Shire of Dumbleyung

Water Operating Licence Audit and Asset Management Review Final Report



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A Risk Assessment



1. Introduction

This Water Licence Audit and Asset Management System review was carried out on the water services at Dumbleyung for the period between 1st December 2002 and 30th November 2005 in accordance with the requirements of the Economic Regulation Authority. Dumbleyung is a small town located approximately 268 kilometres south east of Perth. The Shire was established in early 1900s as centre for grazing and wheat. The town also attracts tourists to Lake Dumbleyung, the site of Donald Campbell's 1964 successful world water speed record attempt. The town has a a population of approximately 292.

The Water Services Include:

Sewerage Scheme; collecting and treating approximately 28.9 ML of the residential and commercial wastewater. Greywater is disinfected and reticulated to the sports oval.

The scope of services and licence compliance requirements are detailed in the Shire of Dumbleyung Operating Licence, Licence Registration Number IL/16, Licence Version 4 dated 28th September 2004. This audit has been prepared in accordance with "The Economic Regulation Authority, Scope and Guidelines for Water Service Licence: Operating Licence and Asset Management Reviews for the Shire of Dumbleyung (the Licensee)".

1.1 Scope

The Audit covers the period 1st December 2002 and 30th November 2005. As it is impractical to review all relevant documents and data over this period, a sample of documents and services/events will be examined in order to establish a thorough appreciation of the operations and assess compliance.

The methodology, order and content of the audit was:

- Inspection of the facilities, including sewer reticulation, pumping and treatment systems;
- Review of previous audit documentation and results;
- Review of Licence Documentation, Asset Management systems, plans etc;
- Interview with relevant personnel; and
- Preparation of draft and final report

1.2 Documents Reviewed

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

- Operational Licence 28th September 2004
- Customer Services Charter July 2003
- Shire of Dumbleyung, Water Services Provider Operational Audit Sewerage Scheme, GHD Pty Ltd, 4 June 2003
- As Constructed Drawings and Plans



- General Ledger System for 2005.
- Relevant correspondence from the Shire to ERA
- ▶ KPI, Quarterly and Annual Reports (Schedule 2, 3 and 4).

1.3 Risk Assessment

A Risk Assessment completed for the Audit Plan identified only one high risk as the water quality for potable water supplies. Most of the assessments were either low or medium risks with no extreme risks. A copy of the risk assessment is enclosed in Appendix A.

1.4 Personnel Interviewed

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

- The Shire
 - Dennis Archer Environmental Health Officer/ Building Surveyor
 - Paul Godfrey Deputy CEO
 - Paul Ethridge Works Foreman

1.5 Assessment And Measurement Of Compliance

The Licensee's compliance with licence requirements was assessed using the following scales:

- A. Exceeds minimum requirement
- B. Meets minimum requirement no improvement needed
- C. Meets minimum requirement improvement needed
- D. Does not meet the minimum requirement

In addition, the following rating scale was used in assessing the effectiveness of the key outputs of the Asset Management System.

A.	Excellent	All key outputs and processes covered and fully demonstrably applied. Systems fully developed and considered appropriate in terms of coverage and application.
B.	Good	All key outputs and processes covered and largely developed. System requires some improvements in terms of coverage, processes and/or application.
C.	Largely adequate	Most key outputs covered. System requires some improvements in terms of coverage, processes and/or application.
D.	Inadequate	System not fully developed. Lacking in key outputs and

coverage. Unable to demonstrate application of system.



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

1.6 Audit Time Input

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

5.	Total	40 hrs	
4.	Review and Amend Draft Report and Prepare Final Report	4 hrs	
3.	Prepare the Draft Report	16 hrs	
2.	Conduct the Audit and AM Review (including travel)	16 hrs	
1.	Preparation of the Audit Plan and Risk Assessment	4 hrs	



2. Previous Audit

The status of the recommendations from the April 2003 Audit Report by GHD is shown in the following table. The status of the recommendations demonstrates that some improvement has occurred since the previous audit and review.

2.1 Mandatory Requirements

Recommendation	Status
Provide a Customer Services Charter to the ERA for approval and make available to customers.	Complete
Review and update the Asset Management Systems dated 1997 and provide a copy to the ERA for approval.	Complete
Provide completed Schedule 3 of the Operating Licence to the ERA within 30 days of the end of the financial year	Complete 2003 & 2004.

2.2 Improvement Recommendations

Recommendation	Status
Develop contingency and emergency response plans	No Improvement
Complete a risk and SWOT analysis and document the outcomes with a copy to the ERA	Basic Risk and SWOT completed
Prepare Capital Investment and Five Year Plans consistent with the asset life and condition	No Improvement
Consider overhead expenditures (portion of salaries and wages etc) and depreciation of the assets in the financial reports	Complete
Develop formal mechanisms to ensure that customer complaints (if there are any) have been appropriately registered and dealt with.	No Improvement
Establish the assets theoretical life is known	Complete
Update the Asset Management Plan.	Complete



3. Operating Licence Audit

Mark Bourhill, accompanied by Dennis Archer and Paul Ethridge carried out the inspections on the 2nd November 2005. The inspection provided an overview of systems operations and facilitated access to the facilities.

The wastewater systems were generally in good condition, operated effectively and generally performed within quality requirements. The assets reviewed included:

Sewerage Services

- Pump Stations at Bartram Road (Main) and the Sporting Complex (Minor)
- Reticulation and pressure mains.
- Wastewater Treatment Plant (WWTP)
- Effluent re-use lagoon and outfall system.

The systems are generally in good condition, maintained to an acceptable level and operated effectively. Operational improvements are being progressively implemented at the main pump station and WWTP over the period. Documentation of the "As Constructed" status of the systems has been captured.

Operations and maintenance manuals and contingency management plans are not available for either the Pump Station or the WWTP.

The town's sewage demand profile is stable in recent years. Growth is not predicted during the next five year period. The WWTP has adequate capacity to meet the town's requirements. The main pump station appears to have greater capacity than currently needed, having been design and built in the 1960s when the town had a larger population. The length of the gravity sewer is a modest 4km and the rising main is approximately 1km.

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



The following information, evidence and inspections were audited for the period:

Table 1 Operational Audit Checklist

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
Operating Area Clause 2 (b) Schedule 1	Is it in the correct operating area	Yes - Drawing OWR-OA-035 (B)	В
General duty to provide services	(a) provide the Water Services; and	Yes	В
Clause 4.	(b) undertake, maintain and operate any Water Services Works, specified in the Licence.	Yes	В
Regulations prescribing standards of service Clause 5.	The Licensee shall comply with Regulations prescribing standards of service made under section 61 of the Act.	Not Applicable	
Asset management system	(a) The Licensee is to:		
Clause 6.	(i) provide for an asset management system in respect of the Licensee's Water Service Assets;	Basics are in place with a simple Asset Management Plan and asset register system.	В
	(ii) notify details of the system and any changes to it to the Authority, and	No changes have occurred during the period.	N/A
	(iii) not less than once in every period of 36 months (or such longer period as the Economic Regulation Authority allows), provide the Economic Regulation Authority with a report by an independent expert acceptable to the Economic Regulation Authority as to the effectiveness of the system.	Water Services Audit and Asset Management Review Report for 2003 provided to Economic Regulation Authority.	В



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(b) The asset management system is to set out the measures to be taken by the Licensee for the proper maintenance of Assets used in the provision of Water Services and for the undertaking, maintenance and operation of Water Services works.	The general requirements for maintaining the system are documented in the Asset Management Plan (March 2004).	В
	(c) The Licensee is to undertake, maintain and operate its Water Services Works in accordance with the processes set out in the asset management system.	Routine and planned maintenance tasks completed in accord with the AMP.	В
	(d) The scope of the asset management system report under paragraph (a) (iii) will be set by the Economic Regulation Authority.	No record of the ERA review of the AMP.	С
Operational Audit Clause 7.	The Licensee is to, not less than once in every period of 36 months (or such longer period as the Economic Regulation Authority allows), provide the Economic Regulation Authority with an Operational Audit conducted by an independent expert acceptable to the Economic Regulation Authority.	Water Services audited and Asset Management System reviewed by GHD for the period to 30 October 2002	В
Technical Standards Clause 8	The Licensee is to comply in line with gazetted technical standards	No standards set.	N/A
Industry codes Clause 9.	The Licensee shall observe the Sewerage Code of Australia WSA 02 1999 in the design and construction of sewerage systems.	Design of systems complies. Original designs unchanged from Dept of Works Specifications	В
Accounting records Clause 10.	The Licensee shall keep accounting records consistent with the requirements of the Local Government Act 1995, the Licensee shall prepare its accounts in a way which enables it to issue an operating statement which accurately describes its income and expenditure in relation to the Water Services provided under the Licence on an accruals basis:	General Ledge accounts reviewed with DCEO. As the Annual Reports were not available for review, the auditor could not assess compliance against this criteria.	С
Prices or charges Clause 11.	In setting process or charges for services to Customers the Licensee shall comply with the relevant provisions and regulations of the <i>Health Act 1911</i> and the	Prices and Charges are being set in accordance with the requirements of the Local Government Act.	В



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	Local Government Act 1995		
Methods or principles to be applied in the provision of Water Services Clause 12.	(a) Notwithstanding the engagement of any person or persons to provide Water Services on its behalf, the Licensee remains responsible to ensure those services comply with the terms and conditions of the Licence and with the relevant legislations	Shire staff understand their responsibilities.	В
	(b) The Licensee shall ensure that its Water Services are available for Connection on request to any land situated in the Operating Area, subject to the applicant meeting any reasonable conditions the Licensee may determine to ensure safe, reliable and financially viable supply of services to land in the Operating Area in accordance with this Licence and any relevant legislation. Satisfactory compliance with the conditions of Connection are an essential requirement of gaining approval to connect to the Licensee's schemes.	Application forms have not been prepared. Town is so small that personal approach to the Shire is all that is required. The processes are documented in the Customer Services Charter.	В
Amendment, revocation or surrender Clause 13.	The ERA may determine that the Licence is to be amended, etc	Minor amendment issued 28 September 2004	N/A
Specified information to be provided Clause 14.	(a) Licensee shall inform the Authority of the occurrence of the following events within five days of their occurrence:		
	 Overflows from wastewater / sewerage infrastructure, including wastewater treatment plants, pumping stations etc. 	No occurrences during the period.	N/A
	(b) The ERA may require a detailed report on these events to be provided within 14 days of the request.	Not required during the period.	N/A



Licence Clause or Schedule		The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(c)	The Licensee shall report the information set out in Schedule 3. The reports are due within 30 days of the end of each financial year.	The information has been provided for 2003 & 2004. 2005 report has not been prepared to date. WWTP does not have flow metering which makes some KPIs difficult to capture.	С
Performance of functions by the Licensee Clause 15.	(a)	The Licensee shall comply with the quality and performance standards set out in Schedule 2	Have not been able to record without flow metering on inflows to WWTP.	С
	(b)	The Licensee shall provide annual notification to all Customers provided with non-potable water that the water supplied is not suitable for drinking.	The Shire is the only non- potable water user. Parks and ovals have warning signs.	В
	(c)	The Licensee shall implement an emergency telephone system so a Customer can report an emergency and receive advice within one hour of the action to be taken by the Licensee. An emergency is an event, which causes, or threatens to cause, harm to people, the environment or property.	Emergency and after hours phone services established and published in local phone book, and Customer Charter.	В
	(d)	The Licensee shall maintain and operate its sewerage scheme so that sewerage does not overflow on Customers' properties.	No incidents recorded during the period.	В
	(e)	The Licensee shall maintain and operate its sewerage scheme so that sewerage blockages are minimised.	Less than one blockage per annum during the period. Target is meaningless for only 4km of main. Active tree root clearing program in place.	В
Terms and conditions of Customer contracts	(a)	The Licensee may enter into agreements with Customers to provide Water Services.	There are no contracts in place.	N/A



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
Clause 16.	(b) The Licensee may not enter into an agreement with a Customer that excludes, modifies or restricts the terms and conditions of the Licence without the prior written approval of the Economic Regulation Authority.	There are no contracts in place	N/A
Obligations to public authorities and other Licensees Clause 17.	Wastewater treatment plants operated by the Licensee shall have relevant Licences from the Department of Environmental Protection and be operated in compliance with those Licences.	No DoE Licence.	N/A
Consumer consultation Clause 18.	(a) Prior to making major changes to the operation of a water service, such as the construction of a new wastewater treatment works or significant expansion of the sewerage network, the licensee will;		
	(i) Hold a public meeting to obtain the Customers views on the performance and operation of the scheme; or	Major changes have not occurred during the period.	N/A
	(ii) Advertise for written submissions on the proposal.	Not Required	N/A
	(b) The Licensee shall allow customers to raise matters of concern regarding the sewerage system at public question time in accordance with the Local Government Act 1995.	Public question time is available at Council Committee Meetings	В
Customer Service Charter Clause 19.	(a) The Licensee must set out in writing the principles, terms and conditions upon which it intends to provide the Water Services to its Customers ('the Customer Service Charter')	Revised Customer Services Charter prepared, provided for comment and issued July 2003.	В
	(b) The Customer Service Charter must be submitted to the Authority for his approval by 1 July 1999.	Submitted for approval and approved with comments by ERA on 4 November 2004.	В



Licence Clause or Schedule		The Licence Obligation System established by the Licensee to comply with obligations of Licence		Compliance Scale
	(c)	The Customer Service Charter:		
		(i) Should be drafted in 'plain English'; and	Yes	В
		(ii) Should address all of the service issues that are reasonably likely to be of concern to its Customers.	Yes	В
	(d)	Different parts of the Customer Service Charter may be expressed to apply to different classes of Customers	Not considered in the Customer Charter, but little requirement for this Licence.	N/A
	(e)	The Licensee shall review the Customer Service Charter not less than once in every period of 36 months.	Yes – reviewed and reissued in July 2003.	В
	(f)	Any proposed amendment to the Customer Service Charter or replacement thereof must also be forwarded to the Authority for approval prior to implementation.	Submitted for approval and approved by ERA on 4 November 2004.	В
	(g)	The Licensee must make the Customer Service Charter available to its Customers in the following ways: (i). by prominently displaying it in those parts of the Licensee's offices to which Customers regularly have access; (ii). by providing a copy, upon request, and at no charge, to a Customer; and (iii). by advising Customers of the availability of the Customer Service Charter on an annual basis.	Copies available on request at the Reception counter. Customers advised of the availability through Rates Notices, but not displayed prominently.	С
	(h)	It is a condition of the Licence that the Licensee provides services in a way that is materially consistent with its Customer Service Charter.	Yes – Compliance Scale	В



Licence Clause or Schedule		The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
Dispute resolution Clause 20.	es ma Co a p	v 1 April 1999, the Licensee shall tablish a system for recording, anaging and resolving Customer omplaints within 21 days regarding provided or requested Water ervice.	Log Book available at Reception, but no formal system in place.	С
	pro	o ensure the effectiveness of such a ocess the Licensee shall, as a inimum:		
	(i)	. Record details of each Customer Complaint and its outcome;	Included in the Log Book.	В
	(ii)	o. Provide an appropriate number of designated officers who are trained to deal with Customer Complaints who are authorised to, or has access to officers who are authorised to make the necessary decisions to settle Customer Complaints or disputes; including where applicable, approving the payment of monetary compensation; and	Staff available and trained in dispute resolution.	В
	(iii). Make such arrangements as are necessary to ensure that if possible Complaints can be resolved in the timeframes set out in subclause (a).	No documented procedures.	С
	Cu reg wa reg	here a dispute arises between a ustomer and the Licensee garding a provided or requested ater service, the Customer may fer the dispute to the Water ervices Planning Branch of the epartment of Water.	No complaints during the period.	N/A
	ma 3.2 19 ha the Cu the	nless the Complaint or dispute is a latter in relation to which Section 22W of the Local Government Act 1995 applies, where the the dispute is not been resolved within 21 days to Licensee shall inform the lustomer of the option of referring the ir Complaint to the Water Services anning Branch of the Department	Not required during the period	N/A



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



4. Asset Management System Review

The Asset Management System comprises the asset register, Asset Management Plan, drawings, and maintenance plans and works records. The Asset Management systems are very basic, but understood by the staff and generally suitable for the scheme. Additional detail on the operation and maintenance of the WWTP and main pump station is desirable. The Shire does not have an Asset Management Software System and past activities are not recorded in a central repository. Works deport records and timesheets record the in-house staff time used on operations and maintenance of the scheme.

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

Information, such as, the Levels of Service, asset performance, asset descriptions and condition have not been comprehensively documented and the level of equipment detail for most assets is limited.

Table 2 Asset Management Review Checklist

1.	Asset Planning/Creation/Acquisition						
1.1	Output Related	Compliance Scale	Comments				
1.1.1	Have the strategic objectives for the asset been identified?	D	Although understood by staff, objectives are not documented.				
1.1.2	Have life cycle costs been considered?	D	Not completed in the Asset Register				
1.1.3	Has the need for new assets been determined and full project evaluation process been followed, including comparative assessment of non-asset solutions?	D	Has not been considered.				
1.1.4	Have documents recording relevant details on the asset been collected?	С	Partially completed in the asset registers. Makes, models etc of equipment is not available				
1.2	Performance Related						
1.2.1	Do assets reflect the objectives identified in the asset creation/acquisition phase?	D	Unable to measure as the original objectives have been lost over time.				
1.2.1	Are actual costs as predicted?	D	Not considered.				



2.	Environmental Analysis		
2.1	Output Related	Compliance Scale	Comments
2.1.1	Have the performance requirements – availability of service, capacity, continuity, emergency response been documented?	D	No evidence available
2.1.2	Are the asset system objectives documented?	С	Generally considered in the AMP, but not in any detail.
2.1.3	Have opportunities and threats in the system environment been assessed?	С	Primary SWOT and Risk analysis completed, but not in the AMP
2.1.4	Are regulatory obligations and statutory/regulatory requirements documented?	В	Included in the AMP.
2.2	Performance Related		
2.2.1	Is the asset meeting the level of service required by users of the service?	В	Assets are performing adequately.
2.2.2	Do the assets meet regulatory requirements?	А	All Compliance Scale

3. Asset System Analysis

3.1	Output Related	Compliance Scale	Comments
3.1.1	Are the asset system components documented?	В	Included in the AMP, could be expanded for PS and pipes
3.1.2	Has asset performance and condition been assessed?	С	No formal system in place. Anecdotal information is collected by staff. No condition documentation system evident
3.1.3	Does the asset management plan include an asset register and plans of asset system components?	В	Upper levels of asset hierarchy included. Component detail is limited.
3.1.4	Does the register record asset type, location, material and an assessment of assets' physical/structural condition?	В	Generally covered.



		Compliance Scale	Comments
3.1.5	Are systems in place to assess asset and practice efficiency?	С	Not considered in the AMP and information is not available.
3.1.6	Assets assessed for capability and deficiencies of current assets to meet performance requirements?	С	Completed informally, but not documented in systems.
3.1.7	Are practices covering operating rules and maintenance documented?	В	Included in the AMP in good level of detail.
3.1.8	Do maintenance plans cover preventative and corrective maintenance?	В	Included in the AMP.
3.2	Performance Related		
3.2.1	Are actual assets and human resources appropriate for performance requirements?	В	Assets are adequate and maintenance staff knowledgeable, well motivated and very capable.
3.2.2	Do operation and maintenance practices reflect performance targets?	С	More based on past practices and observations than comparison with performance targets.
3.2.3	Are costs measured and recorded?	С	Not on an asset by asset basis. Aggregated to waste services group level.
3.2.4	Is the asset under utilised?	В	Not known, but appear adequate.
3.2.5	Is the level of maintenance justified against replacement costs?	С	No analysis is completed. Current practice is based on judgement of the operators.
3.2.6	Has the asset been inspected?	В	WWTP assets are regularly inspected and reviewed.
3.2.7	Is the asset's theoretical life known?	В	Included in the AMP
3.2.8	Does the asset management plan enable the prediction of asset deterioration and failure	С	Not considered in the AMP
3.2.9	Do the maintenance plans and operational plans relate to what is required to achieve the levels of service required of the system?	С	More related to operator judgement as levels of service have not been defined



4.	. Risk Analysis And Contingency Planning						
4.1	Output Related	Compliance Scale	Comments				
4.1.1	Has a risk assessment of the asset been conducted?	С	A basic risk and SWOT has been completed				
4.1.2	Has the probability and consequences of asset failure been identified?	D	No system in place to assess or record risks.				
4.1.3	Are appropriate contingency plans in place?	D	Contingency Plan has not been developed.				
4.2	Performance Related						
4.2.1	Is risk management practiced?	С	Practices are more based on "safe work", which cover the essential risk elements. These are documented in the AMP.				
4.2.2	Where unacceptable risks have been identified have risk control measures been implemented?	В	Confined space entry was assessed and appropriate procedures developed to control risks.				
4.2.3	Where events that may result in severe consequences have been identified have contingency plans been developed?	В	Confined space entry included in the AMP.				
5.	Financial Planning						
5.1	Output Related	Compliance Scale	Comments				
projed and lo	Does the financial plan provide ctions of operating statements (profit pss) and statement of financial position nce sheets)	В	Included in the AMP and annual budgeting processes				
financ	Does the financial plan cover the cial objectives and strategies and as to achieve the objectives?	В	Yes.				

С

С

As above

plan?

the financial plan?

5.1.3 Does the financial plan identify the source of funds for the capital expenditure

5.1.4 Is the source of funds for operations, maintenance and administration identified in

No, but rates is the only source of funds.



		Compliance Scale	Comments
5.1.5 Does the financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period?		В	Included in the detailed revenue projections for five years for all Shire operations.
5.2	Performance Related		
5.2.1 Does the financial plan provide for the operations and maintenance, administration and capital expenditure requirements of the scheme?		В	Yes – included in the financial plans under separate chart of accounts.
6.	Capital Expenditure Planning		
6.1	Output Related		
		Compliance Scale	Comments
6.1.1	Has a capital expenditure plan been prepared?	С	Yes – included in the AMP, but not up to date and summary information only.
6.1.2	Does the plan cover the issues to be addressed, the actions proposed, the centre of responsibilities, and deadline dates?	D	AMP Capital Plan is summary only.
6.1.3	Does the plan provide reasons for capital expenditure and timing of expenditure?	D	No
6.2	Performance Related		
6.2.1	Is the capital expenditure plan consistent with the asset life and condition identified in the asset management plan?	С	Not able to be assessed in detail
7.	Review		
7.1	Output Related	Compliance Scale	Comments
7.1.1	Is a review process in place to ensure that asset management plans are kept current?	В	Yes



7.2	Performance Related	Compliance Scale	Comments
7.2.1	Are asset management plans being reviewed at appropriate intervals?	С	A review during 2006 would be appropriate.
7.2.2	Are the asset management plans current?	В	Yes.



Conclusions and Recommendations

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

The Shire has no growth and planned refurbishment/replacement of assets has not been required. Some improvements of the pipeline network are planned to address tree root infestations. Reallocation of staff responsibilities and roles during the audit period has resulted in an improvement in the general condition of the assets.

The primary deficiencies are the lack of a complaint management process, reporting of performance, reporting and strategic asset management planning. The recommended improvements are:

5.1 Operational Audit

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

Licence Clause	Licence Obligation	Recommendation
Asset Management System	Establish the scope of the Asset Management System with ERA.	Contact the ERA on the requirements of Clause 6 (a)
Clause 6 (d)		(iii).
Specified Information to be provided	The Licensee shall report the information set out in Schedule 3 within 30 days of the end of the	Complete and forward Schedule 3 for 2005 as a matter of urgency.
Clause 14	financial year.	Establish milestone trigger system to ensure the reports are prepared and forwarded on time.
Performance of functions by the Licensee	The Licensee shall comply with the quality and performance standards set out in Schedule 2	The Shire needs to implement measurement processes to capture and
Clause 15 (a).		report the information requirements of Schedule 2.
Customer Services Charter	The Licensee must make the Customer Services Charter available	Either include a copy of the document on the Shire web
Clause 19 (g)	to its customers.	site or display it on the noticeboard.
Dispute Resolution	Establish a system for recording,	An electronic records
Clause 20 (a) and (b) (iii)	managing and resolving Customer Complaints within 21 days.	system should be implemented and procedures laid down.



5.2 Asset Management Review

The following improvements are recommended for the Asset Management System:

Asset Planning/Creation/Acquisition

- Establish the strategic objectives of assets,
- Document life cycle costs for all assets,
- Implement a system of full project evaluation for new assets, and
- Document asset details to component level.

Environmental Analysis

- Document the performance requirements for all assets (availability of service, capacity, continuity, and emergency response),
- Document the asset system objectives, and
- Prepare opportunities and threats assessment for each system.

Asset System Analysis

- Document the asset system components,
- Assess the asset performance and condition,
- Update asset register and plans to system components level,
- Record the asset type, location, material and an assessment of assets' physical/structural condition,
- Instigate a system to assess asset efficiency, including performance capacity and deficiencies,
- Document the outcomes in an Asset Management Plan, and
- Update asset life, predictive failure modes and maintenance requirements.

Risk Analysis and Contingency Planning

- Assess the probability and consequences of asset failures,
- Prepare appropriate contingency plans for high risk failures, and
- Identify unacceptable risks and prepare risk control measures.

Review

Instigate a process for the periodic review of the asset management systems.

5.3 Conclusion

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

A number of improvements have been implemented to the operation of the scheme and the management systems during the period. The staff's attitude to continuos improvement and



their high motivation levels are admirable, and bode well for further improvement in scheme operational efficiency and effectiveness over the next audit period.

The suggested improvements to the operation of the licence and asset management systems should provide the Shire with an assurance that the systems can continue to perform effectively. The purchase of an Asset Management software system would assist in the recording of works activities and predictive capital and maintenance requirements

5.4 Compliance Statement

Mark Bourhill, GHD's Manager Management Services Group has prepared this report for the Shire.

It is certified that the "Scope and Guidelines for the Water Service Licence: Operational Audit, and Asset Management Review for the Shire of Dumbleyung (the Licensee)" have been followed in conducting the review, making the review findings and preparing the report.

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

Mark Bourhill
Manager Management Services
GHD Pty Ltd
31 January 2006



Appendix A Risk Assessment



Operational Audit Risk Calculation: Water Supply Licence

			Fail		lurin udite	g period d		Adequacy	
Operating Licence Compliance Element	Operating Licence	C	Consequence (1) Likelihood		Inherent Risk (3)	of Existing Controls	Priority (5)		
	Reference	C 1	C 2	C 3	О	(2)		(4)	
OPERATING AREAS									
Water Services in designated operating area	Clause 2(b), Sched 1	1	1	2	1	D	Low		
CUSTOMER COMPLAINTS									
Recorded	Clause 20(b)	2	2	1	2	С	Low		
Investigation, conciliation & arbitration	Clause 20(f)	3	2	2	2	D	Low		
Responsiveness (eg solution within 21 days)	Clause 20 (a), Sched 3	3	2	2	2	С	Low		
CUSTOMERS	-								
Charter in place, reviewed and followed	Clause 19	1	2	2	2	С	Low		
Ongoing consultation and feedback established	Clause 18	1	2	2	2	С	Low		
WATER SERVICES PROVISION	of := (c)	_	_	_	<u> </u>		a. c		
Conditions for connection followed	Clause 12 (6)	3	3	2	3	D	Medium		
Availability	Clause 12 (b)	2	1	1	2	D	Low		
Discontinuance	n.a.	3	2	2	2	D	Low		
Billing	n.a.	2	2	2	2	С	Low		
INFO PROVIDED TO AUTHORITY	2662			-	_				
Annual Benchmarking report	Sched 3	1	1	3	2	C	Low		
Incidents (reported within 5 days)	Clause 14	1	2	3	3	С	Medium		
CONTRACTING OF SERVICES	of (f)	-		_	_		24 C		
Maintenance of Licence Standards STANDARDS	Clause 6 (b)	3	3	3	3	D	Medium		
	of 5	_	_	2	_		6		
Adherence to Regulation Adherence to technical standards	Clause 5 Clause 8	2	2	3	2	Д. Д	Low Low		
	Clause 9	2	2	<i>3</i>	2	C	Medium		
Adherence to industry codes Accounting records – prepared to standard	Clause 10	1	1	1	1	D	Low		
	Clause 10	1	1	1	1	D	Low		
Pricing and charges – adhere to legislation Services provided by agreement documented	Clause 16	3	3	3	3	D	Medium		
Obligations to other licensees adhered to	Clause 17	2	2	2	2	C	Low		
Customers advised re planned disruptions	As per charter	3	2	2	3	C	Medium		
Customers contacted re emergency shutdowns	As per charter	3	3	3	3	C	Medium		
Emergency telephone service operational	Clause 15 (c)	3	2	2	3	C	Medium		
STANDARDS SPECIFIC TO:	Curist 15 (t)				Ť	C	340ann		
DRINKING WATER									
Quality	n.a.								
Pressure and flow	n.a.								
Interruptions	n.a.							1	
Drought response	n.a.							1	
Leaks and bursts	n.a	1						1	
NON-POTABLE WATER									
Annual notification water not safe for drinking	Clause 15 (b)	3	3	3	3	С	Medium	İ	
SEWERAGE						-			
Overflows	Clause 15 (d), Sched 3	1	2	3	2	С	Low		
Blockages	Calsue 15 (e), Sched 3	2	2	3	3	С	Medium		
DRAINAGE									
Effectiveness of Design	n.a.	1	2	3	2	D	Low		
Effectiveness of Maintenance	n.a	1	2	3	2	D	Low		
Monitoring of outflows quality	n.a	3	3	3	3	D	Medium		

See over for definitions and notes



Definitions and notes:

The Consequences of an event happening (and as a result the risk) are to be assessed against: Customers, Community and State. These relate to the C1, C2, and C3 columns respectively. An 'Overall' assessment (Column 'O') is based on a subjective assessment of the three consequences.

Consequences are to be assessed as either:

- A. Negligible
- B. Marginal
- C. Critical
- D. Catastrophic

Likelihood is an indication of how often the failure will occur during the period to be audited. The likelihood is to be assessed as either

- A Almost Certain.
- B Likely.
- C Moderate.
- D Unlikely.
- E Rare.

Inherent Risk is to be assessed as either

- High;
- Medium;
- Low; or
- Nil.

The adequacy of existing controls are to be assessed as:

- Strong
- Weak; or
- N.A.

The following critethe Shire should be used to assess internal controls:

- Customer focus
- Regulatory compliance
- Adequate documents and records
- Segregation of duties
- Access controls
- and possibly (depending on Licensees size)
- Validity of data



- Performance reviews
- Monitoring

Priority to be ranked from 1 to 5, where 1 is the highest.



GHD Pty Ltd ABN 39 008 488 373

GHD House, 239 Adelaide Tce. Perth, WA 6004

P.O. Box Y3106, Perth WA 6832

T: 61 8 6222 8222 F: 61 8 6222 8555 E: permail@ghd.com.au

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