4	5	n/a
1	Asset planning	2	B	Med	M				♦		
2	Asset creation and acquisition	2	B	Med	M				♦		
3	Asset disposal	1	C	Low	W					♦	
4	Environmental analysis	2	B	Med	M				♦		
5	Asset operations	3	B	High	M		♦				
6	Asset maintenance	3	B	High	M		♦				
7	Asset Management Information System	2	B	Med	M				♦		
8	Risk Management	3	B	Med	W			♦			
9	Contingency planning	3	A	High	W	♦					
10	Financial planning	2	B	Med	M				♦		
11	Capital expenditure planning	2	B	Med	M				♦		
12	Review of AMS	1	B	Low	M					♦	

Table 4. Preliminary Risk Assessment for Asset Management System Review

Please note: To assess the Audit Priority we have assumed that the “adequacy of current controls” documented in the previous GHD audit in June 2009 is the current control.

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

Table 5. Matrix used for determining inherent risk rating for Operational Audit and AM review.

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

Table 6. Risk Assessment Matrix used for Audit Priority for Operational Audit and AM review

RECOMMENDATIONS

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
Previous Water Service Audit			
	Create and document a review procedure for the Customer Service Charter	The City has a full customer charter and a summary customer charter. There is no review procedure in place.	The City should create a procedure for reviewing its Customer Service Charter.
Previous AMS Review			
Asset Planning			
	Identify and document likelihood and consequences of asset failures	The City has started to identify risks and consequences in its Asset Management System.	The City should complete and integrate into Asset Management Plan. The City has identified all risks and consequences relating to its license but has so far only identified risks and consequences for approximately 40% of its physical assets.
Asset Creation and Acquisition			
	Create and implement asset creation and acquisition procedure including the evaluation of all life cycle costs	The City's asset creations and acquisitions are done on a reactive basis. The City has implemented a refurbishment program which removes the major need for new assets to be created or acquired. Any new acquisitions are a result of reactive maintenance and this is then facilitated through the	The City should write a procedure for creation/acquisition of assets and include in the Asset Management Plan

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
		City's term maintenance contract.	
Asset Disposal			
	Create and implement asset disposal procedure based on performance of assets	The City disposes of assets on a reactive basis. The City has implemented a refurbishment program which removes the major need for the disposal of assets due to low performance of an asset.	The City should write a procedure for disposal of assets and include in the Asset Management Plan
Environmental Analysis			
	Identify and document threats the sewer systems create and create emergency response procedures	The current staff is aware of the sewer system and deal with threats from local knowledge. The City has started to identify risks and consequences in its Asset Management System.	The City should complete and integrate into Asset Management Plan
	Identify and document threats the system environment creates for the sewer system and create procedures for minimizing the threats	The current staff is aware of the sewer system and deal with threats from local knowledge. The City has started to identify risks and consequences in its Asset Management System.	The City should complete and integrate into Asset Management Plan
Asset Operations			
	Create and document a risk management procedure for asset operations	The current staff is aware of the sewer system and deal with threats from local knowledge.	The City should complete and

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
		The City has started to identify risks and consequences in its Asset Management System.	integrate into Asset Management Plan
Asset Maintenance			
	Continue to create and document policies and procedures linked to service levels for the sewer system	The City has created an Asset Management Plan and has developed some operating procedures.	The City should develop all procedures to supplement the site work they are undertaking
	Create, document and regularly review maintenance plan for the sewer system including emergency, corrective and preventative measures	The Asset Management Plan has maintenance planning in it, although this needs to be expanded. There is no procedure for reviewing the document.	The City should write a procedure to document how and when the maintenance plan is updated and reviewed.
Asset Management Information System			
	Create data verification procedure for asset data	Data is input by experienced staff.	The City should create a review procedure for inputting of data.
Risk Management			
	Identify risks and create risk management procedures and policies	The City has identified some risks and continues to update the risk register; there is no procedure or policy for this.	The City should create risk management policies and link them to the Asset Management Plan
	Create and document risk register including the treatment and consequences of asset failure	The City has identified some risks and continues to update the risk register; there is no procedure or policy for this.	The City should be linked to the Asset Management Plan

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
Contingency Planning			
	Create and document contingency plans based on risk management for the sewer system	The City is developing contingency plans for its sewerage assets and this is included in the City's Asset Management Plan. This is based on local knowledge.	The City should continue to develop local knowledge into defined procedure
Review of AMS			
	Create asset management review procedure to ensure system is reviewed regularly	The system is not reviewed on a planned basis.	The City should create a review procedure.

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
New Audit/Review			
Schedule 3 Clause 2	Customer Provisions		
2.1	The licensee must have in place a customer service charter that accords with the Authority's review guidelines.	The City has a full service charter in place. It is however, dated June 2008.	The City should review the existing charter and update it. The City should create a procedure that states when and how its charter is to be reviewed.
Schedule 4 Clause 1	Customer Complaints		
1.2	The licensee shall respond to customer complaints in accordance with the relevant performance indicator/target.	The City received 1 written complaint during the audit period. By interrogating the City's document management system it is evident that this was not dealt with within the target period of 15 working days or within the City's corporate target of 14 days.	The City should ensure that its documented procedures are followed.
Clause 2	Sewerage Services		
2.1	The licensee must comply with the relevant sewerage service standards performance indicator/target.	The City has made a marked improvement in sewer blockages since the previous audit. The blockage figures recorded on the Asset Management System for the	The City has made dramatic improvements to its blockage number through tighter control of its contractor. Further controls should be introduced to ensure that repeat blockages do

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
		current audit period are; Jan 2009-Dec 2009 = 118 /100km Jan 2010-Dec 2010 = 75/100km This is however, still above the target of 40 blockages per 100km of sewer.	not occur due to workmanship of the contractor.
Key Process 1	Asset Planning		
	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.	The team understands the requirements but documentary evidence of any objectives are lacking.	Although the current team understands the current requirements this is based on knowledge rather than any documented procedure. The City should create a procedure that all staff can follow. This should be documented and be held within their Standard Operating Procedure document.
	Non asset options are considered.	No documented objectives or procedures in place.	The City's staff does consider all options; however, this again is due to experience and knowledge rather than a documented procedure. The City should create a documented procedure to sit within their Standard Operating Procedure document.

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
	Lifecycle costs of owning and operating assets are assessed.	The City's Asset Management System does have current costs and projections of costs through the life of the asset. This is still being populated and is not yet complete.	The City has started this task; however this is an ongoing project. The City should ensure that all assets are documented and their lifecycle determined. The City should also document a procedure to show how the life cycles have been derived.
	Funding options are evaluated.	Current staff is aware of funding options although this is not documented.	The City's staff is aware of funding options available to them; however, these are not documented in one place. The City should identify all funding streams and list them in the City's Asset Management Plan as an appendix.
	Plans are regularly reviewed and updated.	Plans are reviewed on an adhoc basis; no procedure is in place to define timescales and format etc.	The City should create and document a procedure to ensure that plans are reviewed and updated regularly and in a uniform manner.
Key Process 2	Asset Creation and Acquisition		
	Evaluations include all life-cycle costs.	Life cycle costing is undertaken as part of the Asset Management System. This is not documented.	Although the City undertakes life-cycle costing as part of the Asset Management System, the City should document the procedure for undertaking this.

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
	Projects reflect sound engineering and business decisions.	Works undertaken during the current audit period show evidence of engineering judgment being employed to determine the best procedure for the works and best value for the City. This is based on staff knowledge and skill rather than documented evidence.	The City has staff with good experience and knowledge; however, a procedure should be created and documented to show options available.
	Commissioning tests are documented and completed.	Commissioning tests have not been undertaken and therefore not documented during the audit period.	The City should develop a process and timeframe for commissioning tests.
Key Process 3	Asset Disposal		
	Under-utilised and underperforming assets are identified as part of a regular systematic review process.	The City feels that it has no underperforming or under-utilised assets; in fact it feels the opposite is true. No documented procedure in place for reviewing the assets.	The City should create a procedure to determine when an asset is under utilised and what actions should be taken.
	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken.	The City feels that it has no underperforming or under-utilised assets; in fact it feels the opposite is true. No documented procedure in place for reviewing the assets.	The City should create a procedure to determine when an asset is underperforming and what actions should be taken.

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
	Disposal alternatives are evaluated.	No sewer lines have been disposed of; items at the WWTP are replaced and disposed of appropriately when required. There is no procedure in place.	The City should create and document a procedure to show how, when and why an asset should be disposed of.
Key Process 4	Environmental Analysis		
	Opportunities and threats in the system environment are assessed.	As part of the Asset Management System the City has a risk assessment which will cover environmental issues. However, currently the risk assessment is a work in progress and needs completing.	The City has started this task; however this is an ongoing project. The City should ensure that all risks are documented within the risk register.
Key Process 5	Asset Operations		
	Risk management is applied to prioritise operations tasks.	Risk Management is applied through staff knowledge rather than documented procedure. This is being improved through the implementation of the Asset Management System which includes risk assessments for all assets.	The City should create a procedure to document risks and how these are measured. This should then be documented.
	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.	Asset register exists including condition data within the Asset Management System The accounting data is contained separately but within the same Asset Management System.	The City should create a procedure to show; what assets are to be documented and how.

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
		The data within the Asset Management System is continually being updated as new information becomes available. The process for this is not however documented.	
Key Process 6	Asset Maintenance		
	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.	An inspection regime for the sewer system is in place, this then forms the basis of the maintenance works, although it is not documented.	The City should create maintenance plans and include them in the City's Standard Operating Procedures.
	Failures are analysed and operational/maintenance plans adjusted where necessary.	Failures in both the sewer system and the WWTP are recorded and analysed using the Asset Management System. This procedure is not documented.	The City should create and document a procedure to ensure that all failures are analysed using set criteria to ensure that failures can be compared against each other.
	Risk management is applied to prioritise maintenance tasks.	Risk Management is applied through staff knowledge rather than documented procedure. This is being improved through the implementation of the Asset Management System which includes risk assessments for all assets.	The City should continue to monitor risks and use these to prioritise tasks. This process should be documented and added to the Asset Management Plan.

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
Key Process 7	Asset Management Information System		
	Adequate system documentation for users and IT operators.	No user guides have been created for the Asset Management System. The system is currently maintained by experienced users.	The City should create and document a user guide for its Asset Management System.
	Input controls include appropriate verification and validation of data entered into the system.	Data input by experienced staff and checked for errors as input. This procedure is not documented.	The City should develop input procedures as part of the user guide.
Key Process 8	Risk Management		
	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system.	The staff understands the need for risk management and the Asset Management System has risk assessments including risk management in it. However, this is a work in progress and needs to be completed. There are no documented procedures.	The City has started this task; however this is an ongoing project. The City should ensure that all risks associated with the AMS are identified and create a policy which documents how the risks are to be managed.
	Risks are documented in a risk register and treatment plans are actioned and monitored.	The staff understands the need for risk management and the Asset Management System has risk assessments including risk management in it. However, this is a work in progress and needs to be completed. There are no documented procedures	The City has a risk register within its AMS but needs to document how risks are identified and how they are to be recorded and monitored.

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
	The probability and consequences of asset failure are regularly assessed.	The staff understands the need for risk management and the Asset Management System has risk assessments including risk management in it. However, this is a work in progress and needs to be completed. There are no documented procedures.	As part of the above document timeframes for review of the risk register must be included.
Key Process 9	Contingency Planning		
	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.	The City's WWTP has a contingency plan in place. There are no contingency plans in place for the sewer system although the staff is fully aware of the system and what is required. This is not documented though.	The City should create a contingency plan for all its sewerage assets not just the WWTP. The City staff understands what is required on the ground however, this needs to be documented.
Key Process 10	Financial Planning		
	The financial plan provides firm predictions on income for the next five years and reasonable indicative predications beyond this period.	The financial plan is included in the Asset Management Plan. The financial statements include income to 2014/15. The Asset Management System has costs through to 2061 for expenditure on the network but not compared to income.	The City should attempt to indicate its income to match expenditure. This will only be indicative but if the expenditure can be projected to 2061 then the income needs to be estimated to compare against.

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services.	The financial plan included in the Asset Management Plan includes administration costs required to deliver the service, however these figures appear to be derived from experience rather than hard fact.	The City should determine what its overhead costs are and these should be included in the financial plan. A document should be created to evidence how these figures have been established,
	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary.	The actual costs against the budget costs are monitored via the Asset Management System. Variances are checked to determine reasons for difference. This process is not documented.	The City should create a procedure to show the actions to be taken when variances between budget and actual cost are noted. This should have varying levels associated with the difference identified.
Key Process 11	Capital Expenditure Planning		
	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.	<i>The Capital Expenditure Plan is available in the Asset Management Plan. It only covers to 2014/15. There is a statement in the plan to state where the funds will be derived from.</i>	The Capital Expenditure plan needs to be expanded to show what is to be done, by whom and when.
	The plan provides reasons for capital expenditure and timing of expenditure.	<i>The Financial plan is broken down into years. The further breakdown is shown asset by asset, year by year in the Asset Management System. This process is not documented.</i>	The Capital Expenditure plan needs to be expanded to show what is to be done, by whom and when.

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

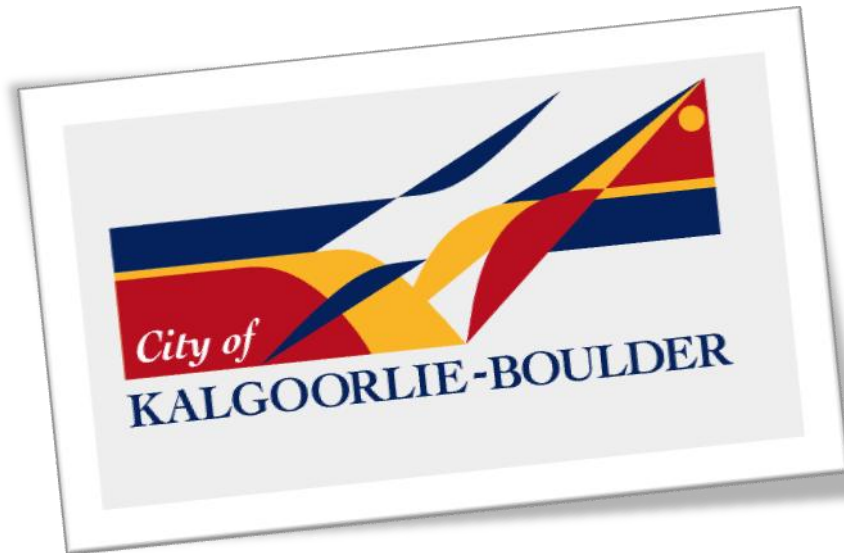
Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.	The actual costs are monitored and amended through the Asset Management System are works are undertaken. This process is not documented.	The City should create a procedure to ensure that its capital expenditure plan is regularly reviewed.
Key Process 12	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 Asset Management System was last updated on 1 March 2011. The system is updated each time works are completed on site. The Asset Management Plan was updated on 16 Nov 2010, replacing the previous plan dated 1997. The new plan incorporates the removal of 1 WWTP, the addition of an IDEA plant. New sub-divisions and an increase in sewer length of approximately 20km. There is no procedure in place for reviewing the plan.	The City should create a procedure for reviewing its asset management plan at regular intervals. Currently this is done on an adhoc basis.
	Independent reviews (eg internal audit) are performed of the asset management system.	No review procedure is in place.	The City has not had its AMS reviewed independently; neither does it have a procedure to do so. The City should create a procedure to ensure that its

City of Kalgoorlie-Boulder, Operational Audit and Asset Management Review

Licence Clause or Schedule / Asset Management System Key Process	Obligation	Comment from audit/review	Recommendation
			AMS is independently reviewed at regular intervals.

POST IMPLEMENTATION PLAN

(Produced by the City of Kalgoorlie – Boulder)



ECONOMIC REGULATORY AUTHORITY: POST AUDIT IMPLEMENTATION PLAN

CITY OF KALGOORLIE-BOULDER

POST AUDIT IMPLEMENTATION PLAN

Previous Operational Licence Audit Recommendations and Action Plan

Licence Clause or Schedule	Licence Obligation	Compliance Scale	Issues Identified	Recommendation	Actions to be taken	Update/Current Position	Personnel Responsible	Completion Date
	Asset Planning Identify and document likelihood and consequences of asset failures		The City has started to identify risks and consequences in its Asset Management System.	The City should complete and integrate into Asset Management Plan. The City has identified all risks and consequences relating to its license but has so far only identified risks and consequences for approximately 40% of its physical assets.	Continue works currently being undertaken.	Approximately 40% of physical assets have risks and consequences identified.	Manager of Sustainability and Waste Services	30 December 2011
	Environmental Analysis Identify and document threats the sewer systems create and create emergency response procedures		The current staff are aware of the sewer system and deal with threats from local knowledge. The City has started to identify risks and consequences in its Asset Management System.	The City should complete and integrate into Asset Management Plan	Continue works currently being undertaken.	As above	Manager of Sustainability and Waste Services	30 December 2011
	Create, document and regularly review maintenance plan for the sewer system including emergency, corrective and preventative measures		The Asset Management Plan has maintenance planning in it, although this needs to be expanded. There is no procedure for reviewing the document.	The City should write a procedure to document how and when the maintenance plan is updated and reviewed.	Procedure to be documented and be held within the Standard Operating Procedure document.	Standard Operating Procedure documentation has commenced.	Manager of Sustainability and Waste Services	30 December 2011

POST AUDIT IMPLEMENTATION PLAN

Operational Licence Audit Recommendations and Action Plan

Licence Clause or Schedule	Licence Obligation	Compliance Scale	Issues Identified	Recommendation	Actions to be taken	Update/Current Position	Personnel Responsible	Completion Date
Schedule 3 Clause 2: 2.1 Customer Provisions	The licensee must have in place a customer service charter that accords with the Authority's review guidelines.	4	The City has a full service charter in place. It is however, dated June 2008.	The City must review the existing charter and update it. The City must create a procedure that states when and how its charter is to be reviewed.	Update charter and create a written procedure document.	Customer Service Charter has been updated and submitted to ERA for review. Procedure for updating charter is in progress.	Manager of Sustainability and Waste Services	30 August 2011
Schedule 4 Clause 2: 2.1 Sewerage Services	The licensee must comply with the relevant sewerage services standards	2	The City has made a marked improvement in sewer blockages since the previous audit. The blockage figures recorded on the Asset Management System for the current audit period are; Jan 2009-Dec 2009 = 118 / 100km Jan 2010-Dec 2010 = 75 / 100km This is however, still above the target of 40 blockages per 100km of sewer.	The City has made dramatic improvements to its blockage number through tighter control of its contractor. Further controls must be introduced to ensure that repeat blockages do not occur due to workmanship of the contractor.	Controls include ensuring the jetting and cleaning of the affected sewer main after a sewer main blockage. All contracted repair work must be inspected by a City Officer prior to backfilling.	The City has a yearly programme of CCTV surveying to identify areas requiring repair or refurbishment. Sewer blockage procedures, including contractor management, to be outlined in the SOP.	Manager of Sustainability and Waste Services	Contractor management: Ongoing. SOP update: 30 September 2011

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Review Recommendations and Action Plan

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
Key Process 1: Asset Planning	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.	D3	The team understands the requirements but documentary evidence of any objectives are lacking.	Although the current team understands the current requirements, this is based on knowledge rather any documented procedure. The City needs to create a procedure that all staff can follow. This should be documented and be held within their Standard Operating Procedure document.	Procedure to be documented and be held within the Standard Operating Procedure document.	Standard Operating Procedure documentation has commenced.	Manager of Sustainability and Waste Services	30 September 2011
	Non asset options are considered.	D3	No documented objectives or procedures in place.	City Officers consider all options; however, this again is due to experience and knowledge rather than a documented a procedure. The City should create a documented procedure to sit within their Standard Operating Procedure document.	Procedure to be documented and be held within their Standard Operating Procedure.	Standard Operating Procedure documentation has commenced.	Manager of Sustainability and Waste Services	30 October 2011
	Funding options are evaluated.	D3	Current staff are aware of funding options although this is not documented.	City Officers are aware of funding options available to them; however, these are not documented in one place. The City should identify all funding streams and list them in the City' s Asset Management System as an appendix.	Funding options to be documented in its Asset Management System.	Review Asset Management Plan with funding options in mind.	Manager of Sustainability and Waste Services	30 November 2011

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
	Plans are regularly reviewed and updated.	D3	Plans are reviewed on an adhoc basis, no procedure is in place to define timescales and format etc.	The City should create and document a procedure to ensure that plans are reviewed and updated regularly and in a uniform manner.	Create a procedure document and implement plan reviewing dates.	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 November 2011
Key Process 2: Asset Creation / Acquisition	Evaluation includes all Life-cycle costs	D2	Life-cycle costings are undertaken as part of the Asset Management System. This is not documented	Although the City undertakes Life-Cycle costings as part of the Asset Management System, the City should document procedure for undertaking this.	Write a procedure for creation / acquisition of assets and include in the Asset Management System.	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 November 2011
	Projects reflect sound engineering and business decisions.	D2	Works undertaken during the current audit period show evidence of engineering judgments being employed to determine the best procedures for the works and best value for the City. This is based on staff knowledge and skill rather than documented evidence.	The City has staff with good experience and knowledge; however, a procedure should be created and documented to show options available.	Write a procedure for project engineering and business decisions and include in the Asset Management System.	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 December 2011
	Commissioning tests are documented and completed.	D4	Commissioning tests have not been undertaken and therefore not documented during the audit period.	The City should develop a process and timeframe for commissioning tests.	Create procedural document.	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 January 2012

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
Key Process 3: Asset Disposal	Under-utilised and underperforming assets are identified as part of a regular systematic review process.	D2	The City feels that it has no underperforming or under-utilised assets; in fact it feels the opposite is true. No documented procedure in place for reviewing the assets.	The City should create a procedure to determine when an asset is under-utilised and what actions should be taken.	Create procedural document as part of the Asset management System.	The City has started this task; however updating this is an ongoing project.	Manager of Sustainability and Waste Services	30 December 2011
	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken.	D2	The City feels that it has no underperforming or under-utilised assets; in fact it feels the opposite is true. No documented procedure in place for reviewing the assets.	The City should create a procedure to determine when an asset is underperforming and what actions should be taken.	Create procedural document.	The City has started this task; however this is an ongoing project. The City should ensure that all assets performances are reviewed and documented.	Manager of Sustainability and Waste Services	30 December 2011
	Disposal alternatives are evaluated.	D2	No sewer lines have been disposed of. Items at the WWTP are replaced and disposed of appropriately when required. There is no procedure in place.	The City should create and document a procedure to show how, when and why an asset should be disposed of.	Write a procedure for disposal of assets and include in the Asset Management System.	The City disposes of assets on a reactive basis. Written procedure to be commenced.	Manager of Financial Services	30 December 2011
Key Process 4: Environmental Analysis	Opportunities and threats in the environment system are assessed.	C2	As part of the Asset management System the City has a risk assessment which will cover environmental issues. However, currently the risk assessment is a work in progress and needs completing.	The City has started this task; however, this is an ongoing project. The City should ensure that all risks are documented within the risk register.	Complete and integrate into Asset Management System.	The current staffs are aware of the sewer system and deal with threats from local knowledge. The City has started to identify risks and consequences in its Asset Management System.	Manager of Sustainability and Waste Services	30 January 2012

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
Key Process 5: Asset Operations	Risk management is applied to prioritise operations tasks.	D3	Risk management is applied through staff knowledge rather than documented procedure. This is being improved through implementation of the Asset Management system which includes risk assessments for all assets	The City should create a procedure for asset risk management.	Complete and integrate into AMS	The current staffs are aware of the sewer system and deal with threats from local knowledge. The City has started to identify risks and consequences in its AMS.	Manager of Sustainability and Waste Services	30 January 2012
	Assets are documented in an Asset Register including asset type, location, material, plans of components, and an assessment of assets" physical/structural condition and accounting data.	C2	Asset Register exists including condition data within the Asset Management System. The accounting data is contained separately but within the same Asset Management System. The data within the Asset Management System is continually being updated as new information becomes available. The process for this is not however documented.	The City should create a procedure to show what assets are to be documented and how.	Create a procedure to show what assets are to be documented and how.	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 January 2012
Key Process 6: Asset Maintenance	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.	D3	An inspection regime for the sewer system is in place, this then forms the basis of the maintenance works, although it is not documented.	The City should create maintenance plans and include them in the City's Standard Operating Procedures.	The City should develop all procedures to supplement the site work they are undertaking.	The City has created an Asset Management System and has developed some operating procedures.	Manager of Sustainability and Waste Services	30 February 2012

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
	Failures are analysed and operational / maintenance plans adjusted where necessary.	D2	Failures in both the sewer system and the WWTP are recorded and analysed using the Asset Management System. This procedure is not documented.	The City should create and document a procedure to ensure that all failures are analysed using set criteria to ensure that failures can be compared against each other.	A procedure outlining the set criteria needs to be documented on the analysis and comparison of failures.	The AMS contains maintenance planning, although needs to be expanded to include failure analysis.	Manager of Sustainability and Waste Services	30 February 2012
	Risk management is applied to prioritise maintenance tasks.	D3	Risk management is applied through staff knowledge rather than documented procedure. This is being improved through the implementation of the Asset Management System which includes risk assessments for all assets.	The City should create a procedure for asset risk management.	Develop a procedure for asset risk management.	Currently being developed.	Manager of Sustainability and Waste Services	30 February 2012
Key Process 7: Asset Management Information System	Adequate system documentation for users and IT operators.	D3	No user guides have been created for the Asset Management System. The system is currently maintained by experienced users.	The City should create and document a user guide for its Asset Management System.	Create and document a user guide for its Asset Management System.	Currently in development.	Manager of Sustainability and Waste Services	30 February 2012 and then ongoing
	Input controls include appropriate verification and validation of data entered into the system.	D3	The City has a small highly trained team therefore the data input is by experienced staff and checked for errors as input. This procedure is not documented.	The City should develop input procedures as part of the AMS user guide.	Create a review procedure for inputting of data.	Data is input by experienced staff. Review procedure yet to commence	Manager of Sustainability and Waste Services	30 March 2012

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
Key Process 8: Risk Management	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the Asset Management System (AMS).	D3	Staff understands the need for risk management and the AMS has risk assessments including risk management in it. However, this is a work in progress and needs to be completed. There are no documented procedures.	The City has started this task; however this is an ongoing project. The City should ensure that all risks associated with the AMS are identified and create a policy which documents how the risks are to be managed.	The City should create risk management policies and link them to the Asset Management Plan (AMP).	The City has identified some risks and continues to update the risk register. There is no procedure or policy for this.	Manager of Sustainability and Waste Services	30 March 2012
	Risks are documented in a risk register as part of the AMS, and treatment plans are actioned and monitored.	D3	The staff understands the need for risk management and the AMS has risk assessments including risk management in it. However, this is a work in progress and needs to be completed. There are no documented procedures	The City has a risk register within its AMS but needs to document how risks are identified and how they are to be recorded and monitored.	This should be linked to the AMP.	The City has identified some risks and continues to update the risk register. There is no procedure or policy for this.	Manager of Sustainability and Waste Services	30 March 2012
	The probability and consequences of asset failure are regularly assessed.	D3	The staffs understand the need for risk management and asset management system has risk assessments including risk management in it. However, this is a work in progress and needs to be completed. There are no documented procedures.	As part of the above document, time frames for review of the risk register should be included.	Develop a review timetable.	Being developed.	Manager of Sustainability and Waste Services	30 March 2012

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
Key Process 9: Contingency Planning	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.	C3	The City's WWTP has a contingency plan in place. Contingency plans for the sewer system are being developed although the staff is fully aware of the system and what is require, the City has a member of technical staff on 24hours call and a plumber on 24 hours call to deal with emergencies as they arise.	The City's staffs understand what is required for incident response, however, contingency planning needs to be documented for the reticulated sewer system.	Contingency plans for all sewerage assets are to be completed.	Contingency Plan documentation for the WWTP is complete. Contingency planning documentation for the reticulated sewer assets yet to commence.	Manager of Sustainability and Waste Services	30 November 2011
Key Process 10: Financial Planning	The financial plan provides firm predictions on income for the next five years and reasonable indicative predications beyond this period.	C3	The financial plan is included in the Asset Management Plan. The financial statements include income to 2014/15. The Asset Management System has costs through to 2061 for expenditure on the network but not compared to income.	The City should attempt to indicate its income to match expenditure. This will only be indicative but if the expenditure can be projected to 2061 then the income needs to be estimated to compare against.	Estimate income versus expenditure projected into the future.	Being developed as part of the City Strategic Plan	Manager of Financial Services	30 June 2012
	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services.	C3	The financial plan included in the Asset Management Plan includes administration costs required to deliver the service, however these figures appear to be derived from experience rather than hard fact.	The City should determine what its overhead costs are and these should be included in the financial plan. A document should be created to evidence how these figures have been established,	Determine and document in the financial plan, overhead costs and methodology.	Being developed as part of the City Strategic Plan	Manager of Financial Services	30 June 2012

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary.	D2	Where expenses relating to the sewerage system are identified i.e. Refurbishment costs, these figures (estimates) are determined from talking with industry professionals and from local knowledge to ensure that the best estimate is given. When the actual cost exceeds this then the City looks at this to determine why, lessons from this are then learnt for future expenditure of the same nature.	The City should create a procedure to show the actions to be taken when variances between budget and actual cost are noted. This should have varying levels associated with the difference identified.	Implement recommendation	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 June 2012
Key Process 11: Capital Expenditure Planning	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.	C3	The Capital Expenditure Plan is available in the Asset Management Plan. It only covers to 2014/15. There is a statement in the plan to state where the funds will be derived from.	The Capital Expenditure plan needs to be expanded to show what is to be done, by whom and when.	Implement recommendation	Initiate annual review of Asset Management Plan to ensure the Plan is up to date and projected expenditure is relevant	Manager of Sustainability and Waste Services	30 June 2012
	The plan provides reasons for capital expenditure and timing of expenditure.	D2	The Financial plan is broken down into years. The further breakdown is shown asset by asset, year by year in the Asset Management System. This process is not documented.	The Capital Expenditure plan needs to be expanded to show what is to be done, by whom and when.	Implement recommendation	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 June 2012

POST AUDIT IMPLEMENTATION PLAN

Asset Management System Key Process	Licence Obligation	Effectiveness Rating	Issues Identified	Recommendation	Actions to be taken	Update/ Current Position	Personnel Responsible	Completion Date
	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.	D2	The actual costs are monitored and amended through the Asset Management System as works are undertaken. This process is not documented.	The City should create a procedure to ensure that its capital expenditure plan is regularly reviewed.	Implement recommendation	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 June 2012
Key Process 12: Review of Asset Management System	A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current.	D2	The AMS was last updated on 1 March 2011. The system is updated each time works are completed on site. The Asset Management Plan was updated on 16 Nov 2010, replacing the previous plan dated 1997. The new plan incorporates the removal of 1 WWTP, the addition of an IDEEA plant. New subdivisions and an increase in sewer length of approximately 20km. There is no procedure in place for reviewing the plan.	The City should create a procedure for reviewing its AMP at regular intervals. Currently this is done on an adhoc basis.	The City should create a review procedure as part of the AMS.	The system is not currently reviewed on a planned basis.	Manager of Sustainability and Waste Services	30 March 2012
	Independent reviews (e.g. internal audit) are performed of the Asset Management System.	D4	No review procedure is in place.	The City has not had its Asset Management System (AMS) reviewed independently; neither does it have a procedure to do so. The City should create a procedure to ensure that its AMS is independently reviewed at regular intervals.	Create a procedure to ensure that the AMS is independently reviewed at regular intervals.	Procedure to be developed in the Standard Operating Procedure document.	Manager of Sustainability and Waste Services	30 June 2012

