

Asset Management Review and Operational Audit

Audit Report

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Prepared for
City of Kalgoorlie-Boulder

20 June 2013



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Executive Summary

General

City of Kalgoorlie-Boulder holds an Operating Licence which permits it to provide non-potable water supply and sewerage services and undertake, maintain and operate any associated works to the City of Kalgoorlie-Boulder. The operating licence was granted by the Economic Regulation Authority on 21 May 1997 and subsequently amended on 15 May 2009.

Cardno was commissioned by City of Kalgoorlie-Boulder to undertake an audit of City of Kalgoorlie-Boulder in accordance with Sections 16 and 17 of its Operating Licence, in November 2012. The purpose of the audit was to:

1. Assess City of Kalgoorlie-Boulder's level of compliance against the conditions of its licence (Operational / Licence Audit)
2. Assess the effectiveness of measures implemented by City of Kalgoorlie-Boulder for the proper management of assets used in the provision and operation of its services (Asset Management System Review).

This audit report outlines the findings of an audit of City of Kalgoorlie-Boulder to fulfil the above objectives, conducted on 5 – 7 February 2013. The audit covers the operating period of 1 January 2011 to 31 December 2012.

The audit was carried out in accordance with the Audit Guidelines: Electricity, Gas and Water Licences, as published by the Economic Regulation Authority in August 2010.

Overview of City of Kalgoorlie-Boulder's Assets

The City of Kalgoorlie-Boulder is located approximately 600 kilometres from Perth and has a population of around 30,000 people. The City operates a non-potable water supply and sewerage service, providing services to an estimated 14,000 connected properties.

The City operates an extensive sewerage and effluent reuse network, consisting of approximately 207 kilometres of sewer network, the 8 ML IDEA South Boulder wastewater treatment plant, sludge and holding lagoons, balance ponds, pump stations, and ancillary infrastructure, such as flow metres and pipe networks. It is estimated that the total replacement cost of the wastewater system is \$26.7M.

The City's non-potable water supply service utilises treated effluent from the South Boulder wastewater treatment plant. On average, approximately 8 ML (based on 2011/12) of sewerage is treated daily through the system with the effluent being used for irrigation of the City's parks and ovals, dust suppression, and on-sold to various customers including the Department of Education, private schools, an 18 hole golf course, a local resort complex and as mining process water. The irrigation area served totals 723,880 m².

The City has an effluent reticulation pipe network of approximately 50 kilometres throughout the urban area with a number of storage dams and tanks for pumping on to various sites. There are 15 recycled water storage sites distributed throughout the City. The total storage capacity of the combined tanks and ponds is 650.54 ML. The City also harvests stormwater for mixing with treated wastewater for irrigation purposes.

The treated water is disinfected with liquefied chlorine gas and filtered at various sites as the water is distributed through the City. Water distribution is controlled via a centralised computer network using Citect SCADA technology along with alarm protocols and shut down systems.

Operational / Performance Audit

Findings of the Operational Audit

The audit reviewed the recommendations of the previous operational audit and identified that of the two recommendations suggested by Opus (the City's previous auditors), both have been resolved and closed out.

The audit assessed the City's compliance against the licence conditions. Licence conditions are rated based on a 7-point rating scale as prescribed in the ERA Guidelines.

The audit found that the City complied with their licence obligations, with the exception of meeting their customer consultation requirements (Sch 3, CI 4.1), and its target to achieve less than 40 blockages/100km of sewer mains in the previous 12 months (included in Sch 4, CI 2.1 of its licence).

Under the strict interpretation of the licence requirement, we do not consider that City meets the licence requirement through either the Part (a) or Part (b) options available under Sch 3, CI 4.1.

Although the City publishes a summary version of its Customer Service Charter and issues it to customers every two year with its rates charges information, the Charter, under the strict interpretation of the licence requirements, is not considered to be a newsletter that provides updates regarding the City's sewerage and non-potable water operations. Additionally, although the City conducts council meetings twice per month that can be attended by the general public, in order for these to qualify as a forum for consultation, the agenda needs to include a regular item to discuss the sewerage and non-potable water services. However, as the licence requirements related to this clause are expected to change, no further action is required at this time in order for the City to achieve compliance.

The City has not met the target to achieve less than 40 blockages/100km of sewer mains in either of the last two Report Years (based on the 1 July to 30 June Financial Year). However, it is currently on target to meet this service standard in the current year. For the six month period 01/07/2012 to 31/12/2012, the City has experienced a total of 25 sewer blockages, equivalent to 12.08 blockages/100km of sewer mains.

As a result of the non-compliance with the target, Sch 3, CI 4.1 and Sch 4, CI 2.1 have been allocated ratings of 2 (does not meet minimum requirements).

All other licence conditions were assessed and were given a rating of 3 (compliant with major or material recommendations), 4 (compliant apart from minor or immaterial recommendations) or 5 (compliant with no further action required).

Summarised in the following table are a list of suggested improvements for conditions allocated compliance ratings of 3 or 4, as well as details of the non-compliance.

Licence Condition	Description of Licence	Key Issue	Recommendations
Recommendations for Improvement			
2.1	The licensee is granted a licence for the Operating Area(s) to provide the water services described in Schedule 1 in accordance with the terms and conditions of this licence (Operating Area as per Plan No OWR-OA-028 (B))	<ul style="list-style-type: none"> The map showing the City's operating area was updated in 2012. Correspondence dated 06/11/2012 from the Authority confirms the amendment to the licence to reflect the correct map reference. 	<ul style="list-style-type: none"> At the next review and update of the Customer Service Charter, the references to the operating area (Section 1.3) should be updated to reflect the correct map reference
5.1	Subject to any modifications or exemptions granted pursuant to the Act, the licensee must comply with any applicable legislation.	<ul style="list-style-type: none"> The City has identified legislation and regulations applicable to the operation of their organisation and provision of the services and these are listed in Section 5 – Regulatory Requirements of the Asset Management Plan. In addition, Federal, State and Local acts, laws and policies related to the City's sustainability and waste services are listed (and hyperlinked) in Section 7 of its Standard Operating Procedures (SOP) Manual, August 2012. 	<ul style="list-style-type: none"> Although relevant legislation is listed in the AMP and in the SOP Manual, a reference in these sections to the officer/department responsible for monitoring applicable legislation and the workflow process/procedure for identifying/implementing/seeking exemption is recommended.
Sch 3, Cl 3.1	The licensee must have in place, a properly resourced process for effectively receiving, recording and (where possible) resolving customer complaints within a timeframe of 15 business days.	<ul style="list-style-type: none"> Customer complaints relating to the licenced services provided by the City are managed under the City's Complaints Handling Policy (Policy 4.1 in its Policy Manual). The Policy covers Commitment, Recording, Responsibility, Complaint Handling and Monitoring. Complaints are logged in the City's document management system. Timeframes and internal escalations are built into the system. 	<ul style="list-style-type: none"> It is recommended that the process and procedures for dealing with customer complaints are added to Section 4 – Administration in the SOP Manual. This SOP includes processes for managing enquiries and correspondence but not specifically complaints. Although our review of the complaints received by the City of Kalgoorlie-Boulder during the two-year audit period showed all complaints being resolved within 15 days, the audit of the information stored in DataWorks was reasonably difficult as each piece of correspondence had to be opened to check if it was a complaint or whether it was just an enquiry. We recommend that the City sets up a simple spreadsheet to record the details of all of the complaints so that monitoring and reporting is simplified.

Licence Condition	Description of Licence	Key Issue	Recommendations
Sch 3, CI 3.8	The licensee must establish a system for recording and resolving complaints by customers within 15 business days regarding a provided or requested water service, or for matters which must be considered by a Local Government Authority Council, within 5 business days after the first ordinary Council meeting following the expiry of the 15 business day period.	<ul style="list-style-type: none"> As above 	<ul style="list-style-type: none"> As above
Sch 3, CI 3.9	To ensure the effectiveness of such a process the licensee must, as a minimum: <ul style="list-style-type: none"> (a) record details of each customer complaint and its outcome; (b) provide an officer trained to deal with customer complaints who authorized to, or has access to another officer who has the authority to, make the necessary decisions to settle customer complaints or disputes, and where applicable, make recommendations to Council as to the payment of monetary compensation; and (c) make all necessary arrangements to ensure that if possible complaints can be resolved in the timeframes set out in sub-clause 3.8. 	<ul style="list-style-type: none"> As above 	<ul style="list-style-type: none"> As above
Sch 3, CI 3.10	Unless the complaint or dispute is a matter in relation to which section 3.22 of the Local Government Act 1995 applies, where a dispute has not been resolved within 15 business days the licensee must inform the customer of the option of referring their complaint to the Department of Water.	<ul style="list-style-type: none"> Customers are informed of the option for referring their complaint to the Department of Water in the Customer Service Charter. Full contact details for the Department are provided in the Charter. However, this is not specifically included in the City's written response to the complainant. 	<ul style="list-style-type: none"> We recommend that standard text be added to the City's complaint response letter that informs the customer of referring their complaint to the Department of Water if they do not consider that it has been resolved to their satisfaction within 15 business days.
Sch 4, CI 1.1	Telephone Answering – Emergency Response The licensee shall provide an emergency 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.	<ul style="list-style-type: none"> The City records details of all the sewer blockages and overflows it attends in a worksheet in its Asset Management System (AMS) and uses this to report against its performance standards. Although the worksheet records the day that the customer call was taken, it does not record the time that the call 	<ul style="list-style-type: none"> Based on the our interpretation of the licence target, we consider that although there is no evidence to prove that the target is being met, that the City would be expected to advise customers of the nature and timing of the action to be undertaken within an hour of them reporting an emergency. However, there may be times when the advice to the customer is not provided at the time the customer first calls in to report an emergency, e.g. busy periods and after-hours

Licence Condition	Description of Licence	Key Issue	Recommendations
	Target: 90% of customers within 1 hour of reporting an emergency shall be advised of the nature and timing of the action to be undertaken by the licensee.	was taken or the time that the City's contactor arrived at site. <ul style="list-style-type: none"> Given that the performance target is based on the customer being advised of the nature and timing of the action to be undertaken by the City to rectify the emergency, rather than the time to respond repair or rectify, it would be expected that the City would meet its requirement in the initial telephone conversation with the customer, i.e. what time the contractor would expect to be on site and what work they will carry out to resolve the emergency.. However, as no times are recorded it was not possible to confirm that the required target is being met. The City considers that it attends all emergencies within an hour, and although this is likely given the size of the scheme, essentially there is no evidence to confirm or otherwise. 	calls, and when the customer has to be called back. <ul style="list-style-type: none"> However, the true measures of an emergency response are the response time (the time between the customer reporting the emergency and the time that that field staff arrive on site) and the repair/rectification time (the time between the customer reporting the emergency and the time that the repair/rectification has been carried out). Although we consider that the City is meeting its licence requirement, we suggest that it creates a simple spreadsheet (or adds columns to its existing worksheet) to look to record the time that emergency calls are received, the time that the customer is advised of the nature and timing of the action, and the time that its contractors arrive on site.
Area of Non-Compliance			
Sch 3, CI 4.1	Customer Consultation 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 by either: <ul style="list-style-type: none"> (a) establishing 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 (b) institute at least two of the following processes: <ul style="list-style-type: none"> i. meeting on a regular basis with customers to seek comment on issues relevant to the licensee's level of service under the licence; or 	<ul style="list-style-type: none"> We consider that under the strict interpretation of the licence requirement, the City does not meet meets the licence requirement through either the Part (a) or Part (b) options. The City publishes a summary version of its Customer Service Charter and issues it to customers every two year with its rates charges information. The summary charter (as well as the full-length version) are downloadable from the City's internet site and are available at the front counter in the main council building. However, the Charter is, under the strict interpretation of the licence requirements, not considered to be a newsletter that provides updates regarding the City's sewerage and non- 	<ul style="list-style-type: none"> As the licence requirements related to this clause are likely to change, no further action is required at this time in order for the City to achieve compliance.

Licence Condition	Description of Licence	Key Issue	Recommendations
	ii. publish a simple newsletter providing basic information about the licensee's operations; and/or establish other forums for consultation to enable community involvement in issues relevant to the exercise of the licensee's obligations under this licence.	potable water operations. ■ Although not specific to the wastewater services, the City conducts council meetings twice per month that can be attended by the general public. Public questions can be taken at the general meetings. Agendas and minutes are downloadable from the City's website. However, in order for the Council meetings to qualify as a forum for consultation, the agenda needs to include a regular item to discuss the sewerage and non-potable water services.	
Sch 4, CI 2.1	Sewerage Service Standards The number of sewer blockages per 100km of sewer mains. Target: In the preceding 12 months there were fewer than 40 blockages per 100km of sewer main.	■ The City reports against its service standards on a Financial Year basis, whereas its operational licence is based on the calendar year. ■ For the period 1 July 2010 to 20 June 2011, the City reported 74 blockages per 100 km in its annual Compliance Report to the Authority. ■ Based on a sewer mains length of 207km, the 148 reported blockages is 71.5 blockages per 100km. ■ For the period 1 July 2011 to 20 June 2012, the City reported 62.4 blockages per 100 km in its annual Compliance Report to the Authority. ■ We reviewed the number of blockages that the City has recorded in its AMS and observed that the total for the year was 133 blockages, of which 28 resulted in overflows. There were 4 external sewer flooding incidents and one internal sewer flooding incidents at customer properties. ■ Based on a sewer mains length of 207km, the 133 reported blockages is 62.4 blockages per 100km.	■ Although the City has not complied with its licence target in the two years of the audit period, the blockages experienced during 2012/13 show a large improvement and indicate that the City is on course to meet its target of less than 40 blockages per 100km this year. From later records and discussion with staff, it is evident that the City's new contact arrangements, procedures and investment in system upgrades are paying dividends by way of significant reduction in blockages.

Summary Opinion of the Control Environment

With respect to the operation of the licenced services during the audit period, the Auditors conducted tests and assessed the control environment, the procedures, policies and performance of the City and found that it generally operates in accordance with the operating licence.

Asset Management System Review

Findings of the Asset Management System Review

The asset management system review assessed the performance of the City against the key asset management processes and effectiveness criteria set out in the ERA Guidelines.

The previous asset management system review identified thirty recommendations, with an additional three recommendations carried forward from the prior audit of June 2009.

The three recommendations from the 2009 review that were still outstanding at the time of the last audit have all been addressed and closed out.

Of the thirty recommendations from the 2011 review, the City has completed 24 of them. There are four recommendations that were made at the last review that we consider are not required. In these cases, we consider that the existing approaches, procedures and processes are reasonable and sufficient to meet the requirements of the relevant effectiveness criteria set out by the ERA. These are outlined in the following table:

Recommendation from Previous Operational Audit (2011)	Status	Observations
Write a procedure for project engineering and business decisions and include in the Asset Management System.	Not required as existing procedure and approach considered sufficient	<ul style="list-style-type: none"> The City has not created a procedure to show options available. Job description forms and the use of the Business Case process for larger capital projects would be expected to reflect sound engineering and business decisions. The capacity and performance of the WWTP to meet future requirements is currently being assessed by an experienced external consultant and would be expected to produce solution options. Generally the majority of the City's engineering decisions focus on mains renewals and the option as to dig-out or reline, with the chosen option based on lifecycle cost, condition, performance, the risk assessment and the number of customer complaints received by customers experiencing blockages and/or overflows with that particular mains length. As such, we do not consider that a separate procedure is required to document the steps for all project engineering and business decisions as this may discourage a search for innovative, cost effective solutions.
The City should develop a process and timeframe for commissioning tests	Not required as existing approach considered sufficient	<ul style="list-style-type: none"> Commission testing associated with large capital works would be expected to be included in the project technical specifications. For commissioning and testing of smaller assets, the City refers to Water Corporation's guidelines. This is referenced in the SOP Manual. Therefore, we do not consider that a separate procedure to document the processes and timeframes for commissioning tests is required.
The City should attempt to indicate its income to match expenditure. This will only be indicative but if the	Not required as existing approach	<ul style="list-style-type: none"> The City has included a 10 year financial plan in its AMP which follows the strategic requirements under the Local Government Act.

Recommendation from Previous Operational Audit (2011)	Status	Observations
expenditure can be projected to 2061 then the income needs to be estimated to compare against.	considered sufficient	<ul style="list-style-type: none"> Future expenditure is based on the indicative asset lives for each asset. We do not consider that anything would be gained by matching this to predicted income going out 50 years into the future given the uncertainties involved.
The City should create a procedure to show the actions to be taken when variances between budget and actual costs are noted. This should have varying levels associated with the difference identified.	Not required as existing procedure considered sufficient	<ul style="list-style-type: none"> The sewerage service budgets are prepared and managed in accordance with the City's overall financial planning requirements and procedures. These are Council-wide and not explicit to the management of the service. Any additional expenditure over the agreed budgets has to be reviewed and then approved by the CEO.

There are two recommendations related to risk management from the last review that have not been fully implemented. These are outlined in the following table:

Recommendation from Previous Operational Audit (2011)	Status	Observations
The City should create risk management policies and link them to the Asset Management Plan.	Partly Completed	<ul style="list-style-type: none"> The City has identified risks within the Risk Assessment module of the AMS, with the assessments covering the risks associated with failing to meet the requirements of its Operating Licence, in addition to the risks associated with the assets themselves. This includes outline risk control and mitigation strategies for each identified risk However, there is not yet a link between the risk management and the Asset Management Plan. Therefore, we have recommended a new section be added into the AMP to cover risk management. This would include an outline of the processes involved in the assessment (e.g. the consequence and likelihood scoring system and the risk matrix used by the City) as well as document the AMS risk register itself and the control and mitigation policies and strategies. We would expect that strategies to address high risks are addressed in the AMP.
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.	Partly Completed	<ul style="list-style-type: none"> As above

The asset management system review conducted for the audit period of 1 April 2009 to 31 March 2011 found that there were opportunities for improvement for the majority of the City's asset management processes. The City's current Asset Management Plan (AMP) is more of an operational document than a strategic planning document and we have identified a number of opportunities and made a series of recommendations that we consider would improve the AMP.

In addition, there is overlap between the operational information included the AMP and the SOPs. We have made a number of recommendations related to cross-referencing the SOPs in the AMP.

We have also recommended that either additional sections be added to the AMP to relate to the non-potable water assets and associated operations and maintenance requirements or a separate AMP is developed for the recycled water scheme.

We have observed that the City's performance against the licence targets and the other levels of service are generally not reported internally and not reported in the City's Annual Report and we have made recommendations for increased reporting of the sewerage service performance information

The Asset Planning, Contingency Planning, Financial Planning and Capital Expenditure asset management processes have been assigned a “C” adequacy rating and a “3” performance rating.

The sewerage scheme AMP does not include any information related to the recycled water scheme and the City does not have a separate AMP for the assets related to the provision of non-potable water. We have recommend that either additional sections be added to the document to relate to the non-potable water assets and associated operations and maintenance requirements or a separate AMP is developed for the recycled water scheme. In addition, although the City has submitted a draft Recycled Water Quality Management Plan to the Department of Health for review, the Incident and Emergency Plan included in Appendix L of the document still needs to be completed.

We observed that old and out-of-date unit rates are being used to develop the future renewals budget and we have recommended that they are reviewed and updated so that future expenditure requirements are not under-estimated and reflect actual costs.

Although the City has not completed any new capital projects during the audit period, we consider that there is scope to improve its existing processes and procedures. We have recommended that the City develops a SOP which includes a flowchart to cover the full budget process, and includes details of the procedures involved in developing the capital expenditure program. This should look to ensure that capital projects go through the required Business Case approval process. We also recommend that the City expands the Financial Planning section included in its AMP to provide more in depth details of the proposed capital works that have been identified and scheduled.

Our recommendations from the asset management system review are provided in the following table.

Asset Management Process	Key Issue	Recommendations
Asset Planning	<ul style="list-style-type: none"> ▪ The current Asset Management Plan is more of an operational document than a strategic planning document and we have identified a number of opportunities that would we consider would improve the AMP. ▪ There is overlap between the information in the AMP and the SOPs. We have made a number of recommendations related to cross-referencing the SOPs in the AMP. ▪ There is no information included in the AMP related to the recycled water scheme. 	<ul style="list-style-type: none"> ▪ Although the AMP covers the City's sewerage scheme, we recommend that either additional sections be added to the document to relate to the non-potable water assets and associated operations and maintenance requirements or a separate AMP is developed for the recycled water scheme. ▪ The Levels of Service included in Section 3 of the AMP should be expanded to include the licence targets for customer complaints, blockages and overflows. ▪ Although the service levels are defined, we recommend that they are also referenced in the Asset Planning section in the SOP Manual to note that asset planning should be in accordance to meet the service levels defined in the licence. ▪ The Asset Planning section should also reference the Non-Asset Options section which is included in a later section in the SOP. ▪ Although the AMP has a section on Maintenance Planning, this has not been completed in the current version of the document. ▪ As there is some overlap between the AMP and the SOP Manual, we recommend that the relevant SOPs should be listed in the appropriate sections of the AMP. ▪ The Asset Environment section of the AMP includes historical population. We recommend that this section be expanded to include details of predicted population growth (including low, medium and high projections). ▪ We recommend that the Description of the Asset System (Section 4) of the AMP be expanded to show more information related to the assets, e.g. pipe length by condition, age, diameter etc to provide a fuller picture of the City's asset base. We would also suggest that schematics of the network be included. ▪ We also recommend that the any asset planning requirements to meet growth be outlined or stated that no new assets have been identified if the growth forecasts do not require it. ▪ Although the SOP includes a comment that business processes and objectives should reflect the needs of all the stakeholders, we recommend that this section be expanded to list the key stakeholders (both internal and external) that should be consulted in issues related to the sewerage (and non-potable water supply) services. ▪ The budget policies and processes used by Council and funding options available should be cross-referenced in the Asset Planning SOP. This should also include the processes and procedures related to developing Business Cases.

Asset Management Process	Key Issue	Recommendations
Asset Creation	<ul style="list-style-type: none"> As above 	<ul style="list-style-type: none"> We recommend that the AMP includes references to the design standards adopted by the City. We recommend that that Asset Acquisition section of the SOP be expanded to include/reference the policies and processes associated with developer contributed assets being taken on by the City. It is also suggested that a flow chart indicating the process for seeking approval of a project be included in the SOP Manual and referenced in the AMP so that all staff understand how the planning process is undertaken and when a project needs to be escalated for approval.
Environmental Analysis	<ul style="list-style-type: none"> As above Customers are not made aware of the levels of service they can expect to receive Performance against the licence targets and the other levels of service are generally not reported internally and not reported in the City's Annual Report. 	<ul style="list-style-type: none"> We recommend that the levels of service are included in the customer charter to inform customers of the service levels they can expect to receive. The performance standards against the licence targets and the other levels of service are not reported internally. We recommend that internal reporting on the sewerage system be increased so that ongoing performance is better monitored throughout the year. We recommend that the performance standards are reported in the publically available Annual Report. We recommend that a reference to the licence to discharge and any appropriate operating rules and procedures be added into Section 6 of the AMP.
Asset Operations	<ul style="list-style-type: none"> The current Asset Management Plan is more of an operational document than a strategic planning document and we have identified a number of opportunities that would we consider would improve the AMP. There is overlap between the information in the AMP and the SOPs. We have made a number of recommendations related to cross-referencing the SOPs in the AMP. Unit costs used to develop future renewals budgets are out of date. 	<ul style="list-style-type: none"> Operational Planning, including operational rules and procedures, included in Section 6 of the AMP should reference the service levels and targets that the City is required to meet. We also suggest that this section of the AMP be expanded to include reference to the operating systems and associated manuals and documentation used to manage the WWTP. Where applicable, reference to the operations-related SOPs included in the City's SOP Manual should also be included in this section of the AMP. The unit costs being used to develop future renewals budgets should be reviewed and updated as it is likely that the old rates being used are under-estimating future expenditure requirements. We also recommend that that the renewal costs include an appropriate contingency.
Asset Maintenance	<ul style="list-style-type: none"> The information on asset maintenance included in the AMP is incomplete. 	<ul style="list-style-type: none"> A section on Maintenance Planning is included in Section 7 of the AMP. However, no schedule has been inserted into the document. We recommend that this section be completed. We recommend that the City continues to develop the maintenance costs included in the Planned Works Schedule and update the information included in the Works Register in the AMS. This will allow for improved monitoring of maintenance costs and assist in forward planning of maintenance budgets.

Asset Management Process	Key Issue	Recommendations
Asset Management Information System	<ul style="list-style-type: none"> The City has experienced increasing stability and control issues with its AMS (essentially a series of linked Excel 97 spreadsheets) The renewals expenditure calculations included in the AMS are fairly rudimentary and cumbersome to review and update. 	<ul style="list-style-type: none"> We suggest that the City looks to investigate options to upgrade the asset maintenance system over the course of the next few years.
Risk Management	<ul style="list-style-type: none"> The current Asset Management Plan is more of an operational document than a strategic planning document and we have identified a number of opportunities that would we consider would improve the AMP. 	<ul style="list-style-type: none"> We recommend that a new section be added into the AMP to cover risk management. This would include an outline of the processes involved in the assessment (e.g. the consequence and likelihood scoring system and the risk matrix used by the City) as well as document the AMS risk register itself. It is recommended that the City review the existing risk register to ensure that it aligns with the revised AS/NZS ISO 31000:2009.
Contingency Planning	<ul style="list-style-type: none"> The Incident Management Plan for the non-potable water supply is included in Appendix L of the Recycled Water Quality Management Plan. However, although it sets out the contents, including incident classification, notification processes, emergency response and communications, containment and remediation procedures and incident cause and investigation procedures, the Plan still needs to be completed. 	<ul style="list-style-type: none"> We recommend that the City completes the Incident and Emergency Plan set out in its the Recycled Water Quality Management Plan.
Financial Planning	<ul style="list-style-type: none"> Expenditure data for the wastewater service is included in the AMP at a very high level, with no detail provided. 	<ul style="list-style-type: none"> We would also recommend that the high level recurrent expenditure in the City's Financial Statement included in the AMP be broken down to a lower level (e.g. labour, energy, chemicals, consultants, contractors etc). Currently the breakdown only shows three items; Interest on Loans, Other Costs and Administration.
Capital Expenditure Planning	<ul style="list-style-type: none"> The City has not completed any new capital projects during audit period. However, we note that the last two new capex projects, two new sewer lines that were constructed in December 2008 and October 2010, did not go through the Business Case approval process that they should have gone through. The current Asset Management Plan is more of an operational document than a strategic planning document and we have identified a number of opportunities that would we consider would improve the AMP. 	<ul style="list-style-type: none"> We recommend that the City develops a SOP to cover the full budget process, and includes details of the procedures involved in developing the capital expenditure program. We also recommend that the City expands the Financial Planning section included in its AMP to provide more in depth details of the proposed capital works that have been identified and scheduled. We recommend that an additional section on Infrastructure Planning be added to the AMP to summarise asset planning for the sewer service and any future planning requirements. This should include summaries of and references/links to any relevant planning studies, regional planning initiatives, strategy reports, network/population models and any appropriate reports/data, e.g. CCTV data, performance/capacity reviews.

Assessment of the Effectiveness of the Asset Management System

Based on the outcomes of the audit, the Auditors found that the asset management processes and measures have been implemented and are being followed. It is the Auditor's opinion that the asset management system is generally operating satisfactorily.

However, the City has experienced increasing stability and control issues with its AMS (essentially a series of linked Excel 97 spreadsheets) and we suggest that it looks to investigate options to upgrade the asset maintenance system over the course of the next few years.

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1 Introduction

1.1 Background

The Economic Regulation Authority of Western Australia (herein referred to as the Authority), grants operating licences to organisations providing potable water, non-potable water, sewerage and drainage services in the State. The Authority is responsible for providing the functions as outlined in Section 4 of the Water Services Licensing Act 1995, which includes monitoring the performance of the water services industry and those participating in the industry, and the performance of providers of water services. The Water Services Licensing Act 1995 provides the mechanisms that allow the Authority to ensure compliance of the operating licence conditions by the licensees.

Under Sections 36 and 37 of the Act, it is a requirement of every licence that the licensee provides an asset management system and provides to the Authority an operational audit and system review, to be conducted by an independent expert that is acceptable to the Authority.

The City of Kalgoorlie-Boulder's current Operating Licence was approved by the Authority on 3 December 2012 and permits City of Kalgoorlie-Boulder's to provide non-potable water and sewerage services and undertake, maintain and operate any associated works within its operating area. Sections 16 and 17 of the Operating Licence outline the obligations of the licensee to undertake an operational audit and a review of the asset management system.

1.2 Purpose of this Report

In accordance with the conditions stipulated in the Water Services Licensing Act 1995 and City of Kalgoorlie-Boulder's Operating Licence No 4, Cardno Pty Ltd was engaged by City of Kalgoorlie-Boulder's, with the approval of the Authority, to undertake an operational licence audit and asset management review of City of Kalgoorlie-Boulder's for the period covering 1 January 2011 to 31 December 2012.

This report provides a summary of the findings of the operational licence audit and asset management review and includes suggestions for improvements in these areas.

The audit was carried out in accordance with the following documents:

- ▶ Audit Guidelines: Electricity, Gas and Water Licenses (ERA, August 2010)
- ▶ City of Kalgoorlie-Boulder's Operating Licence – Licence No 4
- ▶ ASAE 3000: Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (AASB, July 2007)
- ▶ City of Kalgoorlie-Boulder's Audit Plan, (Cardno, Version 2, January 2013).

2 Audit / Review Scope

2.1 Audit / Review Objectives

The objectives of this audit / review were to:

- ▶ Determine the effectiveness of measures that have been implemented by City of Kalgoorlie-Boulder to meet the conditions, performance and quality standards outlined in the licence
- ▶ Determine the effectiveness of measures that have been implemented by City of Kalgoorlie-Boulder for the proper management of assets used in the provision and operation of services, and where appropriate, the construction or alteration of relevant assets
- ▶ Identify areas where improvement is required and provide a recommendation for corrective action, where appropriate.

2.2 Scope of Works

The scope of works and methodology used to conduct the audit / review is based on the procedures and requirements outlined in the Audit Guidelines and as summarised in the sections below.

2.2.1 Operational Licence Audit

The Operational Licence Audit involved an assessment of the operational audit licence for:

- ▶ Process compliance: the effectiveness of systems and procedures in place throughout the audit period, including the adequacy of internal controls
- ▶ Outcome compliance: the actual performance against standards prescribed in the licence throughout the audit period
- ▶ Output compliance: the existence of the output from systems and procedures throughout the audit period
- ▶ Integrity of reporting: the completeness and accuracy of the compliance and performance reports provided to the Authority
- ▶ Compliance with individual licence conditions: the requirements imposed on the specific licensee by the Authority or specific issues that are advised by the Authority.

The operating licence audit focussed on the following key areas:

- ▶ Clause 1: Operating Area
- ▶ Clause 5: Compliance
- ▶ Clause 6: Customer Complaints
- ▶ Clause 7: Customer Service Charter
- ▶ Clause 8: Customer Consultation
- ▶ Clause 15: Accounting Records
- ▶ Clause 16: Operational Audit
- ▶ Clause 17: Asset Management System

- ▶ Clause 18: Reporting
- ▶ Clause 20: Service and Performance Standards
- ▶ Clause 21: Provision of Information
- ▶ Clause 22: Publishing Information
- ▶ Clause 23: Notices
- ▶ Clause 24: Review of the Authority's Decisions.

2.2.2 Asset Management System Review

The Asset management system review included an assessment of the asset management system implemented by City of Kalgoorlie-Boulder and covered the following key areas:

- ▶ Asset planning
- ▶ Asset creation/acquisition
- ▶ Asset disposal
- ▶ Environmental analysis
- ▶ Asset operations
- ▶ Asset maintenance
- ▶ Asset management information system
- ▶ Risk management
- ▶ Contingency planning
- ▶ Financial planning
- ▶ Capital expenditure planning
- ▶ Asset management system review.

2.3 Methodology and Approach

The audit / review approach adopted involved visiting the licensee organisation and conducting enquiries and interviews with key licensee representatives. At these interviews, the licensee's representatives were questioned regarding operating practices and background information on past performance and supplementary information was requested as audit evidence to substantiate the performance and compliance assessment. Where possible, information systems were interrogated to test the veracity of the performance reports provided by the licensee.

Key items discussed and assessed include:

- ▶ The control environment:
 - Organisation's management and operating style
 - The organisational structure
 - Staff delegations of authority and responsibilities
 - Staff skills and experience

- Information systems
- ▶ The information system:
 - The effectiveness and appropriateness of the information system
 - Accuracy of data stored and collected
 - System / data security
 - Documents and procedures relating to the information system
- ▶ Control procedures:
 - The effectiveness of systems and procedures to monitor compliance with the licence
 - The effectiveness of the asset management system in storing and maintaining data
 - The effectiveness of procedures and systems in identifying non-compliance or under performance
- ▶ Compliance attitude:
 - Actions taken in response to previous audit / review recommendations
 - The licensee's attitude towards compliance
- ▶ Outcome compliance:
 - Actual performance against standards prescribed in the licence throughout the audit period.

Assessment for compliance with licence conditions and the effectiveness of the asset management system utilises a risk based approach, which is based on ISO 31000:2009 - Risk management.

The audit was conducted in accordance with ASAE 3000: Assurance Engagements Other Than Audits or Reviews of Historical Financial Information.

2.4 Time Period Covered by the Audit / Review

This audit covers the period from 1 January 2011 to 31 December 2012.

The previous audit covered the period from 1 December 2008 to 31 December 2010 and was undertaken by Opus.

2.5 Time Period of the Audit / Review Process

The audit / review commenced in December 2012 with preparation of the draft Audit Plan. On site interviews with City of Kalgoorlie-Boulder staff were carried out on 5 - 6 February 2013 at City of Kalgoorlie-Boulder's office.

2.6 Details of the Licensee Representatives Participating in the Audit / Review

Details of representatives from the City of Kalgoorlie-Boulder who participated in the audit and review process are provided in Table 2-1.

Table 2-1 Details of Licensee Representatives

Name	Organisation	Role
Keith Boase	City of Kalgoorlie-Boulder	Manager Sustainability & Waste Services
Sue Mizen	City of Kalgoorlie-Boulder	Manager Finance

2.7 Details of Key Documents and Other Information Sources

The following documents were reviewed during the audit / review:

- ▶ City of Kalgoorlie-Boulder Water Services Operating Licence, 3 December 2012
- ▶ City of Kalgoorlie-Boulder Asset Management System
- ▶ City of Kalgoorlie-Boulder Asset Management Plan Sewerage Scheme, July 2012
- ▶ City of Kalgoorlie-Boulder, Engineering Services Directorate, Sustainability and Waste Services Standard Operating Procedures (SOP) Manual, August 2012
- ▶ City of Kalgoorlie-Boulder Asset Management Plan Sewerage Scheme Operational Area and Layouts, November 2010
- ▶ City of Kalgoorlie-Boulder Wastewater Treatment Plan Critical Incident Response Procedure (CIRP)
- ▶ City of Kalgoorlie-Boulder 2012/13 Budget Working Document, July 2012
- ▶ Year to Date vs Budget Monthly Financial Reports for the Sewerage Service
- ▶ City of Kalgoorlie-Boulder Fees and Charges 2012/13
- ▶ City of Kalgoorlie-Boulder Customer Service Charter – Summary
- ▶ City of Kalgoorlie-Boulder Customer Service Charter – Full Version
- ▶ City of Kalgoorlie-Boulder Sewer Property Connection Maintenance Guidelines
- ▶ City of Kalgoorlie-Boulder Policy Manual
- ▶ City of Kalgoorlie-Boulder Housing Strategy 2003
- ▶ Post-Audit Implementation Plan from 2011 audit
- ▶ Compliance Report for 1 July 2010 to 30 June 2011 send to the ERA
- ▶ Compliance Report for 1 July 2011 to 30 June 2012 send to the ERA
- ▶ Receipt from ERA of City of Kalgoorlie-Boulder 2010/11 Water Licence Compliance Report
- ▶ Receipt from ERA of City of Kalgoorlie-Boulder 2011/12 Water Licence Compliance Report
- ▶ ERA's email approval of the City's Customer Service Charter
- ▶ Customer notification for Planned Sewer Maintenance Program work
- ▶ Relevant section of Local Government Act 1995
- ▶ Local Government (Administration) Regulations 1996
- ▶ Water Corporation, "A Guide to Water Corporation Building Approvals" leaflet
- ▶ City of Kalgoorlie-Boulder, "Preventing Sewer Overflows" leaflet
- ▶ Gribble Creek Flood Management Study – Final Part 1, SMEC, 2001.

2.8 Details of Auditors Participating in the Audit / Review and Hours Utilised

The audit / review team comprised of four (4) staff members from Cardno.

Details of their roles and hours utilised in the audit / review process are provided in the table below.

Table 2-2 Details of Audit / Review Team Members

Name	Organisation	Role	Summary of Task	Hours Utilised
Justin Edwards	Cardno	Auditor/Reviewer	<ul style="list-style-type: none"> Audit preparation Audit Preparation of Report 	120 hours
Aneurin Hughes	Cardno	Project Director	<ul style="list-style-type: none"> Audit preparation Report review 	2 hours
Stephen Walker	Cardno	Project Reviewer	<ul style="list-style-type: none"> Audit Plan Preparation of Report 	2 hours
Sean Ackaert	Cardno	Preparation of Audit Plan	<ul style="list-style-type: none"> Audit Plan 	8 hours

3 Licensee's Response to previous Audit Recommendations

In the previous operating licence audit and asset management review conducted by Opus, a series of actions were recommended or suggested to improve the existing controls.

Details of the actions completed by City of Kalgoorlie-Boulder against each recommendation are presented in Table 3-1.

Table 3-1 Summary of Actions to Previous Audit Recommendations

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
Outstanding Actions from Prior Audit / Review June 2009							
	Asset Planning Identify and document likelihood and consequence 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 licence but has so far only identified risks and consequences for approximately 40% of its physical assets.	At the time of the last audit (2011) approximately 40% of physical assets had risks and consequences identified. Continue works currently being undertaken.	Completed	<ul style="list-style-type: none"> All of the City's main physical asset types have had risk and consequences identified and assessed in the AMS.
	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.	At the time of the last audit (2011) approximately 40% of physical assets had risks and consequences identified. Continue works currently being undertaken.	Completed	<ul style="list-style-type: none"> Risks and consequences related to threats from the sewer system have been identified and recorded in the Risk Assessment module of the AMS. Operational and contingency procedures are detailed in the SOP Manual and also referenced in the AMP.
	Create, document and regularly review maintenance plan for 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 held within the Standard Operating Procedure document.	Completed	<ul style="list-style-type: none"> The City has developed a procedure to document how and when the AMP is updated and reviewed. This is included in the SOP Manual.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
Outstanding Actions from Previous Audit / Review 2011							
Sch 3, Cl 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.	Completed	<ul style="list-style-type: none"> The Charter was updated after the previous audit/review and approved by the ERA. A procedure for reviewing the Customer Charter has been developed and is included in the SOP Manual.
Sch 4, Cl 2, 2.1 Sewerage Services	The licensee must comply with the relevant sewerage service standards	2	<p>The City has made a marked improvement in sewer blockages since the previous audit. The blockage figure recorded on the Asset Management System for the current audit period are:</p> <p>Jan – Dec 2009 = 118 / 100km</p> <p>Jan – Dec 2010 = 75 / 100km</p> <p>This is, however, still above the target of 40 blockages per 100km of sewer.</p>	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.	Completed	<ul style="list-style-type: none"> The City has engaged a new contractor since the time of the last audit/review and this has resulted in an improvement in the quality of the workmanship. Although the City previously started to inspect all contracted repair work completed by its previous contractor, it now inspects a random sample of work.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
Asset Management System Review 2011							
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 than 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.	Completed	<ul style="list-style-type: none"> The City has developed an Asset Planning procedure and this is included in the SOP Manual.
	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 rather than a documented procedure to sit within their Standard Operating Procedure document.	Procedure to be documented and be held within the Standard Operating Procedure document.	Completed	<ul style="list-style-type: none"> The City has developed a procedure related to the considering non-asset options in the asset planning process and this is included in the SOP Manual.
	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.	Completed	<ul style="list-style-type: none"> Essentially the City's funding options are rates, reserves and loans. The Source of Funds are outlined in Section 10.2 of the AMP.
	Plans are regularly reviewed and updated	D3	Plans are reviewed on an ad hoc basis, no procedure is in place to define timescales and formats 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 in the Standard Operating Procedure document.	Completed	<ul style="list-style-type: none"> The City has developed a procedure to document how and when the AMP is updated and reviewed. This covers both internal and external reviews and is included in the SOP Manual.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
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 a procedure for undertaking this.	Write a procedure for creation / acquisition of assets and include in the Asset Management System.	Completed	<ul style="list-style-type: none"> Since the time of the last audit/review, the City has developed a procedure for Asset Acquisition and this is included in the SOP Manual.
	Projects reflect sound engineering and business decisions	D2	Works undertaken during the current audit period show evidence of engineering judgements being employed to determine the best procedures for the works and the 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.	Not required as existing procedure and approach considered sufficient	<ul style="list-style-type: none"> The City has not created a procedure to show options available. Job description forms and the use of the Business Case process for larger capital projects would be expected to reflect sound engineering and business decisions. The capacity and performance of the WWTP to meet future requirements is currently being assessed by an experienced external consultant and would be expected to produce solution options. Generally the majority of the City's engineering decisions focus on mains renewals and the option as to dig-out or reline, with the chosen option based on lifecycle cost, condition, performance, the risk assessment and the number of customer complaints received by customers experiencing blockages and/or overflows with that particular mains length.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
							<ul style="list-style-type: none"> As such, we do not consider that a separate procedure is required to document the steps for all project engineering and business decisions as this may discourage a search for innovative, cost effective solutions.
	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.	Not required as existing approach considered sufficient	<ul style="list-style-type: none"> Commission testing associated with large capital works would be expected to be included in the project technical specifications. For commissioning and testing of smaller assets, the City refers to Water Corporation's guidelines. This is referenced in the SOP Manual. Therefore, we do not consider that a separate procedure to document the processes and timeframes for commissioning tests is required.
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.	Write procedural document as part of the Asset Management System.	Completed	<ul style="list-style-type: none"> The City has developed an Asset Disposal procedure and this is included in the SOP Manual.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
	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.	Completed	<ul style="list-style-type: none"> The City has included a general statement relating to under-utilised or under-performing assets in its Asset Disposal procedure. The City has also developed a procedure for System Failure Analysis Investigation and this is also included in the SOP Manual.
	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 procedure for disposal of assets and include in the Asset Management System.	Completed	<ul style="list-style-type: none"> The City has developed an Asset Disposal procedure and this is included in the SOP Manual.
Environmental Analysis	Opportunities and threats in the environmental 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.	Completed	<ul style="list-style-type: none"> Risks and consequences related to threats from the sewer system have been identified and recorded in the Risk Assessment module of the AMS. Operational and contingency procedures are detailed in the SOP Manual and also referenced in the AMP.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
Asset Operations	Risk management is applied to prioritise operations tasks	D3	Risk management is applied through staff knowledge rather than a 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 Asset Management System.	Completed	<ul style="list-style-type: none"> The City has developed an overall procedure in its SOP Manual for the AMS, including the Risk Assessment module. The procedure provides an overview of the module and information on adding data. Day-to-day operational risks are covered under the City's OHS procedures.
	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 asset 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.	Completed	<ul style="list-style-type: none"> The City has developed an overall procedure in its SOP Manual for the AMS, including the Asset register module. The procedure provides an overview of the module and information on adding data for new assets.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
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 Procedure.	The City should develop all procedures to supplement the site work they are undertaking.	Completed	<ul style="list-style-type: none"> ▪ The City has developed an overall procedure in its SOP Manual for the AMS, including the Maintenance Management module. The procedure provides an overview of the module and information on adding data. ▪ The City has also developed a procedure for the Asset Maintenance Program. This covers treatment plant infrastructure and sewer mains infrastructure. The section on the sewer mains infrastructure covers cleaning, CCTV and refurbishment work. ▪ The SOP Manual also contains specific operational procedures related to the site work undertaken. ▪ As included in the actions from this review, the City needs to complete the Maintenance Planning section of its AMP document.
	Failures are analysed and operational / maintenance plans are 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 failure analysis.	Completed	<ul style="list-style-type: none"> ▪ The City has developed a procedure for System Failure Analysis Investigation and this is also included in the SOP Manual.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
	Risk management is applied to prioritise maintenance tasks.	D3	Risk management is applied through staff knowledge rather than a 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.	Completed	<ul style="list-style-type: none"> The City has developed an overall procedure in its SOP Manual for the AMS, including the Risk Assessment module. The procedure provides an overview of the module and information on adding data. The data is then used with condition and performance data and customer complaints to prioritise maintenance tasks.
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 being maintained by experience 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.	Completed	<ul style="list-style-type: none"> The City has developed an overall procedure in its SOP Manual for the AMS.
	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. The procedure is not documented.	The City should develop input procedures as part of the Asset Management System user guide.	Create a review procedure of inputting of data.	Completed	<ul style="list-style-type: none"> As noted, The City has developed an overall procedure in its SOP Manual for the AMS, including the steps involved in the data input for each of the system's modules.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
Risk Management	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the Asset Management System	D3	Staff understand 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.	Partly Completed	<ul style="list-style-type: none"> ▪ The City has identified risks within the Risk Assessment module of the AMS, with the assessments covering the risks associated with failing to meet the requirements of its Operating Licence, in addition to the risks associated with the assets themselves. This includes outline risk control and mitigation strategies for each identified risk ▪ However, there is not yet a link between the risk management and the Asset Management Plan. ▪ Therefore, we have recommended a new section be added into the AMP to cover risk management. This would include an outline of the processes involved in the assessment (e.g. the consequence and likelihood scoring system and the risk matrix used by the City) as well as document the AMS risk register itself and the control and mitigation policies and strategies. ▪ We would expect that strategies to address high risks are addressed in the AMP.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
	Risks are documented in a risk register as part of the AMS and treatment plant are actioned and monitored.	D3	Staff understand 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.	Partly Completed	<ul style="list-style-type: none"> As above
	The probability and consequences of asset failures are regularly assessed.	D3	Staff understand 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.	As part of the above document, timeframes for the review of the risk register should be included.	Develop a review timetable.	Completed	<ul style="list-style-type: none"> As noted, The City has developed an overall procedure in its SOP Manual for the AMS. This includes a section on the review of the AMS. This includes the review of the risk register.
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 are fully aware of the system and	The City's staff 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.	Completed	<ul style="list-style-type: none"> The City has developed a series of operational contingency plans in its SOP Manual to cover sewer main overflows, sewer main blockages, and after hours procedures. An outline of the operating rules and procedures is included in Section 6 of the

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
			what is required. The City has a member of technical staff on duty 24 hours call and a plumber on 24 hours call to deal with emergencies as they arise.				AMP.
Financial Planning	The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions 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.	Not required as existing approach considered sufficient	<ul style="list-style-type: none"> The City has included a 10 year financial plan in its AMP which follows the strategic requirements under the Local Government Act. Future expenditure is based on the indicative asset lives for each asset. We do not consider that anything would be gained by matching this to predicted income going out 50 years into the future given the uncertainties.
	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.	Completed	<ul style="list-style-type: none"> The overhead costs for the sewerage service are documented in the Financial Statement included in the AMP. The breakdown of the City's annual budget information provides detailed breakdown by cost codes of the budget and actual spend for the sewerage service. The approach for overhead costs is based on the expenditure from the previous year,

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
							<p>adjusted where required.</p> <ul style="list-style-type: none"> References to the City's financial planning approaches are included in Section 10 of the AMP.
	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 are determined from talking with industry professionals and from local knowledge to ensure that the best estimate is given. When the actual costs 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 costs are noted. This should have varying levels associated with the difference identified.	Implement recommendation	Not required as existing procedure considered sufficient	<ul style="list-style-type: none"> The sewerage service budgets are prepared and managed in accordance with the City's overall financial planning requirements and procedures. These are Council-wide and not explicit to the management of the service. Any additional expenditure over the agreed budgets has to be reviewed and then approved by the CEO.
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 Capital Expenditure Plan needs to be expanded to show what is done, by whom and when.	Implement recommendation	Completed	<ul style="list-style-type: none"> A 10 year capital program is included in the AMP. A section on the responsibilities for the capital program is included in Section 10.4 of the AMP. Procedures for updating information in the AMS, the primary tool in developing

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
			the funds will be derived from.				the capex program, are included in the AMS SOP included in the SOP Manual.
	The plan provides reasons for capital expenditure and timing of expenditure.	C3	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 done, by whom and when.	Implement recommendation	Completed	<ul style="list-style-type: none"> See above
	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	Completed	<ul style="list-style-type: none"> The review procedures covering the AMP and AMS are included in the SOP Manual. These processes include the reviewing of the base information that is used to form the forward capital program.
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 November 2010, replacing the previous plan dated 1997. The new plan incorporates the removal of 1	The City should create a procedure for reviewing its AMP at regular intervals. Currently this is done on an ad hoc basis.	The City should create a review process as part of the AMS.	Completed	<ul style="list-style-type: none"> The review procedures covering the AMP and AMS are included in the SOP Manual.

Clause / Key Process	Licence Obligation	Previous Rating	Issue	Recommendation from Operational Audit & Asset Management Review (2011)	Action / Response Taken	Status	Comments / Recommended Action
			WWTP, the addition of the IDEA plant, new sub-divisions and an increase in sewer length of approximately 20km. There is no procedure in place for reviewing the plan.				
	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 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.	Completed	<ul style="list-style-type: none"> The review procedures covering the AMP and AMS are included in the SOP Manual. This includes internal and external reviews. Essentially the external review of the AMS is completed during the ERA licence audit and asset management review.

4 Performance Summary

The assessment of the operational / performance compliance includes a risk assessment rating and a compliance rating. Description of the rating scale and outcomes of the operational / performance audit is provided in the following sections.

4.1 Assessment Rating Scales

4.1.1 Risk Assessment Rating Scale

The risk assessment process is undertaken for both the Operating Licence audit and asset management review. It involves the identification of risks that may affect compliance with the licence conditions and affect management processes resulting in ineffective asset management practices.

The risk assessment approach adopted for the audit / review is outlined in the Economic Regulation Authority's Audit Guidelines: Electricity, Gas and Water Licenses and is based on AS/NZS 4360:2004. The process involves:

- ▶ Identifying the likelihood and consequence to determine the inherent risk level
- ▶ Determining the adequacy of existing controls
- ▶ Evaluating the audit priority scale.

Risks are assessed utilising a 3-point rating scale. The rating scale and definitions used in this process is described in **Appendix A**.

4.1.2 Compliance Assessment Rating Scale

The audit component requires an assessment of compliance against the licence conditions. The compliance assessment utilises a 7-point rating scale is outlined in **Appendix B**. The compliance rating applied to each licence condition is based on the auditor's own opinion determined from the audit / review process.

4.1.3 Assessment Management Performance Rating

The asset management system effectiveness review is assessed on the adequacy of the asset management process and policy (rating scale of A to D), and its overall performance (rating scale of 1 to 4).

Definitions of the rating system are provided in **Appendix B**.

4.2 Operational / Performance Audit Compliance Summary

Table 4-1 provides a summary of City of Kalgoorlie-Boulder's compliance rating against each licence condition.

It should be noted that a preliminary risk assessment was undertaken during the development of the audit plan. The risk assessment levels were checked and updated following the audit / review and these are reflected in Table 4-1.

Table 4-1 Operational / Performance Audit Compliance Summary

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating							
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R	
Operating Areas (Clause 2)															
The licensee is granted a licence for the Operating Area(s) to provide the water services described in Schedule 1 in accordance with the terms and conditions of this licence (Operating Area as per Plan No OWR-OA-028 (B))	2.1	2		C	1	Low	Strong				✓				
Fees (Clause 4)															
The licensee must pay the applicable fees in accordance with the Regulations.	4.1			C	1	Low	Strong								✓
Compliance (Clause 5)															
Subject to any modifications or exemptions granted pursuant to the Act, the licensee must comply with any applicable legislation.	5.1			C	2	Medium	Moderate				✓				
Subject to the provisions of any applicable legislation, the Authority may direct the licensee in writing to do any measure necessary to: (a) Correct the breach of any applicable legislation; (b) Or prevent the breach of any	5.2			C	2	Medium	Moderate								✓

¹ A – Likely; B – Probable; C – Unlikely

² 1 – Minor; 2 – Moderate; 3 – Major

³ Low, Medium, High

⁴ Strong, Medium Weak

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
applicable legislation occurring again, And specify a time limit by which such action must be taken.														
Customer Complaints (Clause 6)														
The licensee must establish customer complaints processes as set out in Schedule 3.	6.1	3												
The licensee must have in place, a properly resourced process for effectively receiving, recording and (where possible) resolving customer complaints within a timeframe of 15 business days.	6.1	3	3.1	B	2	Medium	Moderate			✓				
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.	6.1	3	3.4	C	2	Medium	Moderate			✓				
During the process of investigation and conciliation, the licensee must make every endeavour to promptly cooperate with the Department of Water (or its representative's) requests, which must include the expeditious release of any information or documents requested by the Department of Water and the availability of the relevant staff of the licensee.	6.1	3	3.6	C	1	Low	Moderate							✓
The licensee must, on request, provide the Department of Water with details of complaints made, names and addresses of customers who have made complaints and the manner in which the complaint was resolved.	6.1	3	3.7	C	1	Low	Moderate							✓
The licensee must establish a system for recording and resolving complaints by	6.1	3	3.8	B	1	Low	Moderate			✓				

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
customers within 15 business days regarding a provided or requested water service, or for matters which must be considered by a Local Government Authority Council, within 5 business days after the first ordinary Council meeting following the expiry of the 15 business day period.														
To ensure the effectiveness of such a process the licensee must, as a minimum: <ul style="list-style-type: none"> (a) record details of each customer complaint and its outcome; (b) provide an officer trained to deal with customer complaints who authorized to, or has access to another officer who has the authority to, make the necessary decisions to settle customer complaints or disputes, and where applicable, make recommendations to Council as to the payment of monetary compensation; and (c) make all necessary arrangements to ensure that if possible complaints can be resolved in the timeframes set out in sub-clause 3.8. 	6.1	3	3.9	B	1	Low	Moderate			✓				
Unless the complaint or dispute is a matter in relation to which section 3.22 of the Local Government Act 1995 applies, where a dispute has not been resolved within 15 business days the licensee must inform the customer of the option of referring their complaint to the Department of Water.	6.1	3	3.10	B	1	Low	Moderate				✓			

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
Customer Service Charter (Clause 7)														
The licensee must establish a customer service charter as set out in Schedule 3.	7.1	3												
The licensee must have in place a customer service charter that accords with the Authority's review guidelines and the specified principles set out in the licence schedule.	7.1	3	2.1	C	2	Medium	Strong					✓		
The customer service charter: (a) Should be in plain English; and (b) Should address all of the service issues that are reasonably likely to be of concern to its customers	7.1	3	2.2	B	2	Medium	Moderate					✓		
Any proposed amendment to the customer service charter must be forwarded to the Authority for approval.	7.1	3	2.4	C	1	Low	Strong					✓		
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 licensee's offices to which customers regularly have access (b) By providing a copy, upon request, and at no charge, to the customer; and (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.	7.1	3	2.5	C	2	Medium	Moderate					✓		
The customer service charter is to be reviewed by the licensee at least once in every three year period or as agreed	7.1	3	2.6	C	1	Low	Moderate					✓		

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
with the Authority.														
It is a condition of the licence that the licensee provides services in a way which is consistent with the customer service charter. This condition is not intended to create a statutory duty nor provide any third party with a legally enforceable right or cause of action.	7.1	3	2.7	C	2	Medium	Moderate					✓		
Customer Consultation (Clause 8)														
The licensee must establish customer consultation processes as set out in Schedule 3.	8.1	3												
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 by either: <ul style="list-style-type: none"> (a) establishing 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 (b) institute at least two of the following processes: <ul style="list-style-type: none"> i. meeting on a regular basis with customers to seek comment on issues relevant to the licensee's level of service under the licence; or ii. publish a simple newsletter providing basic information about the licensee's operations; and/or iii. establish other forums for 	8.1	3	4.1	C	2	Medium	Strong		✓					

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
consultation to enable community involvement in issues relevant to the exercise of the licensee's obligations under this licence.														
The Authority must be consulted with respect to the type and extent of customer consultation to be adopted by the licensee	8.1	3	4.2	B	1	Low	Moderate							✓
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.	8.1	3	4.3	C	1	Low	Moderate							✓
Accounting Records (Clause 15)														
The licensee and any related body corporate must maintain accounting records that comply with the Australian Accounting Standards Board Standards or equivalent International Accounting Standards.	15.1			C	2	Medium	Strong					✓		
Operational Audit (Clause 16)														
The licensee, must, unless otherwise notified in writing by the Authority, provide the Authority with an operational audit within 24 months after the commencement date, and every 24 months thereafter.	16.1			C	2	Medium	Strong					✓		
The licensee must comply, and must require the licensee's auditor to comply, with the Authority's standard audit guidelines dealing with the operational audit, including any minimum requirements relating to the appointment of the auditor, the scope of the audit, the	16.2			C	2	Medium	Strong					✓		

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
conduct of the audit and the reporting of the results of the audit.														
The independent auditor may be nominated by the licensee but must be approved by the Authority prior to the audit pursuant to Clause 16.1.	16.4			C	2	Medium	Strong					✓		
Asset Management System (Clause 17)														
The licensee must provide for, and notify the Authority of, an asset management system in respect of the licensee's assets within 2 business days from the commencement date unless otherwise notified in writing by the Authority.	17.1			B	1	Low	Strong					✓		
The licensee must notify the Authority of any material change to the asset management system within 10 business days of such change.	17.2			C	1	Low	Strong							✓
The licensee must, unless otherwise notified in writing by the Authority: (a) Conduct an asset management system review; and (b) Provide the Authority with a report on the asset management system review Within 24 months after the commencement date and every 24 months thereafter.	17.3			C	1	Low	Strong					✓		
The licensee must comply and must require the licensee's expert to comply, with the Authority's standard guidelines dealing with asset management system review, including any minimum requirements relating to the appointment of the expert, the scope of the review, conduct of the review and the reporting of the results of the review.	17.4			C	2	Medium	Strong					✓		

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
The independent auditor may be nominated by the licensee but must be approved by the Authority prior to the audit pursuant to Clause 17.3.	17.6			C	2	Medium	Strong					✓		
Reporting (Clause 18)														
The licensee must report to the Authority:	18.1			C	2	Medium	Moderate							✓
(a) If the licensee is under external administration as defined by the Corporations Act 2001 within 2 business days														
(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 occurring														
Service and Performance Standards (Clause 20)														
The licensee must comply with the service and performance standards as set out in Schedule 4.	20.1	4												
Telephone Answering – Emergency Response	20.1	4	1.1	B	2	Medium	Strong			✓				
The licensee shall provide an emergency 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.														
Target:														
90% of customers within 1 hour of														

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
reporting an emergency shall be advised of the nature and timing of the action to be undertaken by the licensee.														
Customer Complaints The licensee shall respond to customer complaints in accordance with the licence standard Target: 90% of customer complaints resolved within 15 business days.	20.1	4	1.2	B	2	Medium	Moderate			✓				
Sewerage Service Standards The number of sewer blockages per 100km of sewer mains. Target: In the preceding 12 months there were fewer than 40 blockages per 100km of sewer main.	20.1	4	2.1	C	2	Medium	Weak		✓					
Sewerage Service Standards Percentage of connected properties experiencing a wastewater overflow. Target: In the preceding 12 month period 90% of customers receive the standard for the licensee's schemes.	20.1	4	2.2	C	2	Medium	Weak					✓		
Provision of Information (Clause 21)														
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.	21.1			C	2	Medium	Moderate					✓		
The licensee must comply with the information reporting requirements as set out in Schedule 5.	21.2	5												

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
The licensee will provide the Authority with data required for performance monitoring purposes as set out in the Water Compliance Reporting Manual, as amended from time to time.	21.2	5	2.1	B	2	Medium	Moderate					✓		
The licensee must provide the data required by Schedule 5, Clause 2.1 for the previous financial year by 31 October each year.	21.2	5	2.2	B	2	Medium	Moderate					✓		
The data supplied to the Authority, pursuant to Schedule 5, Clause 2.1 must be audited in accordance with Clause 6 and Schedule 3 of the Deed by 31 October 2007 (or other such date as determined by the Authority) and then at least once every 36 months (or other such date as determined by the Authority)	21.2	5	2.3	B	2	Medium	Moderate					✓		
The data supplied to the Authority in accordance with performance indicators LSS1 and LSS2 in the Water Compliance Reporting Manual must also be provided on a monthly and rolling 12 month basis.	21.2	5	2.4	B	2	Medium	Moderate					✓		
Publishing Information (Clause 22)														
The Authority may direct the licensee to publish any information within a specified timeframe it considers relevant in connection with the licensee or the performance of the licensee of its obligations under this licence.	22.1			C	2	Medium	Moderate							✓
Subject to Clause 22.3, the licensee must publish the information referred to in Clause 22.1	22.2			C	2	Medium	Moderate							✓
If the licensee considers that the information is confidential it must:	22.3			C	2	Medium	Moderate							✓

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
Immediately notify the Authority; and Seek a review of the Authority’s decision in accordance with Clause 24.1.														
Notices (Clause 23)														
Unless otherwise specified, all notices must be in writing.	23		1	C	2	Medium	Strong					✓		
A notice will be regarded as having been sent and received: (a) When delivered in person to the addressee; or (b) 3 business days after the date of posting if the notice is posted in Western Australia; or (c) 5 business days after the date of posting if the notice is posted outside Western Australia; or (d) If sent by facsimile when, according to the sender's transmission report, the notice has been successfully received by the addressee; or (e) If sent by email when, according to the sender’s electronic record, the notice has been successfully sent to the addressee’s water licensing email address.	23		2	C	2	Medium	Strong					✓		
Review of the Authority’s Decision (Clause 24)														
The licensee may seek a review of a reviewable decision by the Authority pursuant to this licence in accordance with the following procedure: (a) The licensee must make a submission on the subject of the reviewable decision within 10 business days (or other period as	24.1			C	2	Medium	Moderate							✓

Operating Areas	Operating Licence Reference			Likelihood ¹	Consequence ²	Inherent Risk ³	Adequacy of Controls ⁴	Compliance Rating						
	Licence Clause	Schedule	Sch Clause					1	2	3	4	5	N/A	N/R
<p>approved by the Authority) of the decision; and</p> <p>(b) The Authority will consider the submission and provide the licensee with a written response within 20 business days.</p>														

4.3 Asset Management Review Effectiveness Summary

The asset management system review assesses the effectiveness of the asset management system in delivering the services as required under the operating licence.

The review is conducted utilising the asset management adequacy and performance ratings as outlined in the Audit Guidelines, (refer **Appendix C**). A summary of the outcomes of the review is provided in Table 4-2.

Table 4-2 Asset Management Review Summary

Asset Management System	Asset Management Adequacy Rating	Asset Management Performance Rating
Asset planning	C	3
Asset creation/acquisition	B	2
Asset disposal	A	1
Environmental analysis	B	2
Asset operations	C	2
Asset maintenance	B	2
Asset management information system	B	2
Risk management	B	2
Contingency planning	C	3
Financial planning	C	3
Capital expenditure planning	C	3
Review of the asset management system	B	2

5 Observations and Recommendations

5.1 Operational / Performance Audit

The following tables provide detailed commentary based on the findings observed during the audit process and includes the nominated compliance rating, and recommended actions to address the non-compliance and/or process deficiency.

Table 5-1 Observations from the Operational / Performance Audit

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
Clause 2	Operating Areas			
2.1	The licensee is granted a licence for the Operating Area(s) to provide the water services described in Schedule 1 in accordance with the terms and conditions of this licence (Operating Area as per Plan No OWR-OA-028 (B))	<ul style="list-style-type: none"> The map showing the City's operating area was updated in 2012. Correspondence dated 06/11/2012 from the Authority confirms the amendment to the licence to reflect the correct map reference. The current map of the operating area is available and can be downloaded from the Authority's website. The map of the operating area is also accessible by all staff. The City advised that services are provided within the confines of the operating area. All rateable properties are listed in the corporate billing system, Technology One. Customers are billed for sewerage services if they are located within 90m of the sewer network. Although there are some areas with septic tanks within the City's overall operating area, the City can enforce connection to the sewer system if the customer is within 90m of the network. However, the City does not enforce this unless there is a failure to maintain the customer's septic system or if the block is being sub-divided. 	4	<ul style="list-style-type: none"> At the next review and update of the Customer Service Charter, the references to the operating area (Section 1.3) should be updated to reflect the correct map reference
Clause 4	Fees			
4.1	The licensee must pay the applicable fees in accordance with the Regulations.	<ul style="list-style-type: none"> Licence fee was paid at the time the licence was issued in 2004. The licence 	NR	<ul style="list-style-type: none"> No further action required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
		<p>fee is valid until the expiry date of the licence, currently 2021, or in the event of version changes, as requested by the ERA.</p> <ul style="list-style-type: none"> Since the licence fee was paid in 2004, and is outside of the audit period of 1 January 2011 to 31 December 2012, this clause is not applicable under this audit. 		
Clause 5	Compliance			
5.1	<p>Subject to any modifications or exemptions granted pursuant to the Act, the licensee must comply with any applicable legislation.</p>	<ul style="list-style-type: none"> The City has identified legislation and regulations applicable to the operation of their organisation and provision of the services and these are listed in Section 5 – Regulatory Requirements of the Asset Management Plan. In addition, Federal, State and Local acts, laws and policies related to the City's sustainability and waste services are listed (and hyperlinked) in Section 7 of its Standard Operating Procedures (SOP) Manual, August 2012. Details of new/revised legislation is received by the Records department within Council, forwarded to the CEO and then sent to the relevant officers to address. 	4	<ul style="list-style-type: none"> Although relevant legislation is listed in the AMP and in the SOP Manual, a reference in these sections to the officer/department responsible for monitoring applicable legislation and the workflow process/procedure for identifying/implementing/seeking exemption is recommended.
5.2	<p>Subject to the provisions of any applicable legislation, the Authority may direct the licensee in writing to do any measure necessary to:</p> <p>(a) Correct the breach of any applicable legislation;</p> <p>(b) Or prevent the breach of any applicable legislation occurring again,</p> <p>And specify a time limit by which such action must be taken.</p>	<ul style="list-style-type: none"> The Authority contacted the City regarding the Post-Audit Implementation Plan from the last audit to confirm progress against the actions as not all the deadlines were met. However, the Authority did not refer to breaches of licence conditions in their correspondence and so the City completed the remaining actions. The City advised that they have not received any notification of any breaches or non-compliance against any applicable legislation. The Auditor has no reason to believe that the City has not complied with the required 	NR	<ul style="list-style-type: none"> The City to continue monitoring and/or responding to ERA requests, as required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
		legislative requirements.		
Clause 6	Customer Complaints			
6.1	<i>The licensee must establish customer complaints processes as set out in Schedule 3.</i>			
Sch 3, CI 3.1	The licensee must have in place, a properly resourced process for effectively receiving, recording and (where possible) resolving customer complaints within a timeframe of 15 business days.	<ul style="list-style-type: none"> Customer complaints relating to the licenced services provided by the City are managed under the City's Complaints Handling Policy (Policy 4.1 in its Policy Manual). The Policy covers Commitment, Recording, Responsibility, Complaint Handling and Monitoring. The Policy notes that "<i>Complaints which are unresolved after five working days will be referred back to the relevant Director</i>" and "<i>Complaints which are unresolved after 15 working days will be referred to the Chief Executive Officer</i>". Endeavouring to resolve customer complaints within 15 business days is communicated to customers in the Customer Service Charter. Complaints are logged in the City's document management system. Timeframes and internal escalations are built into the system. The City has an out-of-hours telephone number for customers. Complaints related to the sewerage service (e.g. overflows) are directed to the on call officer to attend. We reviewed the complaints that the City received over the two year audit period and confirmed that all had been resolved within the 15 business days timeframe. 	3	<ul style="list-style-type: none"> It is recommended that the process and procedures for dealing with customer complaints are added to Section 4 – Administration in the SOP Manual. This SOP includes processes for managing enquiries and correspondence but not specifically complaints. Although our review of the complaints received by the City of Kalgoorlie-Boulder during the two-year audit period showed all complaints being resolved within 15 days, the audit of the information stored in DataWorks was reasonably difficult as each piece of correspondence had to be opened to check if it was a complaint or whether it was just an enquiry. We recommend that the City sets up a simple spreadsheet to record the details of all of the complaints so that monitoring and reporting is simplified.
Sch 3, CI 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.	<ul style="list-style-type: none"> Customers are informed of the option for referring their complaint to the Department of Water in the Customer Service Charter. Full contact details for the Department are provided in the Charter. 	3	

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
Sch 3, CI 3.6	During the process of investigation and conciliation, the licensee must make every endeavour to promptly cooperate with the Department of Water (or its representative's) requests, which must include the expeditious release of any information or documents requested by the Department of Water and the availability of the relevant staff of the licensee.	<ul style="list-style-type: none"> The City did not receive any requests from the Department of Water to provide supplementary information or requests to consider alternative solutions to a complaint in the period being audited. 	NR	<ul style="list-style-type: none"> No further action required.
Sch 3, CI 3.7	The licensee must, on request, provide the Department of Water with details of complaints made, names and addresses of customers who have made complaints and the manner in which the complaint was resolved.	<ul style="list-style-type: none"> The City did not receive any requests from the Department of Water to provide supplementary information or requests to consider alternative solutions to a complaint in the period being audited. If required, the City is able to provide the Department of Water with details of the complaints it receives. 	NR	<ul style="list-style-type: none"> No further action required.
Sch 3, CI 3.8	The licensee must establish a system for recording and resolving complaints by customers within 15 business days regarding a provided or requested water service, or for matters which must be considered by a Local Government Authority Council, within 5 business days after the first ordinary Council meeting following the expiry of the 15 business day period.	<ul style="list-style-type: none"> Refer to Sch 3, CI 3.1. 	3	<ul style="list-style-type: none"> Refer to Sch 3, CI 3.1.
Sch 3, CI 3.9	To ensure the effectiveness of such a process the licensee must, as a minimum: <ul style="list-style-type: none"> (d) record details of each customer complaint and its outcome; (e) provide an officer trained to deal with customer complaints who authorized to, or has access to another officer who has the authority to, make the necessary decisions to settle customer complaints or disputes, and where applicable, make recommendations to Council as to the payment of monetary compensation; and (f) make all necessary arrangements to ensure that if possible complaints can be resolved in the timeframes set out in sub- 	<ul style="list-style-type: none"> Complaints are logged in DataWorks, the City's document management system. Timeframes and internal escalations are built into the system. Complaints relating to the sewerage service are forwarded in the first instance to the Manager Sustainability and Waste Services. The Manager Sustainability and Waste Services may delegate addressing and responding to the complaint to the Environmental Coordinator. We reviewed the logged complaints that the City received over the two year audit period and observed that an appropriate 	3	<ul style="list-style-type: none"> Refer to Sch 3, CI 3.1

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
	clause 3.8.	<p>response was issued to the customer.</p> <ul style="list-style-type: none"> We also confirmed that each complaint had been resolved within the 15 business days timeframe. 		
Sch 3, Cl 3.10	Unless the complaint or dispute is a matter in relation to which section 3.22 of the Local Government Act 1995 applies, where a dispute has not been resolved within 15 business days the licensee must inform the customer of the option of referring their complaint to the Department of Water.	<ul style="list-style-type: none"> The City's complaint numbers are low and, as observed, over the two year audit period, all complaints were resolved within 15 days. As noted previously, customers are informed of the option for referring their complaint to the Department of Water in the Customer Service Charter. Full contact details for the Department are provided in the Charter. However, this is not specifically included in the City's written response to the complainant. 	4	<ul style="list-style-type: none"> We recommend that standard text be added to the City's complaint response letter that informs the customer of referring their complaint to the Department of Water if they do not consider that it has been resolved to their satisfaction within 15 business days.
Clause 7 Customer Service Charter				
7.1	<i>The licensee must establish a customer service charter as set out in Schedule 3.</i>			
Sch 3, Cl 2.1	The licensee must have in place a customer service charter that accords with the Authority's review guidelines and the specified principles set out in the licence schedule.	<ul style="list-style-type: none"> A customer service charter has been prepared in accordance with the ERA's guidelines. The current version of the Customer Service Charter was developed in March 2011 and was approved by the ERA on 10 June 2011. 	5	<ul style="list-style-type: none"> No further action required.
Sch 3, Cl 2.2	The customer service charter: <ul style="list-style-type: none"> (a) Should be in plain English; and (b) Should address all of the service issues that are reasonably likely to be of concern to its customers 	<ul style="list-style-type: none"> The City's Customer Service Charter covers customer's rights and provides information on: <ul style="list-style-type: none"> customers' rights to wastewater services rights to industrial and commercial wastewater services rights in relation to sewer spills rights to consultation and information rights to assistance, redress and compensation 	5	<ul style="list-style-type: none"> No further action required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
		<ul style="list-style-type: none"> – charges and account – connecting to services – disconnection – enquiries, suggestions, complaints and disputes – entry to private property – rectifying defective work – service interruptions – maintenance – discharge of unauthorised substances – limitation/ withdrawal of services, – liability. 		
Sch 3, CI 2.4	Any proposed amendment to the customer service charter must be forwarded to the Authority for approval.	<ul style="list-style-type: none"> ▪ There have been no amendments made to the Customer Service Charter since it was approved in June 2011. 	5	<ul style="list-style-type: none"> ▪ No further action required.
Sch 3, CI 2.5	The licensee must make the customer service charter available to its customers in the following ways: <ul style="list-style-type: none"> (a) By prominently displaying it in those parts of the licensee's offices to which customers regularly have access (b) By providing a copy, upon request, and at no charge, to the customer; and (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. 	<ul style="list-style-type: none"> ▪ The City has two versions of its Customer Service Charter, the full version and a summary version. ▪ Both versions of the Customer Service Charter are available on the internet, at the administration office and can be requested at no charge. ▪ On the day of the audit, the Auditor observed both versions of the Customer Service Charter were displayed at the customer service office in the waiting area. ▪ The summary customer service charter is distributed to customers every two years with the rates notice. 	5	<ul style="list-style-type: none"> ▪ No further action required.
Sch 3, CI 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.	<ul style="list-style-type: none"> ▪ The next review of the Customer Service Charter is due in 2014. 	5	<ul style="list-style-type: none"> ▪ At the next review and update of the Customer Service Charter, the references to the operating area (Section 1.3) should be updated to reflect the correct map reference
Sch 3, CI 2.7	It is a condition of the licence that the licensee	<ul style="list-style-type: none"> ▪ The customer service charter reflects the 	5	<ul style="list-style-type: none"> ▪ No further action required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
	provides services in a way which is consistent with the customer service charter. This condition is not intended to create a statutory duty nor provide any third party with a legally enforceable right or cause of action.	<p>conditions outlined in the licence.</p> <ul style="list-style-type: none"> ▪ The City operates with the intention to provide services as outlined in the licence and in the customer service charter. ▪ Processes are in place to guide the operation of the City's wastewater services to meet the requirements outlined in the Customer Service Charter and licence. 		
Clause 8 Customer Consultation				
8.1	<i>The licensee must establish customer consultation processes as set out in Schedule 3.</i>			
Sch 3, Cl 4.1	<p>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 by either:</p> <ul style="list-style-type: none"> (c) establishing 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 (d) institute at least two of the following processes: <ul style="list-style-type: none"> iii. meeting on a regular basis with customers to seek comment on issues relevant to the licensee's level of service under the licence; or iv. publish a simple newsletter providing basic information about the licensee's operations; and/or v. establish other forums for consultation to enable community involvement in issues relevant to the exercise of the licensee's obligations under this licence. 	<ul style="list-style-type: none"> ▪ We consider that under the strict interpretation of the licence requirement, the City does not meet meets the licence requirement through either the Part (a) or Part (b) options. ▪ The City publishes a summary version of its Customer Service Charter and issues it to customers every two year with its rates charges information. The summary charter (as well as the full-length version) are downloadable from the City's internet site and are available at the front counter in the main council building. However, the Charter is, under the strict interpretation of the licence requirements, not considered to be a newsletter that provides updates regarding the City's sewerage and non-potable water operations. ▪ Although not specific to the wastewater services, the City conducts council meetings twice per month that can be attended by the general public. Public questions can be taken at the general meetings. Agendas and minutes are downloadable from the City's website. However, in order for the Council meetings to qualify as a forum for consultation, the agenda needs to include a regular item to 	2	<ul style="list-style-type: none"> ▪ As the licence requirements related to this clause are likely to change, no further action is required at this time in order for the City to achieve compliance.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
		<p>discuss the sewerage and non-potable water services.</p> <ul style="list-style-type: none"> The City regularly liaises with customers when it responds to complaints and enquiries. In addition, where appropriate, the City publishes new information in the local paper. Planning notices for public consultation are also available on the City's website. Although not relevant to the wastewater services or its licence obligations, the City has previously undertaken public consultation for hard waste recycling. If the City needed to consult to enable community involvement in a matter relevant to its licence obligations, it would put this into action. 		
Sch 3, Cl 4.2	The Authority must be consulted with respect to the type and extent of customer consultation to be adopted by the licensee	<ul style="list-style-type: none"> There has been no change to the type and extent of the customer consultation that has been adopted by the City. The previous audit report states that the Authority was informed of the City's practices in writing on 27 June 2008. This written confirmation was not re-checked at audit. 	NR	<ul style="list-style-type: none"> No further action required.
Sch 3, Cl 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.	<ul style="list-style-type: none"> The City did not receive a request from the ERA to establish a forum for consultation during the audit period. We reviewed the correspondence between the City and the Authority over the audit period and confirmed that no request was made. 	NR	<ul style="list-style-type: none"> No action required unless requested by the ERA.
Clause 15	Accounting Records			
15.1	The licensee and any related body corporate must maintain accounting records that comply with the Australian Accounting Standards Board Standards or equivalent International Accounting Standards.	<ul style="list-style-type: none"> Accounting records are prepared in accordance with AASB standards. Financial records are included in the City's annual reports and are published on the 	5	<ul style="list-style-type: none"> No further action required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
		internet. <ul style="list-style-type: none"> The financial statement includes a sign-off from the independent auditor and the City's CEO that the financial report complies with the Australian Accounting Standards and the provisions of the Local Government Act 1995 and the regulations under that Act related to Financial Management. 		
Clause 16	Operational Audit			
16.1	The licensee, must, unless otherwise notified in writing by the Authority, provide the Authority with an operational audit within 24 months after the commencement date, and every 24 months thereafter.	<ul style="list-style-type: none"> The last operational audit was undertaken in 2011 by Opus (report prepared in July 2011) which covered the period from 1 December 2008 to 31 December 2010. The next operational audit (this audit) covers the period from 1 January 2011 to 31 December 2012. 	5	<ul style="list-style-type: none"> No further action required.
16.2	The licensee must comply, and must require the licensee's auditor to comply, with the Authority's standard audit guidelines dealing with the operational audit, including any minimum requirements relating to the appointment of the auditor, the scope of the audit, the conduct of the audit and the reporting of the results of the audit.	<ul style="list-style-type: none"> The current operational audit follows the ERA Audit Guidelines – Electricity, Gas and Water Licenses (August 2010). 	5	<ul style="list-style-type: none"> No further action required.
16.4	The independent auditor may be nominated by the licensee but must be approved by the Authority prior to the audit pursuant to Clause 16.1.	<ul style="list-style-type: none"> The City of Kalgoorlie-Boulder has received approval on the appointment of the current auditor (Cardno). 	5	<ul style="list-style-type: none"> No further action required.
Clause 17	Asset Management System			
17.1	The licensee must provide for, and notify the Authority of, an asset management system in respect of the licensee's assets within 2 business days from the commencement date unless otherwise notified in writing by the Authority.	<ul style="list-style-type: none"> The City has an Asset Management System that uses a series of linked Excel spreadsheets. The system is simplistic and was developed by GHD under ERA instruction for use by small service providers. The asset management system consists of: <ul style="list-style-type: none"> An Asset Register 	5	<ul style="list-style-type: none"> No further action required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
		<ul style="list-style-type: none"> – Inventory Control – Condition & Performance Monitoring – Risk Assessment – Maintenance Management – Financial Budget <ul style="list-style-type: none"> ▪ The ERA has previously been notified of the City's Asset Management System. 		
17.2	The licensee must notify the Authority of any material change to the asset management system within 10 business days of such change.	<ul style="list-style-type: none"> ▪ The City advised that no material change has been made to the Asset Management System during the audit period. 	NR	<ul style="list-style-type: none"> ▪ No further action required. The City should notify the ERA of any material changes to the asset management system, as required.
17.3	The licensee must, unless otherwise notified in writing by the Authority: <ul style="list-style-type: none"> (a) Conduct an asset management system review; and (b) Provide the Authority with a report on the asset management system review Within 24 months after the commencement date and every 24 months thereafter.	<ul style="list-style-type: none"> ▪ An asset management system review was conducted by Opus in 2011 (report prepared July 2011), which covered the period from 1 January 2008 to 31 December 2010. ▪ The next asset management system review (this review) covers the period from 1 January 2011 to 31 December 2012. 	5	<ul style="list-style-type: none"> ▪ No further action required.
17.4	The licensee must comply and must require the licensee's expert to comply, with the Authority's standard guidelines dealing with asset management system review, including any minimum requirements relating to the appointment of the expert, the scope of the review, conduct of the review and the reporting of the results of the review.	<ul style="list-style-type: none"> ▪ The current operational audit follows the ERA Audit Guidelines – Electricity, Gas and Water Licenses (August 2010). 	5	<ul style="list-style-type: none"> ▪ No further action required.
17.6	The independent auditor may be nominated by the licensee but must be approved by the Authority prior to the audit pursuant to Clause 17.3.	<ul style="list-style-type: none"> ▪ The City of Kalgoorlie-Boulder has received approval on the appointment of the current auditor (Cardno). 	5	<ul style="list-style-type: none"> ▪ No further action required.
Clause 18	Reporting			
18.1	The licensee must report to the Authority: <ul style="list-style-type: none"> (a) If the licensee is under external administration as defined by the Corporations Act 2001 within 2 	<ul style="list-style-type: none"> ▪ The City has not experienced any significant change to its corporate, financial or technical circumstances in the last 24 months. 	NR	<ul style="list-style-type: none"> ▪ No further action required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
	business days (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 occurring			
Clause 20	Service and Performance Standards			
20.1	<i>The licensee must comply with the service and performance standards as set out in Schedule 4.</i>			
Sch 4, Cl 1.1	Telephone Answering – Emergency Response The licensee shall provide an emergency 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. Target: 90% of customers within 1 hour of reporting an emergency shall be advised of the nature and timing of the action to be undertaken by the licensee.	<ul style="list-style-type: none"> ▪ The City has a 24-hour telephone service. ▪ The front counter receives all calls during the business hours and these are re-directed to the Sustainability and Waste Services department to address. ▪ An after-hours call service is utilised for calls made outside of business hours. The same customer service number is utilised for business hours and after-hours calls. The after-hours calls are re-directed to the on call officer to respond to. ▪ The City records sewer blockages and sewer overflows as emergencies. ▪ The City records details of all the sewer blockages and overflows it attends in a worksheet in its AMS and uses this to report against its performance standards. ▪ Although the worksheet records the day that the customer call was taken, it does not record the time that the call was taken or the time that the City's contactor arrived at site. ▪ Given that the performance target is based on the customer being advised of the nature and timing of the action to be undertaken by the City to rectify the 	3	<ul style="list-style-type: none"> ▪ Based on the our interpretation of the licence target, we consider that although there is no evidence to prove that the target is being met, that the City would be expected to advise customers of the nature and timing of the action to be undertaken within an hour of them reporting an emergency. However, there may be times when the advice to the customer is not provided at the time the customer first calls in to report an emergency, e.g. busy periods and after-hours calls, and when the customer has to be called back. ▪ However, the true measures of an emergency response are the response time (the time between the customer reporting the emergency and the time that that field staff arrive on site) and the repair/rectification time (the time between the customer reporting the emergency and the time that the repair/rectification has been carried out). ▪ Although we consider that the City is meeting its licence requirement, we suggest that it creates a simple spreadsheet (or adds columns to its

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
		<p>emergency, rather than the time to respond repair or rectify, it would be expected that the City would meet its requirement in the initial telephone conversation with the customer, i.e. what time the contractor would expect to be on site and what work they will carry out to resolve the emergency..</p> <ul style="list-style-type: none"> However, as no times are recorded it was not possible to confirm that the required target is being met. The City considers that it attends all emergencies within an hour, and although this is likely given the size of the scheme, essentially there is no evidence to confirm or otherwise. 		<p>existing worksheet) to look to record the time that emergency calls are received, the time that the customer is advised of the nature and timing of the action, and the time that its contractors arrive on site.</p>
Sch 4, Cl 1.2	<p>Customer Complaints</p> <p>The licensee shall respond to customer complaints in accordance with the licence standard</p> <p>Target:</p> <p>90% of customer complaints resolved within 15 business days.</p>	<ul style="list-style-type: none"> The City's policies and processes for managing customer complaints have previously been covered under Clause 6. At audit, we interrogated the customer complaints registered in the City's Data Works document management system and confirmed that between 1 January 2011 and 31 December 2012, all customer complaints received (lodged on the in the system) were resolved within 15 business days. 	3	<ul style="list-style-type: none"> As previously noted under Clause 6, it is recommended that the process and procedures for dealing with customer complaints are added to Section 4 – Administration in the SOP Manual. This SOP includes processes for managing enquiries and correspondence but not specifically complaints. Although our review of the complaints received by the City of Kalgoorlie-Boulder during the two-year audit period showed all complaints being resolved within 15 days, the audit of the information stored in DataWorks was reasonably difficult as each piece of correspondence had to be opened to check if it was a complaint or whether it was just an enquiry. We recommend that the City sets up a simple spreadsheet to record the details of all of the complaints so that monitoring and reporting is simplified.
Sch 4, Cl 2.1	<p>Sewerage Service Standards</p> <p>The number of sewer blockages per 100km of sewer mains.</p> <p>Target:</p>	<ul style="list-style-type: none"> The City reports against its service standards on a Financial Year basis, whereas its operational licence is based on the calendar year. 	2	<ul style="list-style-type: none"> Although the City has not complied with its licence target in the two years of the audit period, the blockages experienced during 2012/13 show a large

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
	In the preceding 12 months there were fewer than 40 blockages per 100km of sewer main.	<ul style="list-style-type: none"> For the period 1 July 2010 to 20 June 2011, the City reported 74 blockages per 100 km in its annual Compliance Report to the Authority. We reviewed the number of blockages that the City has recorded in its AMS and observed that the total for the year was 148 blockages, of which 18 resulted in overflows. There were 7 external sewer flooding incidents and no internal sewer flooding incidents at customer properties. Based on a sewer mains length of 207km, the 148 reported blockages is 71.5 blockages per 100km. For the period 1 July 2011 to 20 June 2012, the City reported 62.4 blockages per 100 km in its annual Compliance Report to the Authority. We reviewed the number of blockages that the City has recorded in its AMS and observed that the total for the year was 133 blockages, of which 28 resulted in overflows. There were 4 external sewer flooding incidents and one internal sewer flooding incidents at customer properties. Based on a sewer mains length of 207km, the 133 reported blockages is 62.4 blockages per 100km. We assessed the blockages on a rolling 12 month period, taking into account blockages from January 2010 to report the 12 month performance at January 2011 until the present time (May 2013). Over this time period there has been a steady decrease in the number of blockages experienced by the City. <ul style="list-style-type: none"> From January 2011 until August 2011, the City's rolling 12 month performance showed blockages in excess of 70 per 100km sewer mains. 		improvement and indicate that the City is on course to meet its target of less than 40 blockages per 100km this year. Based on the rolling 12 month performance, the City has achieved less than 40 blockages per 100km sewer mains in each month since January 2013.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
		<ul style="list-style-type: none"> – In September 2011, the blockage rate decreased below 70 blockages per 100km sewer main for the preceding 12 month period. – In August 2012, the blockage rate decreased below 60 blockages per 100km sewer main for the preceding 12 month period. – In October 2012, the blockage rate decreased below 50 blockages per 100km sewer main for the preceding 12 month period. – In January 2013, the blockage rate decreased below 40 blockages per 100km sewer main for the preceding 12 month period. It has continued to remain below this level during the current year. 		
Sch 4, Cl 2.2	Sewerage Service Standards Percentage of connected properties experiencing a wastewater overflow. Target: In the preceding 12 month period 90% of customers receive the standard for the licensee's schemes.	<ul style="list-style-type: none"> ▪ Although the City has failed to meet its target related to the number of sewer blockages per 100km of sewer main in the last two years, it has met the target for customers experiencing a wastewater overflow. See above. 	5	<ul style="list-style-type: none"> ▪ No further action required.
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.	<ul style="list-style-type: none"> ▪ All ERA requests and information received by the City are forwarded to the Manager Sustainability and Waste Services for delegation and action. 	5	<ul style="list-style-type: none"> ▪ No further action required.
21.2	<i>The licensee must comply with the information reporting requirements as set out in Schedule 5.</i>			
Sch 5, Cl 2.1	The licensee will provide the Authority with data required for performance monitoring purposes as set out in the Water Compliance Reporting Manual, as amended from time to time.	<ul style="list-style-type: none"> ▪ The City prepares annual compliance reports in accordance with the requirements set out by the ERA. 	5	<ul style="list-style-type: none"> ▪ No further action required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
Sch 5, Cl 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.	<ul style="list-style-type: none"> The annual compliance reports are submitted to the ERA by 31 October each year. We confirmed that the 2010/11 annual compliance report was submitted to the Authority on 22/07/2011 and the 2011/12 report was submitted on 12/07/2012. 	5	<ul style="list-style-type: none"> No further action required.
Sch 5, Cl 2.3	The data supplied to the Authority, pursuant to Schedule 5, Clause 2.1 must be audited in accordance with Clause 6 and Schedule 3 of the Deed by 31 October 2007 (or other such date as determined by the Authority) and then at least once every 36 months (or other such date as determined by the Authority)	<ul style="list-style-type: none"> An audit of the data is undertaken every three (3) years in accordance with the ERA. The last audit was undertaken in 2010 by Cardno. The next audit of the data is due later this year. 	5	<ul style="list-style-type: none"> No further action required.
Sch 5, Cl 2.4	The data supplied to the Authority in accordance with performance indicators LSS1 and LSS2 in the Water Compliance Reporting Manual must also be provided on a monthly and rolling 12 month basis.	<ul style="list-style-type: none"> LSS2 was rebadged as LSS1 in 2009. The former LSS1 (breaks and chokes) is covered under the NWI Urban Framework and so was removed by the ERA as a separate reporting obligation in the Compliance Reporting Manuals from 2009. The ERA has also modified the licence reporting requirements through the annual licence reporting handbooks and from 2009 these have specified that the Authority only requires annual data for LSS1. The City prepares annual compliance reports in accordance with the requirements set out by the ERA. 	5	<ul style="list-style-type: none"> No further action required.
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 the performance of the licensee of its obligations under this licence.	<ul style="list-style-type: none"> The City did not receive any requests from the ERA to publish information relating to its licence or performance against its licence condition. 	NR	<ul style="list-style-type: none"> Not assessed as the City did not receive any request to publish information pertaining to its licence condition or performance against the licence condition from the ERA.
22.2	Subject to Clause 22.3, the licensee must publish the information referred to in Clause 22.1	<ul style="list-style-type: none"> The City did not receive any requests from the ERA to publish information relating to its licence or performance against its licence condition. 	NR	<ul style="list-style-type: none"> Not assessed as the City did not publish any information requested by the ERA.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
22.3	If the licensee considers that the information is confidential it must: <ul style="list-style-type: none"> (a) Immediately notify the Authority; and (b) Seek a review of the Authority's decision in accordance with Clause 24.1. 	<ul style="list-style-type: none"> ▪ The City did not notify or seek a review from the ERA. 	NR	<ul style="list-style-type: none"> ▪ Not assessed as the City did not receive any requests or publish any information requested by the ERA.
Clause 23	Notices			
23.1	Unless otherwise specified, all notices must be in writing.	<ul style="list-style-type: none"> ▪ The City issues all formal correspondence in writing. ▪ Planned notices are delivered to customers in relation to the planned sewer maintenance program to inform them of the work taking place in their area. Contact details are provided to arrange access to their property if the City has not been able to contact the customer. ▪ If the City is rectifying a sewer overflow they will not generally provide notice to access or if it needs to access its infrastructure. 	5	<ul style="list-style-type: none"> ▪ No further action required.

Licence Condition	Description of Requirements	Observation / Comments	Compliance Rating	Recommendation
23.2	<p>A notice will be regarded as having been sent and received:</p> <ul style="list-style-type: none"> (a) When delivered in person to the addressee; or (b) 3 business days after the date of posting if the notice is posted in Western Australia; or (c) 5 business days after the date of posting if the notice is posted outside Western Australia; or (d) If sent by facsimile when, according to the sender's transmission report, the notice has been successfully received by the addressee; or (e) If sent by email when, according to the sender's electronic record, the notice has been successfully sent to the addressee's water licensing email address. 	<ul style="list-style-type: none"> ▪ All formal notices are logged in DataWorks, the City's corporate register / correspondence file. 	5	<ul style="list-style-type: none"> ▪ No further action required.
Clause 24 Review of Authority's Decision				
24.1	<p>The licensee may seek a review of a reviewable decision by the Authority pursuant to this licence in accordance with the following procedure:</p> <ul style="list-style-type: none"> (a) The licensee must make a submission on the subject of the reviewable decision within 10 business days (or other period as approved by the Authority) of the decision; and (b) The Authority will consider the submission and provide the licensee with a written response within 20 business days. 	<ul style="list-style-type: none"> ▪ The City did not seek a review of a reviewable decision from the ERA during the audit period. 	NR	<ul style="list-style-type: none"> ▪ Not assessed as the City did not request a review of a decision made by the ERA during the audit period.

5.2 Asset Management System Review

The following tables provide detailed commentary based on the findings observed during the audit process and includes the nominated adequacy and performance ratings (effectiveness rating), and recommended actions to improve the effectiveness of the asset management process to an acceptable level.

Table 5-2 Observations from the Asset Management Review

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
Asset Planning				
<ul style="list-style-type: none"> Planning processes and objectives reflect the needs of all stakeholders and is integrated with business planning. Service levels are defined. Non-asset options are considered. Lifecycle costs for owning and operating assets are assessed. Funding options are evaluated. Costs are justified and cost drivers identified. Likelihood and consequences of asset failure are predicted. Plans are regularly reviewed and updated. 	<p>Asset Management Plans</p> <ul style="list-style-type: none"> The City has an Asset Management Plan (AMP) for its Sewerage Scheme. The current version is 12/07/2012. The AMP includes an outline of the operating environment, Levels of Service, a description of the asset system and regulatory requirements. The AMP also documents the key aspects of operational planning for the scheme, including system operation and operating rules and procedures. Operational procedures are included in the Standard Operating Procedure (SOP) Manual. The sewerage scheme AMP does not include any information related to the recycled water scheme and the City does not have a separate AMP for the assets related to the provision of non-potable water. <p>Standard Operating Procedures</p> <ul style="list-style-type: none"> Since the last asset management review, the City has developed an overall SOP for the Sewer Asset Management System that includes a section on Sewer Asset Planning, Acquisition and Disposal. In addition, there is a separate section for considering non-asset options in the planning phase. <p>Asset Management System</p> <ul style="list-style-type: none"> The City has an Asset Management System that uses a series of linked Excel spreadsheets. The system is simplistic and was developed by GHD 	C	3	<ul style="list-style-type: none"> Although the AMP covers the City's sewerage scheme, we recommend that either additional sections be added to the document to relate to the non-potable water assets and associated operations and maintenance requirements or a separate AMP is developed for the recycled water scheme. The Levels of Service included in Section 3 of the AMP should be expanded to include the licence targets for customer complaints, blockages and overflows. Although the service levels are defined, we recommend that they are also referenced in the Asset Planning section in the SOP Manual to note that asset planning should be in accordance to meet the service levels defined in the licence. The Asset Planning section should also reference the Non-Asset Options section which is included in a later section in the SOP. Although the AMP has a section on Maintenance Planning, this had not been completed in the version of the document reviewed at audit. However, in the most recent version of the AMP, updated after the audit, this section has been completed and provides an overview of maintenance expenditure trends, standards and specifications, a summary of future maintenance expenditure, and the approach for developing the City's

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>under ERA instruction for use by small service providers.</p> <ul style="list-style-type: none"> The asset management system consists of: <ul style="list-style-type: none"> An Asset Register Inventory Control Condition & Performance Monitoring Risk Assessment Maintenance Management Financial Budget The AMS is used as the key tool for future asset predictions that are included into the City's asset planning. <p>Asset Management Planning</p> <ul style="list-style-type: none"> The Planning department within the Council is responsible for overall planning and develop the Planning Scheme document that identifies what infrastructure and facilities are required. The City has a corporate budgeting process to review and approve any new works that have been identified. The Planning Scheme document is currently to be reviewed by GHD in light of the predicted future increase in population to 38,000 as part of a review of the WWTP. This review will identify any requirements to upgrade the capacity of the WWTP to meet the potential future population that the plant serves. The Risk Assessment included in the City's AMS is used to plan asset renewals, with condition and performance being used to prioritise work. The AMP includes a 10 year capital works program. This is based on the lifecycle costs for that have been populated in the AMS. These are based on renewals of assets as they reach the end of their asset life. No new works for growth, levels of service or legislation have been identified in the current planning projections. The AMS forecasts a capex program out to 50 			<p>Renewal/Replacement Plan.</p> <ul style="list-style-type: none"> As there is some overlap between the AMP and the SOP Manual, we recommend that the relevant SOPs should be listed in the appropriate sections of the AMP. The Asset Environment section of the AMP includes historical population. We recommend that this section be expanded to include details of predicted population growth (including low, medium and high projections). We recommend that the Description of the Asset System (Section 4) of the AMP be expanded to show more information related to the assets, e.g. pipe length by condition, age, diameter etc to provide a fuller picture of the City's asset base. We would also suggest that schematics of the network be included. We also recommend that the asset planning requirements to meet growth be outlined or stated that no new assets have been identified if the growth forecasts do not require it. Although the SOP includes a comment that business processes and objectives should reflect the needs of all the stakeholders, we recommend that this section be expanded to list the key stakeholders (both internal and external) that should be consulted in issues related to the sewerage (and non-potable water supply) services. The budget policies and processes used by Council and funding options available should be cross-referenced in the Asset Planning SOP. This should also include the processes and procedures related to developing Business Cases.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>years based on the asset lives assigned to each type of asset.</p> <ul style="list-style-type: none"> Under the Local Government Act, the City will be required to break out their planned expenditure budget to show the estimates for capex, renewals and maintenance so that there is a clear report of the predicted costs. Funding options are included in Section 10 the AMP or the Asset Planning SOP. The only options available to the City to fund its sewerage service are income from rates, reserves and loans. The City has to prepare Business Cases under Section 3.59 of the Local Government Act for new assets that are identified but not for renewal of current assets. At the present time all of the asset planning work identified by the City has been for renewals. This may change based on the current GHD review of the WWTP. 			
Asset Creation				
<ul style="list-style-type: none"> Full project evaluations are undertaken for new assets including comparative assessment of non-asset solutions. Evaluations include all life-cycle costs. Projects reflect sound engineering and business decisions. Commissioning tests are documented and completed. Ongoing legal / environmental / safety obligations of the asset owners are assigned and understood. 	<ul style="list-style-type: none"> An overview of how assets should be acquired is included in the Part 3: Sewer Asset Management System in the SOP Manual. This covers the considerations for reticulated deep sewer assets and static and rotational assets. As noted previously, full project evaluations are completed as part of the Business Case process required for new assets and include all life-cycle costs. This includes assessment of non-asset solutions. Business Cases are submitted through the City's budgeting process for review and approval. The need / requirement for new sewer assets are identified from the 10-year capital expenditure program. However, at the present time all of the identified works are for renewal of assets as they reach the end of their asset lives. Headworks charges are applied by the City against every new premise as per Water Corporation's approach. 	B	2	<ul style="list-style-type: none"> As recommended previously in the Asset Planning section, the budget policies and processes used by Council and funding options available should be cross-referenced in the Asset Acquisition section of the SOP. This should also include the processes and procedures related to developing Business Cases. We recommend that the AMP includes references to the design standards adopted by the City. We recommend that that Asset Acquisition section of the SOP be expanded to include/reference the policies and processes associated with developer contributed assets being taken on by the City. It is also suggested that a flow chart indicating the process for seeking approval of a project be included in the SOP Manual and referenced in the AMP so that all staff

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<ul style="list-style-type: none"> The City does not inspect every new develop asset but requires engineer sign-off before they are transferred to the City's asset base. There is a requirement for the developer to provide As Constructed drawings of the new sewer pipework connecting to the City's existing infrastructure. Requirements for testing and commissioning for sewer pipes is included in Policy 5.1 – Requirements for Sub-Divisions. The City does not have specific testing and commissioning procedures for its active assets but would expect to include these in the conditions of contract when tendering any work at the WWTP. Mechanical and Electrical (M&E) assets would be expected to have a three month warranty for labour and a minimum of 3 months for the assets themselves. The City would expect to specify any requirements in the contract documentation. Legal, environmental and safety obligations are documented in the AMP and in the SOP Manual. The SOP Manual also outlines specific operational procedures in detail. Checklist procedures for specific operations at the WWTP are located at site. Legal, environmental and safety obligations related to the recycled water scheme are documented in the Recycled Water Quality Management Plan (RWQMP). There is also a separate O&M Manual for the recycled water scheme. 			understand how the planning process is undertaken and when a project needs to be escalated for approval.
Asset Disposal				
<ul style="list-style-type: none"> Under-utilised and under-performing assets are identified as part of a regular systematic review process. The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken. 	<ul style="list-style-type: none"> The City has an Asset Disposal Policy (Policy 6.8) The City has developed a SOP in its SOP Manual for Asset Disposal since the last review. Disposal of sewerage assets are undertaken in accordance with Section 3.58 of the Local Government Act 1995. No asset that has been in contact with raw sewage is disposed of into the public environment for reuse. These assets are scrapped. 	A	1	<ul style="list-style-type: none"> No further action required

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
<ul style="list-style-type: none"> Disposal alternatives are evaluated. There is a replacement strategy for assets. 	<ul style="list-style-type: none"> There is no formal process in place for assessing under-utilised or under-performing assets. Such assets are identified in the AMS using knowledge gained from site and historical information such as asset performance, failures and age. Assets are continually reviewed in the AMS. Retired / decommissioned assets are also notated in the City's GIS using as-constructed / survey drawings and in the AMS. The City's asset replacement strategy is based on investigation of assets associated with emergencies/incidents leading straight replacement of a failed asset and use of the AMS to review assets for renewals based on age, condition and performance. 			
Environmental Analysis				
<ul style="list-style-type: none"> Opportunities and threats in the system environment are assessed. Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved. Compliance with statutory and regulatory requirements. Achievement of customer service levels. 	<ul style="list-style-type: none"> Risk assessment is undertaken within the AMS. Two separate assessments have been developed for the risks of failing to meet the requirements of the operating licence and for the risks associated with the assets themselves. The Risk Assessment for the assets considers the consequences for risks to the environment related to each type of asset. The risk consequences related to customers, community, the water licence, financial impact and OHS are also assessed and used to derive an overall consequence score. At the present time, the City has not taken the risks associated with the Carbon tax into account and the impact of electricity and diesel for it operations in its risk assessment. The predicted costs have been taken into account in the operations budget. The budget was prepared against the costs from the City's previous electricity supplier but a new contract with better prices with a different supplier was negotiated in December 2011. As a result, this provides savings in electricity costs against the budget prepared using the previous supplier's 	B	2	<ul style="list-style-type: none"> As noted under the Asset Planning section, we recommend that the Levels of Service included in Section 3 of the AMP should be expanded to include the licence targets for customer complaints, blockages and overflows. We would also recommend that the levels of service are included in the customer charter to inform customers of the service levels they can expect to receive. The performance standards against the licence targets and the other levels of service are not reported internally. We recommend that internal reporting on the sewerage system be increased so that ongoing performance is better monitored throughout the year. We recommend that the performance standards are reported in the publicly available Annual Report. We recommend that a reference to the licence to discharge and any appropriate operating rules and procedures be added into Section 6 of the AMP.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>costs.</p> <ul style="list-style-type: none"> ▪ The City is considering implementing solar power at the WWTP in the future although this is yet to be priced. This would supplement the existing power requirements and would never fully replace the need for electricity to be provided to run the plant. ▪ Levels of Service for availability of service, capacity, continuity, emergency response, odours and risk and consequence of failure are outlined in Section 3 of the AMP. ▪ The City records details of all the sewer blockages and overflows it attends in a worksheet in its AMS and uses this to report against its performance standards. ▪ Although the worksheet records the day that the customer call was taken, it does not record the time that the call was taken or the time that the City's contactor arrived at site. As such, response times are not recorded or reported. Refer to our comments included against Clause 20, Sch 4, Cl 1.1 in the previous section of this report. ▪ During 2010/11 and 2011/12, the City failed to comply with its licence requirement target of fewer than 40 blockages per 100km of sewer main. This was reported to the Authority in the annual Compliance Reports submitted by the City in each of these years. Refer to observations provided under Clause 20 of the Operational Licence audit in the previous section of this report. ▪ The City received notification from the Department of Health in August 2012 that it had not complied with the requirement to provide the Department with its draft Recycled Water Quality Management Plan (RWQMP) by 30 June. The City's Recycled Management Plan was issued in September 2012 and provided to the Department. ▪ The letter from the DoH also commented on concerns with the inconsistent water quality results for the recycled water scheme and the City has addressed these concerns by completing the 			

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>draft version of the RWQMP and submitting it to the DoH for review to demonstrate how it minimises the risks associated with managing the scheme. At the time of this report, DoH are still reviewing the City's RWQMP and has yet to endorse the Plan.</p> <ul style="list-style-type: none"> ▪ The RWQMP includes a number of specific management plans in the appendices, including Mosquito Management Plan and Algae Management Plan. The Odour Management Plan provides a reference to appropriate section of the WTPP SOP Manual. ▪ A separate health risk assessment for the recycled water scheme is included in Appendix E of the Recycled Water Quality Management Plan. ▪ Performance standards are reported to the ERA annually but the City does not have a formal regular internal reporting of performance to the CEO or the Board. ▪ The Board are provided with details of the information submitted to the National Performance Report but generally are only reported to when there are significant problems/issues with the sewerage service. ▪ The City's public Annual Report documents include a small section on the key activities over the year related to the sewer network within the overall Environment and Sustainability section but performance targets and standards are not reported. ▪ Sewer spills to the general environment are reported to the Health Department. Spills to creek are reported to the Department of Environment and Conservation. ▪ Under its licence for the WWTP, the City can discharge to creek if required. However, this is considered an emergency back-up and has not been used during the audit period, with 100% of the effluent reused over this timeframe. 			

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
Asset Operations				
<ul style="list-style-type: none"> Operational policies and procedures are documented and linked to service levels required. Risk management is applied to prioritise operations tasks. 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. Operational costs are measured and monitored. Staff receives training commensurate with their responsibilities. 	<p>Policies</p> <ul style="list-style-type: none"> The City has an overall Asset Management policy (Policy 6.9) which provides a broad framework for the whole lifecycle, including asset operations. The Mission Statement included in Section 1.1 of the AMP also provides an outline of the City's overall objectives in its provision of the sewerage service. Operational Planning, including operational rules and procedures, are included in Section 6 of the AMP. As previously observed, Levels of Service are outlined in the AMP. However, there is no specific reference to link the operational policies and procedures to the required service levels. The City's policy for recycled water is included in Section 2 of its Recycled Water Quality Management Plan. <p>Operational / Maintenance Procedures and Tasks</p> <ul style="list-style-type: none"> Operational/maintenance procedures for the sewerage scheme are included in the SOP Manual. These include procedures for: <ul style="list-style-type: none"> sewer main blockages sewer overflows (including containment and clean up procedures) sewer jetting public notification of overflows/contamination after hours procedures development of new sewers (currently at draft) trade waste audit emergency liquid spillage demand response (related to reducing peak energy usage at the WWTP) resetting the WWTP/pumping stations after 	C	2	<ul style="list-style-type: none"> The Operational Planning, including operational rules and procedures, included in Section 6 of the AMP should reference the service levels and targets that the City is required to meet. We also suggest that this section of the AMP be expanded to include reference to the operating systems and associated manuals and documentation used to manage the WWTP. Where applicable, reference to the operations-related SOPs included in the City's SOP Manual should also be included in this section of the AMP. The unit costs being used to develop future renewals budgets should be reviewed and updated as it is likely that the old rates being used are under-estimating future expenditure requirements. The renewals expenditure calculations included in the AMS are fairly rudimentary and cumbersome to review and update. The AMS that the City uses is an Excel 1997 spreadsheet and increasing stability issues with the system have been experienced. We suggest that the City looks to review its AMS requirements over the course of the next couple of years and, if identified, replaces the current system with a more up-to-date, better functioning and more adaptable system. We recommend that the City continues to develop its planned maintenance schedules for maintenance tasks on the recycled water scheme.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>power failure</p> <ul style="list-style-type: none"> – chlorine emergency response plan – City incident emergency response plan – sampling and testing procedures – overall sewer Asset Management System procedures <ul style="list-style-type: none"> ▪ Specific checklists are located at the WWTP together with the pro-formas used to record operational data and wastewater test parameters. ▪ A spreadsheet used as a running diary of tasks to be completed is maintained on the City's server and updated by the Technical Officers located at the WWTP. There is no sign-off of tasks to confirm that they have been completed. The City has used the spreadsheet as a performance management tool in the past but considers that the current operators are experienced enough for this to not be required. ▪ The WWTP has an implemented SCADA system that is used to monitor performance. ▪ An Operations Manual for the plant and the network is located at the WWTP. ▪ The City has a separate Operational and Maintenance Manual of the Recycled Scheme for the assets associated with its non-potable supply. ▪ Maintenance work on the recycled scheme is predominantly reactive at the present time and the City is currently developing a more planned approach. ▪ The Recycled Water Quality Management Plan also includes details of the operational and verification monitoring plans. The sampling plan is included in Appendix H of the document. <p>Risk Management</p> <ul style="list-style-type: none"> ▪ As noted previously, a risk management tool is built into the City's AMS. This is used, together with performance, condition and age data recorded in the AMS to prioritise and schedule 			

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>work.</p> <ul style="list-style-type: none"> The key mitigation strategies to minimise operational risks are the operational SOPs included in the City's SOP Manual. An overview and the procedures related to managing the risk assessment tool within the AMS is outlined in the overall AMS SOP. Risk management related to the non-potable water supply are included in the Recycled Water Quality Management Plan. The Health Risk Assessment is included in Appendix E of the document. <p>Asset Register</p> <ul style="list-style-type: none"> The City's asset register is recorded in the AMS. Separate worksheets capture the asset attributes for access chambers, pipes, pump stations, the WWTP and the Old Boulder Holding Ponds (used for storing the effluent prior to reuse). The details included for each asset include: <ul style="list-style-type: none"> asset reference numbers location material dimensions asset description (where appropriate) construction date asset life financial information The asset register is used as the base data template for other information recorded in the AMS, e.g. condition and performance data, dates of inspection and refurbishment works, links to external data (e.g. CCTV) The procedure for adding asset data to the register is included in the AMS SOP. 			

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>Asset Costs</p> <ul style="list-style-type: none"> Operational costs are monitored in the AMS. Invoices from maintenance contractors are received monthly and tracked against work in the AMS. Energy bills and other invoices go through the City's corporate system and are forwarded to the Manager Sustainability and Waste Services for sign-off. All costs are recorded against the ongoing annual operations budget. The operational budget is developed by the Manager Sustainability and Waste Services with input from other members of the department. The previous year's budget is the starting point, with any new expenditure needing to be approved by the CEO and the Board. Operational budget is documented in the 10-year financial plan included in the AMP. Financial/accounting costs associated with the assets are recorded in the City's main finance system (Synergy). Replacement costs for the sewer network are based on unit rates. However, the unit rates being used to forecast future capital expenditure are out-of-date and need to be updated. Actual expenditure on pipe renewals is input into the AMS as the replacement cost for those assets. <p>Staff Training</p> <ul style="list-style-type: none"> Field staff are trained to meet their position responsibilities. Training requirements are identified through the annual staff performance review process. Specialist training (e.g. breathing apparatus) is arranged within the Sustainability and Waste Services department and the information forwarded to the HR department to record. 			

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
Asset Maintenance				
<ul style="list-style-type: none"> Maintenance policies and procedures are documented and linked to service levels required. Regular inspections are undertaken of asset performance and condition. Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule. Failures are analysed and operational / maintenance plans adjusted where necessary. Risk management is applied to priorities maintenance tasks. Maintenance costs are measured and monitored. 	<p>Policies and Procedures</p> <ul style="list-style-type: none"> Refer to previous section for details of policies and procedures. <p>Asset Inspections</p> <ul style="list-style-type: none"> The details for CCTV inspections are hyperlinked in the AMS to the appropriate file showing the CCTV survey for that section of pipework Inspections of assets at the WWTP are also recorded in the AMS. Future CCTV inspections are based primarily on asset failures (e.g. blockages and overflows) and any remaining budget is prioritised based on the age of the pipes. For the WWTP, there is no formal schedule for inspecting assets. The City's M&E contactors undertake the inspection work and inform the Manager Sustainability and Waste Services of the condition of the assets and any further maintenance requirements. <p>Maintenance Plans</p> <ul style="list-style-type: none"> A section on Maintenance Planning is included in Section 7 of the AMP. However, no schedule has been inserted into the document. Emergency and contingency plans are included in the SOPs for sewer main overflows, sewer main blockages, after-hours procedures, emergency liquid waste spillages and WWTP faults and emergencies. In addition, the SOP manual also references and hyperlinks the separate Critical Incident Response Plan and Chlorine Emergency Response Plan documents. <p>Asset Failure Analysis</p> <ul style="list-style-type: none"> The procedures for system failure analysis are outlined in Section 5 of the overall AMS SOP included in the City's SOP Manual. Asset failure analysis is the primary tool used by the City to develop its inspection, maintenance 	B	2	<ul style="list-style-type: none"> A section on Maintenance Planning is included in Section 7 of the AMP. However, no schedule has been inserted into the document. We recommend that this section be completed. We recommend that the City continues to develop the maintenance costs included in the Planned Works Schedule and update the information included in the Works Register in the AMS. This will allow for improved monitoring of maintenance costs and assist in forward planning of maintenance budgets.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>and renewals programs. Sewer blockages and overflows are investigated through CCTV work and the results of the surveys used to program maintenance and pipe renewals where applicable.</p> <p>Risk Management</p> <ul style="list-style-type: none"> Refer to previous section for details of risk management included in the AMS. <p>Maintenance Costs</p> <ul style="list-style-type: none"> A planned maintenance register and a works schedule are built into the AMS but are not fully utilised. As with the operational costs, maintenance costs are recorded in the AMS against the different assets in the Planned Work worksheet. However, this has not been completed and only the CCTV costs have been recorded. Maintenance tasks are also recorded against the Works Register included in the AMS but this has not been updated recently. The maintenance budget has not been fully developed and the budget broken down into for routine & breakdown, restorative and preventive maintenance is only available for access chambers at the current time, based on unit rates and the type and frequency of maintenance in order to price the work. At present, the maintenance budget for the sewer network is based on the previous year's expenditure for jetting and blockages. Renewals expenditure forecasts are already captured in the budget. Actual O&M expenditure vs budget is regularly reviewed. A monthly report is produced from the finance system and is reviewed by the Manager Sustainability and Waste Services. The report also includes the actual capital spend against the proposed budget. A quarterly report is also produced by the finance system for review. 			

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
Asset Management Information System				
<ul style="list-style-type: none"> Adequate system documentation for users and IT operators Input controls include appropriate verification and validation of data entered into the system Logical security access controls appear adequate, such as passwords Physical security access controls appear adequate Data backup procedures appear adequate Key computations related to licensee performance reporting are materially accurate Management reports appear adequate for the licensee to monitor licence obligations 	<p>Overview</p> <ul style="list-style-type: none"> The City utilises the following asset information systems: <ul style="list-style-type: none"> AMS – the City's Asset Management System, for the sewerage assets, consisting of the asset register, inventory control, condition and performance monitoring, maintenance management, risk assessment and financial planning. SCADA – utilised to monitor and store operating data from the WWTP. DataWorks - the City's corporate records and document management system Synergy Soft – corporate financial system. MapInfo – the City's GIS software IntraMaps – the public mapping system Manuals and other documentation are maintained for the City's corporate systems. The SCADA manual is located at the WWTP. A full set of operations manuals were provided by Water Corporation when the WWTP was transferred into the City's ownership. The City has started to investigate a new corporate asset management system but there are issues in that the options that have been assessed so far related to the systems being maintained and accessed offsite by third parties vendors. <p>Data Entry</p> <ul style="list-style-type: none"> Data entry procedures into each area of the AMS are covered in the AMS SOP Asset data is generally input by the Engineering Draftspeople. Performance data is generally input into the AMS by the Manager Sustainability and Waste Services and other Supervisors. The data is only generally verified and validated on input, although ad hoc reporting is used to 	B	2	<ul style="list-style-type: none"> As noted previously, the City has experienced increasing stability and control issues with its AMS (essentially a series of linked Excel 97 spreadsheets) and we would suggest that it looks to investigate options to upgrade the asset management system over the course of the next few years. As noted previously, the performance standards against the licence targets and the other levels of service are not reported internally. We recommend that internal reporting on the sewerage system be increased so that ongoing performance is better monitored throughout the year. We also recommend that the performance standards are reported in the publicly available Annual Report.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>identify and rectify any errors in the input information.</p> <ul style="list-style-type: none"> ▪ Synergy Soft, the corporate financial system is maintained by the Corporate Services department. ▪ The ongoing maintenance of the GIS system is currently contracted out of Council. <p>Management Reports</p> <ul style="list-style-type: none"> ▪ As noted previously, there is no regular internal management reporting related to the sewerage system. Licence obligations are continually monitored by the Manager Sustainability and Waste Services but only reported upwards in Council when issues are experienced. ▪ Performance standards are reported to the ERA annually but the City does not have a formal regular internal reporting of performance to the CEO or the Board. ▪ The Board are provided with details of the information submitted to the National Performance Report but generally are only reported to when there are significant problems/issues with the sewerage service. ▪ The City's public Annual Report documents include a small section on the key activities over the year related to the sewer network within the overall Environment and Sustainability section but performance targets and standards are not reported. ▪ Sewer spills to the general environment are reported to the Health Department. Spills to creek are reported to the Department of Environment and Conservation. <p>Security access of system</p> <ul style="list-style-type: none"> ▪ All systems require a password to log on. ▪ Access to the AMS server is password restricted to the team of five people. ▪ All members of the Sustainability and Waste Services team have read access but some areas of the system (e.g. the finance information) are write-access restricted to Manager Sustainability 			

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>and Waste Services.</p> <ul style="list-style-type: none"> Although security access to the AMS is in place, the City has experienced some issues associated with running an Excel-based AMS, e.g. new assets being entered into the incorrect areas and breaking the links to other asset information in the system. This is another driver related to the City investigating moving away from an Excel-based system to a new database AMS in the future. All systems are backed up daily by the IT department onto backup tapes. Tapes are stored offsite at a local bank. The Council did not start to back up the AMS until September 2012 when stability issues with the spreadsheet meant that a significant rebuild of the system had to be undertaken. 			
Risk Management				
<ul style="list-style-type: none"> Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system Risks are documented in a risk register and treatment plans are actioned and monitored The probability and consequences of asset failure are regularly assessed 	<ul style="list-style-type: none"> The City has a corporate Risk and Prioritisation Matrix that is included in its Policy Manual. As noted previously, the City undertakes its Risk management for its sewerage system in a module of the AMS. This is used, together with performance, condition and age data recorded in the AMS to prioritise and schedule work. Two separate assessments have been developed for the risks of failing to meet the requirements of the operating licence and for the risks associated with the assets themselves. Risk management related to the non-potable water supply are included in the Recycled Water Quality Management Plan. The Health Risk Assessment is included in Appendix E of the document. The risk consequences related to customers, community, the water licence, financial impact, the environment and OHS are assessed and used to derive an overall consequence score based on the maximum individual score. Likelihood scores are used to assign inherent risk scores to each element in the assessment. The adequacies of 	B	2	<ul style="list-style-type: none"> We recommend that a new section be added into the AMP to cover risk management. This would include an outline of the processes involved in the assessment (e.g. the consequence and likelihood scoring system and the risk matrix used by the City) as well as document the AMS risk register itself. It is recommended that the City review the existing risk register to ensure that it aligns with the revised AS/NZS ISO 31000:2009.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>existing controls are also assigned and risk mitigation and minimisation strategies listed against each identified risk.</p> <ul style="list-style-type: none"> An overview and the procedures related to managing the risk assessment tool within the AMS is outlined in the overall AMS SOP. The key mitigation strategies to minimise operational risks include operational SOPs included in the City's SOP Manual. The AMP includes a section on Due Diligence that summarises the hazards of operating the sewerage system. 			
Contingency Planning				
<ul style="list-style-type: none"> Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks 	<ul style="list-style-type: none"> Emergency and contingency plans are included in the SOPs for sewer main overflows, sewer main blockages, after-hours procedures, emergency liquid waste spillages and WWTP faults and emergencies. In addition, the SOP manual also references and hyperlinks the separate WWTP Critical Incident Response Plan and Chlorine Emergency Response Plan documents. The Incident Management Plan for the non-potable water supply is included in Appendix L of the Recycled Water Quality Management Plan. However, although it sets out the contents, including incident classification, notification processes, emergency response and communications, containment and remediation procedures and incident cause and investigation procedures, the Plan still needs to be completed. The Plans themselves are not specifically tested via emergency incident scenario exercises but are considered to be tested under normal operating conditions. Overflows are experienced and managed regularly and the power supply to the WWTP is considered to fail several times each year. Diversion of flows at the WWTP is also carried out during heavy rain events. 	C	3	<ul style="list-style-type: none"> We recommend that the City completes the Incident and Emergency Plan set out in its the Recycled Water Quality Management Plan.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<ul style="list-style-type: none"> The City does not have any back-up generators. However, the City is able to divert flows at the WWTP and considers that emergency power is not required. Similarly, the pumping stations in the network only serve a small number of properties and eductor trucks can be called on during any emergencies if required. 			
Financial Planning				
<ul style="list-style-type: none"> The financial plan states the financial objectives and strategies and actions to achieve the objectives The financial plan identifies the source of funds for capital expenditure and recurrent costs The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets) The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services Significant variances in actual / budget income and expenses are identified and corrective action taken where necessary 	<ul style="list-style-type: none"> Financial planning is carried out in accordance with the requirements of the Local Government Act. The City undertakes its financial planning for its sewerage service in accordance with the City's Integrated Planning Framework used to develop a ten year Corporate Business Plan. Requirements are included in the Policy 6.1 – Accounting included in the City's Policy Manual. The overall responsibility for financial planning lies with the Corporate Services department within the Council. An overview to financial planning for the sewerage service is outlined in Section 10 of the AMP. The City prepares a 10 year Financial Statement for its sewerage service which includes predicted income for its services and the forecast expenditure. The 10 year Financial Statement is included in the AMP and updated annually. The last update was in July 2012. The Financial Statement identifies the balance and anticipated movement in reserve funds, as well as any borrowing required. The capital expenditure component of the Financial Statement is based on the 10 year capital works forecast developed in the AMS. This is all for renewals at the present time although the current review of the WWTP by GHD may identify expenditure for new assets that will need to be added into the financial forecasts. 	C	2	<ul style="list-style-type: none"> As noted under Asset Operations, the unit costs being used to develop future renewals budgets should be reviewed and updated as it is likely that the old rates being used are under-estimating future expenditure requirements. We would also recommend that the high level recurrent expenditure in the City's Financial Statement included in the AMP be broken down to a lower level. Currently the breakdown only shows three items; Interest on loans, Other Costs and Administration.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<ul style="list-style-type: none"> The 10 year income forecasts included in the City's financial planning are based on an arbitrary annual CPI increase and also take into account future population changes. Ongoing general operations and maintenance budgets are based on the previous year's expenditure and inflated for CPI, and refined where required. We reviewed the Financial Statement and confirmed that it includes projections of operating statements, statements of financial position and predictions of income for a 10 year period. We confirmed that the capital expenditure forecasts reconcile with the renewals expenditure in the AMS. Funding options are included in Section 10 of the AMP and the Asset Planning SOP. The only options available to the City to fund its sewerage service are income from rates, reserves and loans. Variances in expenditure are identified and tracked typically monthly for operating expenditure and as needed for capital expenditure. We witnessed evidence of variance tracking and analysis in monthly reports. Where required, corrective action can be taken. We also confirmed that the sewerage service budgets and expenditure are included in the overall financial planning carried out by Corporate Services. 			
Capital Expenditure Planning				
<ul style="list-style-type: none"> There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates The plan provides reasons for capital expenditure and timing of expenditure The capital expenditure plan is consistent with the asset life and 	<ul style="list-style-type: none"> The responsibility for developing the capital expenditure budget lies with the Manager Sustainability and Waste Services. The capital expenditure plan forms part of the 10 year Financial Statement. The capital budget is developed in conjunction with the AMS and forward planned maintenance and, where identified, system development. The procedures related to the Financial Planning 	C	3	<ul style="list-style-type: none"> Although the City has not completed any capital projects during the review period, we recommend that the City develops a SOP to cover the full budget process, and includes details of the procedures involved in developing the capital expenditure program. We note that the last two new capex projects, two new sewer lines that were constructed in December 2008 and October 2010 did not go through the Business Case

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
<p>condition identified in the asset management plan</p> <ul style="list-style-type: none"> There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned 	<p>module included in the AMS are outlined in the AMS SOP.</p> <ul style="list-style-type: none"> The 10 year capex plan included in Section 8 of the AMP outlines the reasons for new capital expenditure and the triggers for its timing, as well as the breakdown of the expenditure into the different asset types. The capex forecasted for the next five years will predominantly be concentrated on the refurbishment of pre-1960 sewer lines and other pipes that have been identified through the ongoing CCTV inspections as being at significant risk of failure. We confirmed that the capex forecasts included in the AMP reconcile with the asset data included in the AMS. Forward planning in relation to the WWTP is ongoing and a review of the future requirements of the plant and its capacity/ability to meet them is currently underway. A previous review of the capacity of the WWTP was completed in 2010. Any expenditure on new assets (as opposed to renewals) that is identified will need to go through the City's business planning process. The last new additions to the City's asset register were two new sewer lines that were constructed in December 2008 and October 2010. As both of these projects were outside of the current two year audit/review period, they have not been reviewed. However, we note that Business Plans were not prepared for these two projects. The capex planning is consistent with asset lives. The asset lives are captured in the AMS against each asset and form the basis of the future works program. The City also captures asset condition data and takes account of this in renewals planning. We saw this particularly applied to mains renewals, where CCTV is used to identify and prioritise pipes for relining. The capex plan is reviewed using the results from 			<p>approval process that they should have gone through.</p> <ul style="list-style-type: none"> We also recommend that the City expands the Financial Planning section included in its AMP to provide more in depth details of the proposed capital works that have been identified and scheduled. We recommend that an additional section on Infrastructure Planning be added to the AMP to summarise asset planning for the sewer service and any future planning requirements. This should include summarise of and references/links to any relevant planning studies, regional planning initiatives, strategy reports, network/population models and any appropriate reports/data, e.g. CCTV data, performance/capacity reviews.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<p>the CCTV surveys and asset life information to decide whether to undertake more or less relining work in the works program.</p> <ul style="list-style-type: none"> ▪ The City does not use deterioration models or renewals planning models. However, given the fairly small size of the asset base, models like these are unlikely to greatly improve the renewals planning process. ▪ The capital works program is submitted to Council annually. Previously the information was submitted in spreadsheet form but the City has recently implemented a new system for its annual corporate budgeting. ▪ The capital works budget submitted for review and approval includes a justification for the proposed expenditure and details of the previous spend for each item. ▪ We confirmed that high level budgets for capital works are included in the whole-of-Council budget. ▪ The 10 year capex forecasts are reasonably small although there are a number of spikes in the predicted costs, particularly 2018/19 and 2019/20. Given that the works in these years are based on the asset lives, it is likely that further inspection and consideration of condition and performance nearer the time will result in the forecast expenditure spikes being spread over a number of years. 			
Review of Asset Management System				
<ul style="list-style-type: none"> ▪ A review process is in place to ensure that the asset management plan and asset management system described therein are kept current ▪ Independent reviews (e.g., internal audit) are performed of the asset management system 	<ul style="list-style-type: none"> ▪ The SOP manual includes the review processes, both internal and external, to ensure that the AMP and the AMS are kept current. ▪ The last internal review was completed in July 2012 when the budget for 2012/13 was being finalised. This also resulted in the budget increasing from a 5 year to a 10 year budget. ▪ Although the SOP notes that the AMS is reviewed quarterly, it is really in a process of continual review through usage and the key driver of the data and information that forms the AMP. 	B	2	<ul style="list-style-type: none"> ▪ Refer to recommendations outlined in this table to further enhance the asset management system.

Asset Management Process / Effectiveness Criteria	Observation / Comments	Adequacy Rating	Performance Rating	Recommendation
	<ul style="list-style-type: none"> ▪ The SOP Manual and AMP are provided to new staff, who are encouraged to provide feedback and identify any improvement opportunities. ▪ Prior to this current review, the Asset management system review was last carried out by an external auditor in 2011. No other intermediary reviews have been undertaken. 			

6 Changes to Licence

It is of the Auditor's opinion that no changes to the licence conditions are required.

7 Confirmation of the Audit / Review

I confirm that the audit / review carried out at City of Kalgoorlie-Boulder on 5 and 6 February 2013 and recorded in this report is an accurate presentation of our findings and opinions.



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16 May 2013

APPENDIX A

RISK ASSESSMENT RATING SCALE DEFINITIONS

Risk Assessment Rating Scales

The consequence, likelihood, inherent risk and adequacy of internal controls are assessed using a 3-point rating scale as described below. The rating scale is as per the Audit Guidelines – Electricity, Gas and Water Licences (ERA, August 2010).

Consequence Rating

The consequence rating scale is outlined below.

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

Likelihood Ratings

The likelihood rating scale is described below.

Level	Description
A Likely	Non-compliance is expected to occur at least once or twice a year
B Probable	Non-compliance is expected to occur once every three years
C Unlikely	Non-compliance is expected to occur once every 10 years or longer

Inherent Risk Assessment Rating and Description

The inherent risk rating is based on the combined consequence and likelihood rating. The inherent risk assessment rating scale and descriptions are outlined below.

Likelihood	Consequence		
	Minor	Moderate	Major
Likely	Medium	High	High

Likelihood	Consequence		
	Minor	Moderate	Major
Probable	Low	Medium	High
Unlikely	Low	Medium	High

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

Adequacy Ratings for Existing Controls

The adequacy of existing internal controls is also assessed based on a 3-point scale as indicated below.

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

Assessment of Audit Priority

The assessment of audit priority is used to determine the audit objectives, the nature of audit testing and the extent of audit testing required. It combines the inherent risk and risk control adequacy rating to determine the priority level.

Inherent Risk	Adequacy of Existing Controls		
	Weak	Medium	Strong
High	Audit Priority 1	Audit Priority 2	
Medium	Audit Priority 3	Audit Priority 4	
Low	Audit Priority 5		

APPENDIX B

ASSET MANAGEMENT PERFORMANCE RATING DEFINITIONS

Compliance Assessment Rating Scale

In accordance with the Audit Guidelines – Electricity, Gas and Water Licenses (ERA, August 2010), a 7-point rating scale has been adopted to assess the licensee's compliance against each licence condition. The rating scale and description of compliance is outlined below.

Compliance Status	Rating	Description of Compliance
Compliant	5	Compliant with no further action required to maintain compliance
Compliant	4	Compliant apart from minor or immaterial recommendations to improve the strength 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.

Asset Management Review Rating Scales

The asset management review utilises a combination of asset management adequacy ratings and asset management performance ratings, which are outlined below. These are based on the Audit Guidelines – Electricity, Gas and Water Licenses (ERA, August 2010).

Asset Management Adequacy Ratings

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 requires 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 consideration 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 Processes and policies are significantly out of date The asset management improvement system(s) require significant improvement s (taking into consideration 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 is not fit for purpose

Rating	Description	Criteria
(taking into consideration the assets that are being managed).		

Asset Management Performance 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 when 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.

APPENDIX C

POST-AUDIT IMPLEMENTATION PLAN

Reference in Document	Item No. Clause	Recommendation	Responsible Officer	Target Date for Completion
Outstanding Actions from Previous Audit / Review				
Table 3-1	Risk Management	<ul style="list-style-type: none"> The City should create risk management policies and link them to the Asset Management Plan. 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. 	Environmental Coordinator	30/09/2014
Recommendations from the 2013 Operational / Performance Audit				
Table 4-1	2.1	<ul style="list-style-type: none"> At the next review and update of the Customer Service Charter, the references to the operating area (Section 1.3) should be updated to reflect the correct map reference 	Manager Sustainability and Waste Services	30/09/2013
Table 4-1	5.1	<ul style="list-style-type: none"> Although relevant legislation is listed in the AMP and in the SOP Manual, a reference in these sections to the officer/department responsible for monitoring applicable legislation and the workflow process/procedure for identifying/implementing/seeking exemption is recommended. 	Environmental Coordinator	30/09/2014
Table 4-1	Sch 3, Cl 3.1, 3.8 and 3.9	<ul style="list-style-type: none"> It is recommended that the process and procedures for dealing with customer complaints are added to Section 4 – Administration in the SOP Manual. This SOP includes processes for managing enquiries and correspondence but not specifically complaints. Although our review of the complaints received by the City of Kalgoorlie-Boulder during the two-year audit period showed all complaints being resolved within 15 days, the audit of the information stored in DataWorks was reasonably difficult as each piece of correspondence had to be opened to check if it was a complaint or whether it was just an enquiry. We recommend that the City sets up a simple spreadsheet to record the details of all of the complaints so that monitoring and reporting is simplified. 	Manager Sustainability and Waste Services	30/06/2013
Table 4-1	Sch 3, Cl 3.10	<ul style="list-style-type: none"> We recommend that standard text be added to the City's complaint response letter that informs the customer of referring their complaint to the Department of Water if they do not consider that it has been resolved to their satisfaction within 15 business days. 	Manager Sustainability and Waste Services	30/06/2013
Table 4-1	Sch 4, Cl 1.1	<ul style="list-style-type: none"> Although we consider that the City is meeting its licence requirement, we suggest that it creates a simple spreadsheet (or adds columns to its existing worksheet) to record the time that emergency calls are received, the time that the customer is advised of the nature and timing of the action, and the time that its contractors arrive on site. 	Manager Sustainability and Waste Services	30/06/2013

Reference in Document	Item No. Clause	Recommendation	Responsible Officer	Target Date for Completion
Recommendations from the 2013 Asset Management System Review				
Table 5-2	Asset Planning	<ul style="list-style-type: none"> Although the AMP covers the City's sewerage scheme, we recommend that either additional sections be added to the document to relate to the non-potable water assets and associated operations and maintenance requirements or a separate AMP is developed for the recycled water scheme. The Levels of Service included in Section 3 of the AMP should be expanded to include the licence targets for customer complaints, blockages and overflows. Although the service levels are defined, we recommend that they are also referenced in the Asset Planning section in the SOP Manual to note that asset planning should be in accordance to meet the service levels defined in the licence. The Asset Planning section should also reference the Non-Asset Options section which is included in a later section in the SOP. Although the AMP has a section on Maintenance Planning, this has not been completed in the current version of the document. As there is some overlap between the AMP and the SOP Manual, we recommend that the relevant SOPs should be listed in the appropriate sections of the AMP. The Asset Environment section of the AMP includes historical population. We recommend that this section be expanded to include details of predicted population growth (including low, medium and high predictions). We recommend that the Description of the Asset System (Section 4) of the AMP be expanded to show more information related to the assets, e.g. pipe length by condition, age, diameter etc to provide a fuller picture of the City's asset base. We also suggest that schematics of the network be included. We also recommend that the any asset planning requirements to meet growth be outlined or stated that no new assets have been identified if the growth forecasts do not require it. Although the SOP includes a comment that business processes and objectives should reflect the needs of all the stakeholders, we recommend that this section be expanded to list the key stakeholders (both internal and external) that should be consulted in issues related to the sewerage (and non-potable water supply) services. The budget policies and processes used by Council and funding 	Manager Sustainability and Waste Services	28/02/2014

Reference in Document	Item No. Clause	Recommendation	Responsible Officer	Target Date for Completion
		options available should be cross-referenced in the Asset Planning SOP. This should also include the processes and procedures related to developing Business Cases.		
Table 5-2	Asset Creation	<ul style="list-style-type: none"> ▪ We recommend that the AMP includes references to the design standards adopted by the City. ▪ We recommend that that Asset Acquisition section of the SOP be expanded to include/reference the policies and processes associated with developer contributed assets being taken on by the City. ▪ It is also suggested that a flow chart indicating the process for seeking approval of a project be included in the SOP Manual and referenced in the AMP so that all staff understand how the planning process is undertaken and when a project needs to be escalated for approval. 	Manager Sustainability and Waste Services	28/02/2014
Table 5-2	Environmental Analysis	<ul style="list-style-type: none"> ▪ We recommend that the levels of service are included in the customer charter to inform customers of the service levels they can expect to receive. ▪ The performance standards against the licence targets and the other levels of service are not reported internally. We recommend that internal reporting on the sewerage system be increased so that ongoing performance is better monitored throughout the year. ▪ We recommend that the performance standards are reported in the publically available Annual Report. ▪ We recommend that a reference to the licence to discharge and any appropriate operating rules and procedures be added into Section 6 of the AMP. 	Manager Sustainability and Waste Services	28/02/2014
Table 5-2	Asset Operations	<ul style="list-style-type: none"> ▪ Operational Planning, including operational rules and procedures, included in Section 6 of the AMP should reference the service levels and targets that the City is required to meet. ▪ We also suggest that this section of the AMP be expanded to include reference to the operating systems and associated manuals and documentation used to manage the WWTP. Where applicable, reference to the operations-related SOPs included in the City's SOP Manual should also be included in this section of the AMP. ▪ The unit costs being used to develop future renewals budgets should be reviewed and updated as it is likely that the old rates being used are under-estimating future expenditure requirements. We also recommend that that the renewal costs include an appropriate contingency. 	Manager Sustainability and Waste Services	28/02/2014
Table 5-2	Asset Maintenance	<ul style="list-style-type: none"> ▪ A section on Maintenance Planning is included in Section 7 of the AMP. However, no schedule has been inserted into the document. We 	Manager Sustainability and	28/02/2014

Reference in Document	Item No. Clause	Recommendation	Responsible Officer	Target Date for Completion
		recommend that this section be completed. <ul style="list-style-type: none"> We recommend that the City continues to develop the maintenance costs included in the Planned Works Schedule and update the information included in the Works Register in the AMS. This will allow for improved monitoring of maintenance costs and assist in forward planning of maintenance budgets. 	Waste Services	
Table 5-2	Asset Management Information System	<ul style="list-style-type: none"> We suggest that the City looks to investigate options to upgrade the asset maintenance system over the course of the next few years. 	Manager Sustainability and Waste Services	30/12/2014
Table 5-2	Risk Management	<ul style="list-style-type: none"> We recommend that a new section be added into the AMP to cover risk management. This would include an outline of the processes involved in the assessment (e.g. the consequence and likelihood scoring system and the risk matrix used by the City) as well as document the AMS risk register itself. It is recommended that the City review the existing risk register to ensure that it aligns with the revised AS/NZS ISO 31000:2009. 	Manager Sustainability and Waste Services	28/02/2014
Table 5-2	Contingency Planning	<ul style="list-style-type: none"> We recommend that the City completes the Incident and Emergency Plan set out in its the Recycled Water Quality Management Plan. 	Manager Parks and Reserves	31/12/2013
Table 5-2	Financial Planning	<ul style="list-style-type: none"> We also recommend that the high level recurrent expenditure in the City's Financial Statement included in the AMP be broken down to a lower level (e.g. labour, energy, chemicals, consultants, contractors etc). Currently the breakdown only shows three items; Interest on Loans, Other Costs and Administration. 	Manager Sustainability and Waste Services	28/02/2014
Table 5-2	Capital Expenditure Planning	<ul style="list-style-type: none"> We recommend that the City develops a SOP to cover the full budget process, and includes details of the procedures involved in developing the capital expenditure program. We also recommend that the City expands the Financial Planning section included in its AMP to provide more in depth details of the proposed capital works that have been identified and scheduled. We recommend that an additional section on Infrastructure Planning be added to the AMP to summarise asset planning for the sewer service and any future planning requirements. This should include summaries of and references/links to any relevant planning studies, regional planning initiatives, strategy reports, network/population models and any appropriate reports/data, e.g. CCTV data, performance/capacity reviews. 	Manager Finance and Manager Sustainability and Waste Services	28/02/2014

Note: The last two columns in the table (Responsible Officer and Target Date for Completion) are provide by the licensee and do not form part of the audit/review report.