
Shire of Dalwallinu
2005 Operational Audit and
Asset Management System Review

Final Report



January 2006

Document / Report Control Form

Project Name: **Northern Wheatbelt Shires Water Service Audit\36004.008 Shire Operational Audits**

Project number: **3006038**

Report for: **Shire of Dalwallinu**

PREPARATION, REVIEW AND AUTHORISATION

Revision #	Date	Prepared by	Reviewed by	Approved for Issue by
1	7/12/05	Naomi Hill	Mark Warner	Mark Warner
2	16/2/06	Naomi Hill	Peter Hanlon	Mark Warner

ISSUE REGISTER

Distribution List	Date Issued	Number of Copies
Geoff Benson	12/01/05	1
Peter Hanlon	12/01/05	1
Associates:		
Office Library:		
Report Project File:		

SMEC Holdings Limited

Level 6, 12 St Georges Terrace

Perth WA 6000

Tel: 08 9323 5935

Fax: 08 9323 5901

Email: naomi.hill@smec.com.au

www.smec.com.au

The information within this document is and shall remain the property of SMEC.

Table of Contents

Executive Summary	i
Background	i
Objectives and Scope of Audit and Review	ii
Time Frame of the Audit and Review	ii
Overview of Compliance Performance	ii
Operational Audit Conclusion	iv
Overview of Asset Management System Review	iv
Asset Management System Review Conclusion	iv
Statement of Declaration	vi
1 Introduction	1
2 Objectives and Scope	1
2.1 Operational Audit	1
2.2 Asset Management System Review	1
3 Risk Assessment	2
Operating Audit Risk Calculation – Non–Potable Water Supply & Sewerage Services Licence.....	2
4 Methodology	3
4.1 Task 1 - Risk Assessment	3
4.2 Operational Audit	3
4.3 Asset Management System Review	4
4.4 Compliance Key.....	4
5 Period Covered by the Audit/Review	5
6 Staff Resources	5
6.1 Shire of Dalwallinu Representatives	5
6.2 Audit and Review Team.....	5
7 Review of Previous Audit Recommendations.....	6
8 Operational Audit – Specific Compliance Issues Examined.....	6
8.1 Compliance Key.....	6
8.2 Shire of Dalwallinu Operational Audit Checklist	7
9 Summary of Operational Audit Findings	13
9.1 Asset Management System (Clause 6)	13
9.2 Specific Information to be provided (Clause 14)	13
9.3 Specific Information to be provided (Clause 15/2)	13
9.4 Performance Standards – Overflows and Blockages.....	13

9.5	Customer Service Charter (Clause 19)	13
10	Asset Management System Review – Key Outputs and Performance	14
10.1	Effectiveness Rating Scale	14
10.2	Asset Planning/Creation/Acquisition	14
10.3	Environmental Analysis	16
10.4	Asset Management System Analysis	17
10.5	Risk Analysis and Contingency Planning	20
10.6	Financial Planning	21
10.7	Capital Expenditure Planning.....	22
10.8	Review of Asset Management Plan	23
11	Summary of Asset Management Review Findings	24
11.1	Introduction	24
11.2	Specific Findings and Recommendations from Current Review	24
12	References	26

Background

The Shire of Dalwallinu was formally granted an Operating Licence for a term of five years on 29th April 1996. Amended Operating Licences were subsequently issued, by means of substitution on 21st May 1997 and 14th June 2002, and is valid up to and including the 29th April 2021. The Licence permits the Shire of Dalwallinu to provide Non-potable Water Supply Services in the operating areas that are centred on the township of Dalwallinu, located in the Northern Region of the State of Western Australia. The Economic Regulation Authority (the Authority) monitors the operational performance of the Shire of Dalwallinu against its Operating Licence.

The Dalwallinu sewerage system consists of 4,200m of earthen-ware sewerage pipe reticulation, tanks and pumping station, Imhoff tank, primary and two secondary ponds and one irrigation storage dam. The wastewater is directed into the Imhoff tank via a gravity reticulation pipework. It is then discharged into a primary wastewater pond then the treated effluent is discharged from the oxidation pond into the irrigation dam where it is mixed with storm-water runoff and utilised for the irrigation of sports ovals. Currently, the Shire of Dalwallinu is proposing and developing plans to increase the Scheme developed in 1969 to accommodate the forecasted growth.

In accordance with Section 37 (1) of the *Water Services Licensing Act 1995*, operational audits are required to be undertaken not less than once in every 24 month period, or such longer periods allowed for by the Authority. The primary objective of this audit is to determine the effectiveness of measures taken by the Shire of Dalwallinu to maintain those quality and performance standards that are referred to in the Shire of Dalwallinu's Operating Licence.

Section 36 of the *Water Services Licensing Act 1995*, and Clause 6 of the Attachment to the Shire of Dalwallinu's Operating Licence, require the Shire of Dalwallinu to provide and maintain an asset management system in respect of its assets. The system must set out the measures to be taken by the Shire of Dalwallinu for the proper maintenance of its assets and for the undertaking, maintenance and monitoring of its water services works.

The Act further requires the Shire of Dalwallinu to provide the Authority with a report by an independent expert on the effectiveness of the asset management system.

The Shire of Dalwallinu, with the approval of the Authority, commissioned SMEC Australia to conduct the second operational audit and review of their asset management system. This report documents the findings of the audit/review.

Objectives and Scope of Audit and Review

The scope of the operational audit was to assess the Shire of Dalwallinu's systems and effectiveness of processes used to ensure compliance with the standards, outputs and outcomes which are:

- referred to in the Shire of Dalwallinu's Operating Licence, and
- applied to the Shire of Dalwallinu's Operating Licence, including those standards prescribed under Section 33 of the Water Services Licensing Act 1995.

The scope of the asset management review was to provide an opinion to the Authority on whether the Shire of Dalwallinu has in place the appropriate systems for the planning, construction, operation and maintenance of its assets. The review examined:

- the adequacy of the asset management system by considering the outputs of the system, such as the operations and maintenance plans, asset registers and financial plans,
- the effectiveness of the asset management system by considering the systems established for the planning, construction, operation and maintenance of works,
- the identification, development and implementation of strategic initiatives to improve the effectiveness of asset management, and
- the Shire of Dalwallinu's response to the recommendations made in the previous reviews.

The review focused on identifying those aspects of the asset management system that could be further strengthened, with the view to providing feedback to the Shire of Dalwallinu on the adequacy and effectiveness of the system.

Time Frame of the Audit and Review

The audit and review covered the period of 1st December 2002 to 30th November 2005. It is noted that the previous audit covered the period of 31st October 1999 to 31st October 2002.

Overview of Compliance Performance

It is the auditors' professional view that the Shire of Dalwallinu is achieving a good level of compliance with the requirements of the Operating Licence.

Improvements to how the Shire of Dalwallinu makes the Customer Charter available will ensure that a good level of compliance is provided.

The results of the assessment of the relevant standards, outputs and outcomes are summarised in the following table:

TABLE 1. SHIRE OF DALWALLINU– 2005 OPERATIONAL AUDIT SUMMARY LEVEL OF COMPLIANCE

Clause	Standard	Compliance
Clause 2(b)	Operating Area Schedule	Excellent
Clause 6	Asset Management	Good
Clause 8	Technical Standards	N/A

Clause 9	Industry Standards	N/A
Clause 10	Accounts	Good
Clause 11	Prices or charges	Good
Clause 12	Methods or principles to be applied in the provision of Water Services	Good
Clause 14	Specific information to be provided	Largely adequate
Clause 15/Sched 2	Performance Standards	Largely adequate
Charter	Overflows	Largely adequate
Charter	Blockages	Good
Charter	Emergency response	Good
Charter	Responsiveness to Customer Complaints	Good
Clause 16	Terms and conditions of customer contracts	Good
Clause 17	Obligations to public authorities and other Licensees	Good
Clause 18	Consumer Consultation	Good

Clause 19	Customer Service Charter	Good
Clause 20	Dispute Resolution	Good

Excellent:	Exceeds requirements
Good:	Meets requirements
Largely Adequate:	Meets requirements – improvement suggested
Inadequate:	Does not meet the requirement
N/A:	Not applicable

Operational Audit Conclusion

The level of compliance found in Operational Audit during the audit period indicates that the Shire of Dalwallinu is undertaking the necessary measures to maintain those quality and performance standards referred to in the Shire of Dalwallinu’s Operating Licence.

The audit has determined that the Shire of Dalwallinu’s Asset is in compliance with the licence requirements.

Overview of Asset Management System Review

The results of the assessment of the relevant standards outputs and outcomes are summarised in the table on Page v.

Asset Management System Review Conclusion

There is an Asset Management Plan for the Dalwallinu Sewerage Scheme which is deemed to be adequate for the extent and complexity of the scheme. Suggested improvements to the Asset Management Plan include the addition of risk management, a contingency plan and capital expenditure. The review revealed that the Shire of Dalwallinu’s assets present to a good standard relevant to the scale of operations undertaken. This reflects well on the level of management and operating skill and commitment devoted to the operation of the areas under licence to Shire of Dalwallinu.

The results of the assessment of the relevant standards outputs and outcomes is summarised in the table that follows overleaf.

The review to closeout the recommendations from the previous audit showed that good progress has been made in all aspects previously commented on.

TABLE 2. SHIRE OF DALWALLINU– 2005 ASSET MANAGEMENT SYSTEM REVIEW
SUMMARY OF SYSTEM EFFECTIVENESS

Activity	Description	Effectiveness Scale
Asset Planning/Creation /Acquisition	Asset creation means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay.	Good
Environmental Analysis	Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.	Good
Asset System Analysis	Asset system analysis examines and documents the system and process for its effective operations. Operation Plans document the knowledge of staff in the operation of assets. Maintenance Plans cover the scheduling and matching of resources to the maintenance task so that work can be done on time and on cost. The Maintenance Plans should cover preventative and corrective maintenance. Assessment of the asset system analysis components included examination of the asset register.	Largely adequate
Risk Analysis and Contingency Planning	Risk analysis involves the identification of risks and management to reduce the level of risk. Contingency plans document the steps to deal with an unexpected failure of a process, procedure or the asset management system itself.	Inadequate
Financial Planning	The financial planning component of the asset management plan brings together the financial elements of the scheme to ensure its financial viability over the long term.	Largely adequate
Capital Expenditure Planning	The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure on each over the next five or more years.	Inadequate
Review	Review of the asset management plan assists to ensure the effective development and operation of asset management plans.	Good

Statement of Declaration

This report has been prepared in accordance with the Audit Plan approved by the Authority. The audit and review findings reflect the professional opinion of the Lead Auditor.

The Shire of Dalwallinu is achieving adequate standards and quality in the operational aspects of its Operating Licence. This report has identified some instances (mainly with regard to risk assessment) in which Shire of Dalwallinu's compliance with Licence requirements may be further enhanced.

The review revealed that no risk assessments have been conducted or a contingency plan developed. Capital expenditure planning has not been done since 1999 although there is a sewerage reserve fund which gets added to annually. Performance of the wastewater treatment system has been good, which indicates an appropriate level of assets for the customers.

A risk assessment needs immediate attention, with particular reference given to environment, occupational health and safety, finances and possible failure of asset. This is the main area of non-compliance and once the risk assessment has been conducted, the licence compliance will be significantly improved.

A handwritten signature in black ink that reads "Naomi Hill". The signature is written in a cursive style. To the right of the signature is a vertical red line.

Naomi Hill
Auditor

1 Introduction

In August 2005 SMEC Australia was awarded a consultancy by the Shire of Dalwallinu, with the approval of the Economic Regulation Authority (the Authority), to undertake their third Operational Audit and Asset Management System Review. This audit/review assessed:

- the adequacy and effectiveness of measures taken by the Shire of Dalwallinu to maintain those quality and performance standards referred to in the licence, and
- the effectiveness of processes implemented by the Shire of Dalwallinu to maintain assets used in the provision of water services and for the undertaking, maintenance and operation of water service works.

Following acceptance of the Audit and Review Plan by the Shire of Dalwallinu and the Authority, Naomi Hill undertook the on-site component of the audit and review on the 2nd December 2005.

This report summarises the findings of the Operational Audit and Asset Management Review and identifies areas of the asset management system that could be improved or enhanced.

2 Objectives and Scope

2.1 Operational Audit

In accordance with Section 37 (1) of the *Water Services Licensing Act 1995* operational audits are required to be undertaken not less than once in every 24 month period, or such longer periods allowed for by the Authority.

The primary objective of this audit is to determine the effectiveness of measures taken by the Shire of Dalwallinu to maintain those quality and performance standards which are referred to in the Shire of Dalwallinu's Operating Licence.

Specifically, the audit considered the systems and effectiveness of processes used by the Shire of Dalwallinu to ensure compliance with the following standards, outputs and outcomes required by the current Licence.

2.2 Asset Management System Review

The *Water Services Licensing Act 1995* also requires that the Shire of Dalwallinu provide for and maintain an asset management system. The system must set out the measures to be taken by the Shire of Dalwallinu for the proper maintenance of its assets and for the undertaking, maintenance and monitoring of its water services works.

This review provides an opinion to the Authority on whether the Shire of Dalwallinu has in place the appropriate systems for the planning, construction, operation and maintenance of its assets. In reaching this opinion, the review examined:

- the adequacy of the asset management system by considering the outputs of the system, such as the operations and maintenance plans, asset registers and financial plans;
- the effectiveness of the asset management system by considering the systems established for the planning, construction, operation and maintenance of works;
- whether the system provides for the identification, development and implementation of strategic initiatives to improve the effectiveness of asset management; and
- the Shire of Dalwallinu's response to the recommendations made in previous reviews.

3 Risk Assessment

Operating Audit Risk Calculation – Non-Potable Water Supply & Sewerage Services Licence

Operating Licence Compliance Element	Operating Licence Reference	Failure during period audited				Likelihood (2)	Inherent Risk (3)	Adequacy of Existing Controls (4)	Priority (5)
		Consequence (1)							
		C1	C2	C3	O				
OPERATING AREAS									
Water Services in designated operating area	Sched 1	1	1	2	1	E	Nil	Strong	≥ 5
CUSTOMER COMPLAINTS									
Recorded	Clause 20(a), (b)	2	1	1	1	B	Low	Strong	≥ 5
Investigation, conciliation & arbitration	Clause 20	3	2	2	2	C	Low	Strong	≥ 5
Responsiveness (eg solution within 21 days)	Sched 2 sec 4	3	2	2	3	C	Medium	Strong	4
CUSTOMERS									
Charter in place, reviewed and followed	Clause 19	1	3	2	3	D	Medium	Weak	3
Ongoing consultation and feedback established	Clause 18	1	3	2	2	C	Low	Strong	≥ 5
WATER SERVICES PROVISION									
Conditions for connection followed	Clause 4	2	2	2	2	D	Low	Strong	≥ 5
Availability	Clause 12(b)	2	2	2	2	E	Low	Strong	≥ 5
Discontinuance	n.a.								
Billing	n.a.								
INFO PROVIDED TO AUTHORITY									
Customer complaints (12 monthly)	Sched 3	1	1	2	1	D	Nil	Weak	≥ 5
Quarterly reports	n.a.								
Annual Benchmarking report	Sched 3	1	1	3	2	D	Low	Strong	≥ 5
Incidents (reported within 5 days)	Clause 14	2	2	3	2	C	Low	Weak	≥ 5
CONTRACTING OF SERVICES									
Maintenance of Licence Standards	Clause 12	3	3	3	3	D	Medium	Strong	4
STANDARDS									
Adherence to Regulation	Clause 5	3	3	3	3	C	Medium	Strong	4
Adherence to technical standards	Clause 8	2	2	3	3	E	Low	Strong	≥ 5
Adherence to industry codes	Clause 9	2	2	3	3	E	Low	Strong	≥ 5
Accounting records – prepared to standard	Clause 10	2	2	3	3	D	Medium		4
Pricing and charges – approval of the Authority	Clause 11	2	2	2	2	D	Low	Strong	≥ 5
Services provided by agreement documented	Clause 12	3	3	3	3	D	Medium	Strong	≥ 5
Obligations to other licensees adhered to	n.a.								
Customers advised re planned disruptions	As per charter	3	3	3	3	C	Medium	Strong	4
Customers contacted re emergency shutdowns	As per charter	3	3	3	3	C	Medium	Strong	4
Emergency telephone service operational	Clause 15(c)	3	3	3	3	C	Medium	Strong	4
STANDARDS SPECIFIC TO:									
DRINKING WATER									
Quality	n.a.								
Pressure and flow	n.a.								
Interruptions	n.a.								
Drought response	n.a.								
Leaks and bursts	n.a.								
NON-POTABLE WATER									
Annual notification water not safe for drinking	Clause 15(b)	3	3	3	3	D	Medium	Strong	4
SEWERAGE									
Overflows	Clause 15(d), Sched 2	3	3	3	3	C	Medium	Weak	3
Blockages	Clause 15(e), Sched 2	3	3	3	3	C	Medium	Weak	3
IRRIGATION									
Quality	n.a.								
Supplied when required	n.a.								
Monitoring of consumption is accurate	n.a.								

4 Methodology

The audit and review was undertaken in accordance with the ‘*Scope and Guidelines for Water Service Licence: Operational Audit, and Asset Management Review for the Shire of Dalwallinu*’ issued by the Economic Regulation Authority.

The work involved was divided into four distinct phases each with specific tasks, these being;

- risk assessment;
- development of the Audit and Review Plan
- site visit
- reporting and follow-up

This audit and review focused on the development of the Shire of Dalwallinu’s systems and procedures since receiving their initial licence, and their response and actions to recommendations from previous audits and reviews.

4.1 Task 1 - Risk Assessment

Assess the risk posed by non-compliance with licence standards and the adequacy of internal controls by completing the Audit Risk Calculation Proforma. This completed proforma was forwarded and then discussed with the Authority and the Licensee before finalising the areas to focus in on during the audit.

4.2 Operational Audit

Specific tasks undertaken included:

- A review of key documents including;
 - the Shire of Dalwallinu’s Customer Charter for Wastewater Services;
 - relevant Policies and Procedures established by the Shire of Dalwallinu for the provision of water services, management of customer services (including the receipt, handling, resolution and reporting of customer complaints), and performance reporting requirements;
 - relevant Performance Indicator data and reports;
 - the Shire of Dalwallinu’s customer complaints handling processes, procedures and reporting mechanisms;
 - Financial reports;
 - any relevant Service Agreements or Memorandum of Understanding with other agencies, and
 - any relevant correspondence between the Shire of Dalwallinu and the Authority relating to Operating Licence requirements.
- review and analysis of all technical/operational and administrative aspects of those quality and performance standards maintained by the Shire of Dalwallinu, enabling comparison with requirements of the Operating Licence;
- consultation and discussions with the Authority representatives (where necessary, within each of the four audit phases);
- discussions and interviews with key staff of the Shire of Dalwallinu (within each of the four audit phases);
- observation of processes / procedures and operations;
- analysis of the extent to which the Shire of Dalwallinu’s information systems produce accurate and reliable information which complies with the requirements of its Operating Licence;
- technical assessment of the adequacy of measures taken by the Shire of Dalwallinu in meeting the requirements relating to the provision of services;

- technical review of a sample of works requests relating to the provision of services;
- sampling source documents to determine whether established procedures relating to the provision of services and management of customer services were complied with;
- field inspections and observation of work sites relating to the provision of required services, and
- an assessment of the level of compliance with the operating licence requirements using the Compliance Key detailed in Section 3.4 of the 'Scope and Guidelines for the 2002 Audit of the Local Government Operating Licence holders and Asset Management Review' document, and repeated in Section 4.4 below.

Note: Where non-compliances with Operating Licence requirements were noted during the audit, an assessment was made on the adequacy and effectiveness of the Shire of Dalwallinu's plans to resolve the matter of non-compliance.

4.3 Asset Management System Review

Specific tasks undertaken included:

- consultation and discussions with the Authority representatives;
- analysis of the Shire of Dalwallinu's documented procedures related to its asset management system to determine whether they are consistent with the relevant requirements of its Operating Licence;
- discussions and interviews with key staff of the Shire of Dalwallinu;
- observation of processes / procedures and operations;
- analysis of the Shire of Dalwallinu's information systems supporting its asset management system;
- technical analysis of a sample of transactions or data relating to the Shire of Dalwallinu's asset management system;
- field inspections and observation of work sites relating to the provision of the Shire of Dalwallinu's asset management system, and
- where instances of non-compliance with Operating Licence requirements were noted during the review, an assessment was made on the adequacy and effectiveness of the Shire of Dalwallinu's plans to resolve the matter of non-compliance.

Note: The review utilised the Asset management Review effectiveness rating scale detailed in the 'Scope and Guidelines for the 2002 Audit of the Local Government Operating Licence holders and Asset Management Review' document.

4.4 Compliance Key

For the Operational Audit, the Licensee was assessed for compliance with the licence requirements against the following scale:

- 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 cases of non-compliance or where the auditor considers there to be action required (a rating of (c) to (d)), then a comment has been provided on actions required.

For the Asset Management Review, an asset management adequacy matrix was used to assess the effectiveness of the Licensee's asset management system.

5 Period Covered by the Audit/Review

The brief required the audit/review to cover the period from 1st December 2002 to 30th November 2005, as required by the Scope of Works. It was noted that the previous audit undertaken on the Shire of Dalwallinu was for the period 31st October 1999 to 30th October 2002.

On site activities were conducted over the period 2nd December 2005.

The review also focused on identifying those aspects of the asset management system which may be further strengthened, with the view to providing feedback to the Shire of Dalwallinu on the adequacy and effectiveness of the system.

6 Staff Resources

6.1 Shire of Dalwallinu Representatives

The following representatives of Dalwallinu participated in the audit and review:

Geoff Benson Environmental Health Officer (EHO)
Bill Atkinson Chief Executive Officer

6.2 Audit and Review Team

The Team comprised:

Mark Warner Lead Auditor
Naomi Hill Auditor

The following table provides a break up of hours spent on the review:

Task no.	Audit and Review Task	Hours
1	Risk Assessment	1
2	Development and approval of Audit and Review Plan	4
3	Site Visit	5
4	Reporting and Follow-up	5
	Total Hours	15

7 Review of Previous Audit Recommendations

GHD's Water Services Provider Operational Audit: Sewerage Scheme – February 2003 was reviewed and all recommendations and non-compliance issues were discussed during the audit meeting. The Shire's credit has done exceptionally well to close off most of the actions. The only action outstanding is to conduct a risk assessment and contingency plan.

8 Operational Audit – Specific Compliance Issues Examined

8.1 Compliance Key

For the Operational Audit, the Licensee was assessed for compliance with the Licence requirements against the following scale:

Excellent:	Exceeds requirements
Good:	Meets requirements
Largely Adequate:	Meets requirements – improvement suggested
Inadequate:	Does not meet the requirement
N/A:	Not applicable

8.2 Shire of Dalwallinu Operational Audit Checklist

Operating Licence Clause or Schedule	Specific Compliance Issues/Requirements	Auditee	Activity Compliance	Comments/Remarks	Actions
Clause 2(b) Operating Area Schedule 1	Does the operating area identified in Schedule 1 correspond to the area in which Shire of Dalwallinu provides its water services?	Geoff Benson	Excellent	Sighted. Water Services Operating Licence. Plan Number OWR-OA-29 (B): DALWALLINU	None
Clause 6 Asset Management System	Is there an Asset Management System in place for the water service assets of the Shire of Dalwallinu?	Geoff Benson	Good	Yes. Sighted Shire of Dalwallinu Asset Management Plan Dalwallinu Town Sewerage Scheme.	None
	Have the details of the system, and any changes, been forwarded to the Authority?	Geoff Benson	Good	Yes. Sighted letter from Shire dated 12/6/03 stating that the review of the AMP has been conducted.	None.
	Does the system set out the measures to be taken by the Shire of Dalwallinu for the proper maintenance of its assets and the undertaking, maintenance and operation of water service works?	Geoff Benson	Good	Yes. Sighted in the AMP	None.
	Has the information on maintenance activities been collected and recorded in accordance with documented procedures?	Geoff Benson	Good	Maintenance schedule contained within the AMP is currently not being followed maintenance is being conducted.	Maintenance schedule should be updated and maintenance schedule followed and documented.
	Are the procedures understood by staff?	Geoff Benson	Largely adequate	Staff is aware of some procedures; however this knowledge could be increased.	Increase staff knowledge of the AMP and its procedures.
Clause 8 Technical Standards	Does the Shire of Dalwallinu comply with the technical standards for the provision of and the undertaking, maintenance and operation of Water Services works as	Geoff Benson	N/A	N/A	None.

Shire of Dalwallinu 2005 Operational Audit and Asset System Review

	published in the Government Gazette?				
	Is the Government Gazette readily available and reviewed?	Geoff Benson	N/A	N/A	None.
Clause 9 Industry Standards	Does the Shire of Dalwallinu observe the <i>Sewerage Code of Australia WSA 02 1999</i> when designing/constructing works?	Geoff Benson	N/A	No such works have been undertaken during the Audit Period.	None.
Clause 10 Accounts	Are the Shire of Dalwallinu's accounts consistent with the requirements of the <i>Local Government Act 1995</i> ?	Geoff Benson	Good	Yes. Sighted Audit Report (October) from Haines and Norton that verifies that the Shire is consistent with the Act.	None.
	Does the Shire of Dalwallinu 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?	Geoff Benson	Good	Yes. Sighted Audit Report (October) from Haines and Norton.	None.
Clause 11 Prices or charges	Do the prices and charges set by the Shire of Dalwallinu comply with the <i>Health Act 1911</i> and the <i>Local Government Act 1995</i> ?	Geoff Benson	Good	Yes. Prices charged for connections send by Health Department and Rates are in line with capped rating reporting.	None.
Clause 12 Methods or principles to be applied in the provision of Water Services	How does the Shire of Dalwallinu ensure that water services provided on its behalf comply with the terms and conditions of the Licence and relevant legislation?	Geoff Benson	Good	After discussions with the EHO external audits and water monitoring are used as indicators that the water services comply with licence and legislation.	None.

	How does the Shire of Dalwallinu ensure that its water services are available for connection on request to any land within the Operating Area?	Geoff Benson	Good	Scheme was installed for every block ready for connection.	None.
	How does the Shire of Dalwallinu ensure that the services it supplies are safe, reliable and financially viable?	Geoff Benson	Good	Auditing, maintenance, site fenced off, no failure or complaints to date indicates reliability, income and expenditure are allowed for in the budget.	None.
Clause 14 Specific information to be provided	Has the Shire of Dalwallinu informed the Authority within five days of any overflows from wastewater/sewerage infrastructure?	Geoff Benson	Largely adequate	Did not inform the Authority.	Provide the annual statistics immediately and ensure that future statistics are provided as per the requirements of the licence.
	If the Authority requested any detailed reports on overflow events, have they been provided within 14 days of the request?	Geoff Benson	Largely adequate	Did not inform the Authority.	Provide the annual statistics immediately and ensure that future statistics are provided as per the requirements of the licence.
	Has the Shire of Dalwallinu provided the information in Schedule 3 been reported to the Authority within 30 days of the end of each financial year?	Geoff Benson	Inadequate	EHO was not aware that this was required.	2004/05 Schedule 3 to be filled and submitted ASAP. Schedule 3's to be submitted within 30 days of the end of the financial year.
Clause 15/Schedule 2 Performance Standards	Are customers provided with non-potable water annually notified that the water supplied is not potable?	Geoff Benson	Largely adequate	Treated effluent is used to irrigate sporting field. Currently no signs have been posted nor has there been any notices given to Customers. The Sporting Complex Management, however has verbally informed Complex users that non-potable water is used on the oval and it has been	Recommend that notification about the use of treated effluent on the sports field be sent out with rates notice and that signs are erected.

				deemed that due to the small size of the community, Customers are aware of the use of non-potable water and therefore the risk is considered small.	
Overflows	Have 90% or more of customers had no sewerage overflows onto their properties?	Geoff Benson	Largely adequate	Yes. Salmon Gum Place, had blockage from tree roots. Discussed Water Corporation blasters (clay pipe lines).	Review the pipe line system and develop an Action Plan on how you will reduce the number of overflows. The Action Plan will need to be forwarded to the Authority.
Blockages	Were there less than 40 blockages per 100 km length of sewer?	Geoff Benson	Good	No. Low flow and small diameter clay pipe lines (tree roots are a major issue).	Review the pipe line system and develop an Action Plan on how you will reduce the number of blockages. The Action Plan will need to be forwarded to the Authority.
Emergency response	Has Shire of Dalwallinu implemented an emergency telephone number? Do 90% of customers receive advice within one hour of reporting an emergency?	Geoff Benson	Good	The Shire has two emergency telephone numbers (work hours and after hours).	None.
Responsiveness to Customer Complaints	Are 90% of written customer complaints resolved within 21 days?	Geoff Benson	Good	N/A	None.
Clause 16 Terms and conditions of customer contracts	Have the Shire of Dalwallinu entered into agreements with customers to provide water services?	Geoff Benson	Good	No.	None.
	If so, have any of the terms and conditions been modified without written approval from the Authority?	Geoff Benson	Good	N/A	None.
Clause 17	Do the wastewater treatment plants	Geoff Benson	Good	Yes. Renewed 2004	None.

Shire of Dalwallinu 2005 Operational Audit and Asset System Review

Obligations to public authorities and other Licensees	operated by the Shire of Dalwallinu have the relevant licences from the Department of Environment and are they operated in accordance with these licences?				
Clause 18 Consumer Consultation	Have the Shire of Dalwallinu held a public meeting or advertised for written submissions prior to making major changes to the operation of the water service?	Geoff Benson	Good	No longer have to hold public meetings as apart of their license.	None.
	Does the Shire of Dalwallinu allow customers to raise matters of concern regarding the sewerage system at public question time in accordance with the <i>Local Government Act 1995</i> ?	Geoff Benson	Good	Annual meeting of Electives and accounts of previous years and includes sewerage issues	None.
Clause 19 Customer Service Charter	Does the Shire of Dalwallinu have a “plain English” Customer Service Charter?	Geoff Benson	Good	Yes. Sighted Shire of Dalwallinu Customer Service Charter For Wastewater Services (requires updating)	None.

Shire of Dalwallinu 2005 Operational Audit and Asset System Review

	Does the Charter address all of the service issues reasonably likely to be of concern to its Customers?	Geoff Benson	Good	Yes, sighted in Customer Charter.	None.
	Has the Charter been reviewed within the last three years?	Geoff Benson	Good	Yes. Reviewed in 26/8/03	None.
	Have any changes to the Charter been approved by the Authority?	Geoff Benson	Good	Yes. Sighted Letter from the Authority dated on the 4/9/03 stating that they accept the Customer Charter	None.
	How does the Shire of Dalwallinu make the Charter available to its Customers?	Geoff Benson	Largely adequate	Available on demand. (not sent to customers nor displayed in front office)	Shire to display Charter in a prominent position and to send a notice Customers annually.
	Does the Shire of Dalwallinu provide services that are consistent with the Charter?	Geoff Benson	Good	Emergency number, follow complaints procedures	None.
Clause 20 Dispute Resolution	Is there a system in place for recording, managing and resolving customer complaints?	Geoff Benson	Excellent	Yes. Completion of the Sewerage System Defect Report then entered Complaints Register.	None.
	Are there officers designated to deal with complaints, and are they authorised to settle disputes, including monetary compensation where necessary?	Geoff Benson	Good	Customer Service Officers, Works Supervisor and Financial Services Manger.	None.
	Are Customers made aware that they can refer any dispute between themselves and the Shire of Dalwallinu to the Water Services Planning Branch of the Department of Water?	Geoff Benson	Good	Yes. The Charter lists Authority contact details for Customers incase of a dispute.	None.
	Where complaints are not resolved within 21 days, is the Customer advised of alternative forms of redress?	Geoff Benson	Good	The Shire has a full understanding of the procedure, however there has not been any complaints during this audit period.	None.

9 Summary of Operational Audit Findings

Overall, the Shire of Dalwallinu's compliance with licence conditions was mainly good, with no non-compliances. The following issues were regarded as 'Largely adequate'.

9.1 Asset Management System (Clause 6)

Staff do not have a comprehensive understanding of the AMP. The AMP needs to be reviewed in 2006 and once updated staff should be made aware of the requirements and procedures concerning the Asset.

Recommendation

After review of the AMP in 2006, refresh staff awareness and content of the AMP.

9.2 Specific Information to be provided (Clause 14)

There is no evidence of communication between the Shire of Dalwallinu and the Authority.

Recommendations

The Shire of Dalwallinu will need to inform the Authority of any overflows. The Shire is to ensure that the Schedule 3 form is filled in and submitted to the Authority within 30 days of the end of each financial year.

9.3 Specific Information to be provided (Clause 15/2)

Treated effluent is used to irrigate the sporting field; however there are no signs or evidence of annual notification to Customers that the water is not suitable for drinking. The community is aware that non-potable is used by the sporting complex and general knowledge;

Recommendations

It is recommended that a notification about the use of the treated effluent in the sports field be sent out with rates notice and that signs are erected.

9.4 Performance Standards – Overflows and Blockages

The Shire of Dalwallinu has had numerous blockages due to tree roots invading the pipe lines. Review the pipe line system and develop an Action Plan on how you will reduce the number of blockages and overflows. The Action Plan will need to be forwarded to the Authority for approval.

Recommendations

It is recommended that a review of the performance and viability of pipe line replacement should occur.

9.5 Customer Service Charter (Clause 19)

The Charter also needs to be displayed in a visible area in the Shire of Dalwallinu's office and sent annually to customers.

10 Asset Management System Review – Key Outputs and Performance

10.1 Effectiveness Rating Scale

For the Asset Management Review, an asset management adequacy matrix was used to assess the effectiveness of the Licensee’s asset management system. The rating scale uses the following levels:

- Excellent
- Good
- Largely adequate
- Inadequate

10.2 Asset Planning/Creation/Acquisition

Asset creation/acquisition means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay. In the case of major capital expenditure, full project evaluation should be undertaken and life cycle costs assessed.

Item No.	Test	Comments	Effectiveness
a.	Have the strategic objectives for assets been identified?	Yes. Sighted AMP’s Mission Statement.	Good
b.	Have the life cycle costs been considered?	Minimal information with respect to replacement, construction cost, maintenance cost was evident. Update during the review of the AMP.	Good
c.	Has the need for new assets been determined and full project evaluation processes been followed, including comparative assessment of non-asset solutions?	Sighted the Wastewater Disposal Scheme Analysis.	Good

Item No.	Test	Comments	Effectiveness
d.	Have documents recording relevant details on the asset been collected?	Yes. Sighted in AMP	Good
e.	Do assets reflect the objectives identified in the asset creation/acquisition phase?	Yes, as evidenced by lack of complaints.	Good
f.	Are actual costs as predicted?	Yes. Sighted AMP and Financial Budget	Good

Overall Comment

There have been 3 new connections, 2 disconnected and 4 units that will be connected next year. This is a small and simple system that is well run as indicated by the lack of complaints and breakdowns.

10.3 Environmental Analysis

Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.

Item No.	Test	Comments	Rating
a.	Have the performance requirements (availability of service, capacity, continuity, emergency response) been documented?	Capacity, availability and continuity have been sighted in the Wastewater Disposal Scheme Analysis. An emergency response has not been developed.	Largely adequate
b.	Are the asset system objectives documented?	Yes. AMP sighted the mission statement.	Good
c.	Have the opportunities and threats in the system environment been assessed?	No risk assessment has been undertaken with remedial actions and contingency plans.	Inadequate
d.	Are regulatory obligations and statutory/regulatory requirements documented?	Yes. Sighted in AMP Water Services Licensing Act, Health Act, Department of Environmental Protection, OHS and Welfare Act and Local Government Act.	Excellent
e.	Is the asset meeting the level of service required by users of the service?	Yes. There have been no written complaints reflecting that the asset is meeting the required level of service.	Good
f.	Do the assets meet regulatory requirements?	Yes. Sighted in AMP.	Good

Overall Comment

This current Asset Management Plan provides good documentation of the asset system environment. One off registration with the Department of Environment is still required.

10.4 Asset Management System Analysis

An asset system analysis examines and documents the system and processes for its effective operations. Operations plans document the knowledge of staff in the operation of the asset. Maintenance plans cover the scheduling and matching of resources to the maintenance task so that work can be done on time and on cost. The maintenance plans should cover preventative and corrective maintenance. Assessment of the asset system analysis components would include examination of the asset register.

Item No.	Test	Comments	Effectiveness
a.	Are the asset system components documented?	Sighted in AMP	Good
b.	Has the asset performance and condition been assessed?	The asset register describes each asset, when it was constructed, expected life and an overall assessment as to its condition.	Good
c.	Does the asset management plan include an asset register and plans of asset system components?	Sighted. in AMP	Good
d.	Does the register record asset type, location, material and an assessment of assets' physical/structural condition?	The asset register with the AMP provides much of the necessary data except for location.	Good
e.	Are systems in place to assess asset and practice efficiency?	Operational efficiency is determined by level of complaints. Pipelines need to be improved due to the number of blockages and overflows.	Largely adequate
f.	Assets assessed for capability and deficiencies of current assets to meet performance requirements?	Yes. Inspections and maintenance are deemed adequate for the size of this operation.	Good
g.	Are practices covering operating rules and maintenance documented?	No. Inspections and maintenance are conducted; however these are not recorded and documented.	Largely adequate
h.	Do maintenance plans cover preventative and corrective maintenance?	Yes. AMP and customer complaints	Good

Item No.	Test	Comments	Effectiveness
i.	Are actual assets and human resources appropriate for performance requirements?	No. Pipeline asset need to be reviewed to determine if it variable to replace the asset. The level of staffing appears adequate to meet the performance requirements. EHO, Accountant and Works Supervisor share the responsibility of the asset.	Inadequate
j.	Do operation and maintenance practices reflect performance targets?	Due to the high number of blockages performance targets are not being meet, however maintenance is being conducted as set in the maintenance schedule.	Largely adequate
k.	Are costs measured and recorded?	Yes. Financial Budget	Good
l.	Is the asset under-utilised?	No. Nearing capacity and is functioning at the desired level.	Good
m.	Is the level of maintenance justified against replacement cost?	More maintenance is required. Currently the maintenance is reactive instead of preventative.	Largely adequate
n.	Has the asset been inspected?	Yes. Manholes are checked, ponds. Not pipelines. Shire personnel and Civil Engineers	Good
o.	Is the assets' theoretical life known?	Yes. Sighted in AMP which assumes economical life for each item with an estimated replacement year.	Good

Item No.	Test	Comments	Effectiveness
p.	Does the assess management plan enable the prediction of asset deterioration and failure.	Yes. During the next AMP review the asset deterioration should be considered instead of life span based deterioration. This aspect of the AMP requires further development. The asset plan could be used in conjunction with systematic patterns to determine actual asset deterioration and failure.	Largely adequate
q.	Do the maintenance plans and operational plans relate to what is required to achieve the levels of service required of the system?	Yes. Sighted basic principals of operation and maintenance within the AMP	Good

Overall Comment

This aspect of the AMP is considered to be largely adequate. To improve performance the pipe lines replacement need to be considered.

10.5 Risk Analysis and Contingency Planning

Risk analysis involves the identification of risk and management within an acceptable level of risk. Contingency plans document the steps to deal with the unexpected failure of an asset.

Item No.	Test	Comments	Effectiveness
a.	Has a risk assessment of assets been conducted?	There is no evidence of Risk Assessment	Inadequate
b.	Has the probability and consequences of asset failure have been identified?	The probability and consequences have been considered and identified but not documented.	Inadequate
c.	Are appropriate contingency plans in place?	There is no written contingency plan.	Inadequate
d.	Is risk management practiced?	Risk management is considered, although not documented.	Inadequate
e.	Where unacceptable risks have been identified have risk control measure been implemented?	No unacceptable risks were identified during the informal risk assessment.	Largely adequate
f.	Where events that may result in severe consequences have been identified have contingency plans been developed?	There is no contingency plan	Inadequate

Overall Comment

The analysis of risk is at an inadequate/non-existent level. An overflow and emergency procedure needs to be developed.

10.6 Financial Planning

The financial planning component of the asset management plan brings together the financial elements of the scheme to ensure its financial viability over the long term. Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least 10 years, preferably longer. Projections over the next five years would be based on firm estimates.

Item No.	Test	Comments	Effectiveness
a.	Does the Financial Plan provide projections of operating statements (profit and loss) and statement of financial position (balance sheets)?	Yes. Sighted Shire of Dalwallinu 2005/06 Adopted Budget Explanatory Notes.	Good
b.	Does the financial plan cover the financial objectives and strategies and actions to achieve the objectives?	Short term needs have money set aside however long term requirements have not been thought out.	Good
c.	Does the financial plan identify the source of funds for the capital expenditure plan?	The Financial Plan is adequate, however the capital expenditure plan within the AMP needs updating.	Largely adequate
d.	Are the sources of funds for operation, maintenance and administration identified in the financial plan?	Yes. Identify is required for operation, maintenance and administration.	Good
e.	Does the financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period?	The predictions have not been updated in the AMP or Financial Plan, however due to the size of the asset this is deemed largely adequate as the income will be similar to the previous five years.	Largely adequate
f.	Does the financial plan provide for the operation and maintenance, administration and capital expenditure requirements of the scheme?	Financial plan sets aside Sewerage money for future but has not identified for future works.	Largely adequate

Overall Comment

This area of the overall asset management system is operating at an adequate level.

10.7 Capital Expenditure Planning

The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure on each over the next five or more years. This can be expressed as a schedule of projected annual expenditures offset by possible income from asset disposal, supported by documentation of the reasons for the decisions and evaluation of alternatives and options.

Item No.	Test	Comments	Effectiveness
a.	Has a capital expenditure plan been prepared?	No	Inadequate
b.	Does the plan cover the issues to be addressed, the actions proposed, the centre of responsibilities, and deadline dates?	No.	Inadequate
c.	Does the plan provide reasons for capital expenditure and timing of expenditure?	No.	Inadequate
d.	Is the capital expenditure plan consistent with the asset life and condition identified in the asset management plan?	The life expectancy and actual condition of the asset may differ and therefore there is a requirement for a Capital expenditure plan	Largely adequate

Overall Comment

The existing system has been operating in its current configuration, apart from a number of minor alterations over the years, since the late 1960's. The Shire of Dalwallinu is planning to increase the number of lots within the township and thus require additional pump stations and increase in capacity of the ponds to cope with the capacity increase. (Van Der Meer Consulting, Dalwallinu – Wastewater Disposal Scheme Analysis Engineering Report 2001)

10.8 Review of Asset Management Plan

Review of the asset management plan assists to ensure the effective development and operation of asset management plans.

Item No.	Test	Comments	Effectiveness
a.	Is a review process in place to ensure that asset management plans are kept current?	Yes. Every five years	Good
b.	Are asset management plans being reviewed at appropriate intervals?	Yes.	Good
c.	Are the asset management plans current?	Yes. The plan has been reviewed recently; however the content in most sections of the AMP is not.	Largely adequate

Overall Comment

The AMP requires review and updated to reflect the current system.

11 Summary of Asset Management Review Findings

11.1 Introduction

The 2005 Asset Management System audit is the third external assessment undertaken on Dalwallinu's asset management system. The purpose of this review was to examine the Asset Management System in light of the recommendations made in the audit of 2003.

The Asset Management Plan was reviewed in January 2003, however the Capital Expenditure needs to be updated and the Financial Plan (section 10) was not available for viewing. The financial planning and capital expenditure planning are also largely adequate, with the capital expenditure planning underpinned by a sewerage reserve fund, however a 5 year plan for capital expenditure will need to be developed. The issues mentioned above will be addressed during the 2006 AMP review.

The Asset Management System is adequate for the size of the Shire of Dalwallinu's wastewater treatment system because the system is small and simple. Due to the high number of blockages (tree roots in pipe lines) future strategies to manage this problem need to be investigated.

The AMP, along with the Customer Charter, detail the level of service the customer can stand to expect from the Shire of Dalwallinu and emergency number.

11.2 Specific Findings and Recommendations from Current Review

11.2.1 Asset Planning/Creation/Acquisition

This area of the asset management system is operating at an acceptable level due to the size of the system. With the proposed increase of the Asset, ensure that the changes to the system are captured during the AMP review.

Assessment: Good.

11.2.2 Environmental Analysis

The operating environment is adequately understood, with the service delivery of a high standard.

Recommendation

Opportunities and threats need to be assessed and documented.

Assessment: Good.

11.2.3 Asset Management System Analysis

The AMP was reviewed in January 2003 and is an excellent document with clearly written operation and maintenance plans.

Recommendation

The AMP will need to be reviewed in 2006. The asset deterioration is currently only based on predicted life span. This aspect of the AMP could be improved by incorporating systematic patterns to determine actual asset deterioration and failure. The Asset's pipe lines also need to be investigated to determine future strategies to prevent blockages.

Assessment: Largely adequate.

11.2.4 Risk Analysis and Contingency Planning

No risk assessment and analysis has been conducted.

The system is minor and the ponds are located such that any catastrophic failure will result in local, minor environmental damage rather than human harm. Contingency measures will need to be developed, including financial to deal with any contingencies.

There is a sewerage reserve fund which appears in the annual budget and gets regular inputs of cash.

Recommendation

Conduct a risk assessment and develop a contingency plan.

Assessment: Inadequate.

11.2.5 Financial Planning

Other than the annual budget detailing operation and maintenance revenue and expenditure, financial planning needs to be updated. This should be done as part of the AMP review, however this was omitted during the last review. Once asset life and expected replacements are determined, this information could be used to feed into the Principal Activities Plan.

Recommendation

The annual budget outlines the income and expenditure for the wastewater treatment system.

Assessment: Largely adequate.

11.2.6 Capital Expenditure Plan

The capital expenditure plan was not updated during the last review. There is a sewerage reserve fund that gets added to each year as part of the annual budget process.

Recommendation

Update the capital expenditure plan. A review of existing asset life, capital replacement and asset acquisition needs to be undertaken to determine when future expenditure is likely to be required. As the Asset is being expanded this is particularly important.

Assessment: Inadequate.

11.2.7 Review

The Asset Management Plan and the Customer Charter have been reviewed since the last audit was undertaken and have been submitted to the Authority for approval.

The Licence stipulates that the AMP and Charter should be reviewed no later than every 36 months.

Recommendation

The AMP and Customer Charter needs to be updated in 2006.

Assessment: Good.

12 References

- GHD's Shire of Dalwallinu Water Services Provider Operational Audit: Sewerage Scheme 2003
- Shire of Dalwallinu Customer Services Charter for Wastewater Services August 2003
- Letter from DoE re: Registration Application
- Letter from the Authority re: Customer Charter Approval
- Sighted Haines and Norton Audit Report
- Shire of Dalwallinu Budget
- Asset Management Plan January 2003
- Wastewater Disposal Scheme Analysis