## EAST PILBARA SHIRE COUNCIL NEWMAN NON-POTABLE WATER SUPPLY (SEWERAGE SERVICES)

#### REPORT

#### ON

### OPERATIONAL AUDIT AND ASSET MANAGEMENT REVIEW FOR THE PERIOD DECEMBER 2002 TO NOVEMBER 2005

### FINAL

Barry Robbins Engineering & Project Management

January 2005

#### EAST PILBARA SHIRE COUNCIL

#### OPERATIONAL AUDIT AND ASSET MANAGEMENT REVIEW OF

#### NEWMAN NON-POTABLE WATER SUPPLY (SEWERAGE SERVICES)

#### **EXECUTIVE SUMMARY**

# This report on the Operational Audit undertaken on 4<sup>th</sup> January 2005 concludes that:

1 - The East Pilbara Shire Council is operating the Newman Waste Water Treatment Plant and associated effluent disposal processes in a professionally competent manner and in accordance with the conditions of its ERA Operating Licence, DEP Licence and relevant Health and Safety regulations.

#### 2 As a consequence of the Audit, it is recommended that:

- The Shire (irrespective of ad hoc availability and the absence of written contracts or charges made for water) advise annually those taking non-potable water from the effluent disposal system that the water is not suitable for drinking
- The Operating Licence requirement for "major changes to plant operations to be discussed at a public meeting of customers" be rescinded and replaced by the current practise of such changes being approved by the Council following ratepayers 45 days review of and comments on, the annual capital works program

# This report on the Asset Management Review undertaken on 4<sup>th</sup> January 2005 concludes that:

3 The preparation and implementation of the Asset Management system - for the Newman Waste Water Treatment Plant is assessed overall as "excellent" in terms of the assessment guidelines prepared by the Economic Regulation Authority.

#### 4 As a consequence of the Review, it is recommended that:

- The existing detailed and comprehensive spare parts list be improved by the addition of summary information regarding the role and in- plant location of the listed spares, in addition to the details of appropriate suppliers
- The adequacy and currency of the Asset Management Plan be reviewed annually as a matter of policy.
- 5 It is acknowledged that the Shire has transferred its drawings and Manufacturer's operation manuals to electric media as recommended by the 2002 review

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#### **SECTION 1 – INTRODUCTION**

#### 1.1 **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 period as the Authority allows.

*The Act* requires the audit to be conducted by an independent expert acceptable to the Authority and the provision to the Authority of the independent expert's audit report.

This audit, which is the subject of this report, was undertaken to determine the effectiveness of measures taken by the Shire of East Pilbara (the Shire) to maintain any quality and performance standards referred to in its Operating Licence for the Non-Potable Water Supply (Sewerage Services) at Newman, Western Australia.

The audit considered the level of effectiveness of systems and procedures implemented by the Shire to ensure its water services comply with the quality and performance standards required under its Licence;

The audit addressed the requirements of the Licence issued to the Shire on  $4^{\text{th}}$  November 2004 - and covers the period from  $1^{\text{st}}$  December 2002 to 30 November 2005.

#### **1.2 ASSET MANAGEMENT REVIEW**

The *Water Services Licensing Act 1995* also requires that the Shire provide for and maintain an asset management system. The system should set out the processes to be taken by the Shire to ensure the proper planning, operation, financing, maintenance, repair and renewal of its assets and for monitoring of its water services. As for the Operational Audit, *the Act* requires the Shire to provide the Authority with a report by an independent expert on the effectiveness of the system.

This review is intended to provide the Authority with an opinion on whether or not the Shire has in place the appropriate systems for the planning, construction, operation and maintenance of its water services works.

The review therefore examined;

- The adequacy or otherwise of the outputs of the system including documentation of performance standards and statutory requirements, system opportunities and threats, preparation of operations manuals, maintenance schedules and action records, registers of the location, condition, age etc of assets.
- The extent to which the risks associated with the system environment and / or unexpected system failures have been assessed, quantified and reduced by specific practices such as stocking selected spare parts or equipment items subject to extended delivery or repair periods.

- The existence and effectiveness of systems implemented for the assessment, planning, financing and construction of new, replacement and major maintenance works.
- Whether or not the system has been subject to regular internal review; with systems in place to ensure that plans are regularly updated to current status, provide for prior identification of new or replacement assets, their implementation; and initiatives to improve the overall effectiveness of the asset management system.
- The Shire's response to the recommendations made in previous reviews.

This review also identifies any aspects of the asset management system, which are considered to require amendment or, improvement.

### **1.3 BACKGROUND**

The Newman Waste Water Treatment Plant (WWTP) was constructed by BHP in 1981 and operated by the company until 1990, when operations were taken over by Water Corporation. In 1996, ownership and responsibility for the operation of the plant was transferred from the Water Corporation to the East Pilbara Shire Council

The plant accepts raw sewage flows from the residential, commercial and industrial land use areas within the Newman townsite boundaries. The maximum operating capacity of the WWTP is 2,000 Kl / day. During the period of the previous audit (2003) a decline in Newman's population had resulted in a daily inflow in the order of 700 Kl / day. Currently – due to improvement in the present iron ore market, the town population is in the order of 6,500 persons and the daily inflow to the treatment plant is approximately 1,500 Kl / day.

Treated waste water effluent from the plant is discharged to a major on-site storage within the WWTP site. Following chlorination, the effluent is discharged via a header tank and reticulation system for disposal by irrigation - to Council owned grassed recreational facilities and some verges within the townsite and the High School playing field. The race course outside the townsite is also supplied.

The raw sewage collection system discharging to the plant is owned and operated by the Water Corporation. The effluent disposal reticulation is owned by the Council and operated by its Parks and Gardens Department. Although treated effluent from the plant is pumped to the townsite and disposed of by reticulation to town ovals and other areas, the disposal facilities are not included in the Water Services Licence. This Operational Audit and Asset Management Review is therefore confined to the treatment plant.

The effluent quality and disposal procedures are the subject of a Department of Environmental Protection (DEP) Licence and the regulatory requirements of the Western Australian Health Department (WAHD).

As supply of water is dependent on availability and considered by the Shire as a community service, Council makes no charge for the supply of treated effluent to the facilities which take water and supply of water is not the subject a contract

Costs of operating the plant and its effluent disposal system are covered by a Special Area Rate levied annually on all rateable properties in the Newman townsite. Council strikes this rate under the Health Act. The Water Corporation also contributes to the cost of operating the treatment and disposal system – from rates it levies on rateable properties in Newman in connection with its operation of the town sewage collection system

Executive responsibility for the plant rests with Council's CEO. The plant is actually operated through Council's Technical Services Department - with day to day operations, maintenance, repairs etc undertaken via Council's depot – by a staff member responsible for undertaking all daily checks, maintenance, sampling, recording and reporting. Results are reported daily to Council's Consultant / Manager, who assesses results, operational reports etc and directs the Operator on actions / activities to be undertaken in connection with the plant and disposal reticulation operations. The Consultant also maintains management contact with Authorities and Licensors of the plant and prepares reports, estimates etc to Council as required

Section 12 (a) of the Licence allows the Council to engage others to provide water services. Council engages its Consultant / Manager to provide technical and management advice. In addition, Council contracts out Electrical Services, Mechanical Services and Cranage services associated with plant repair and maintenance.

### **1.4 WATER OPERATING LICENCE**

The Coordinator of Water Services granted the East Pilbara Shire Council an operating licence on the  $1^{st}$  January 1999. This licence was replaced by the Licence granted on  $28^{th}$  July 2003 – which in turn was replaced by the Economic Regulation Authority on  $15^{th}$  November 2004

#### 1.5 – AUDITOR

The Shire of East Pilbara commissioned Barry Robbins Engineering & Project Management to undertake this operational audit and report.

#### **1.6– PERIOD OF THE AUDIT AND REVIEW**

The audit and review covered the period from 1<sup>st</sup> December 2002 to 30<sup>th</sup> November 2005.

#### **1.7 – AUDIT DATES AND PARTICIPANTS**

The audit plan was approved by Economic Regulation Authority on  $8^{th}$  December 2005.

The audit and review was undertaken on  $4^{th}$  January 2005 by Barry Robbins – Principal of Barry Robbins Engineering & Project Management - with Mr Mel Rowe – Consultant / Manager for the plant.

Discussions were also held with Mr A Cooper – CEO, M/s S Appleton, Corporate Finance and Mr K Giblett – Depot Supervisor

The operational audit and the asset management review were undertaken in accordance with the Audit Plan referred to above; and "Scope and Guidelines for Water Service Licence Operational Audits and Asset Management Reviews" dated 28<sup>th</sup> June 2002, prepared by the Economic Regulation Authority.

Discussions were held with officers of the Economic Regulation Authority prior to and following preparation of the audit plan and following the initial draft of this report.

#### **1.8 – AUDIT TIME INPUTS**

Input of professional time for the audit, review and report were as follows:

Preparation of Audit Plan	4 hours
Conduct of Audit and Asset Management Review	10 hours
Travel	6 hours
Preparation of Draft Report	18 hours
Review, amendment and preparation of Final Report	4 hours
Total	<u>42 hours</u>

#### SECTION 2 – REVIEW OF CONCLUSIONS / RECOMMENDATIONS AND ACTION TAKEN FROM PREVIOUS AUDIT

#### 2.1 **`INTRODUCTION**

The table overleaf summarises the conclusions / recommendations (and actions undertaken) from the previous audit – undertaken by Barry Robbins Engineering & Project Management on 7<sup>th</sup> January 2003

The table has been presented in two separate units – the first dealing with the 2002 Operational Audit and the second, with the 2002 Review of Asset Management System

	SUMMARY TABLE - NOVEMBER 2002 AUDI	T & ACTION TAKEN
Item	Conclusions / Recommendations	Subsequent Action Taken by Shire
1	Council upgrades its complaints protocol to require complaints to be resolved within 21 days and to include processes required by the Licence in the event that the above period is exceeded.	Complaints documentation now has a specific requirement for a resolution within 21 days <b>Done – Closeout Recommended</b>
2	The Operating Licence requirement for "major changes to plant operations to be discussed at a public meeting of customers" be rescinded and replaced by the current practise of such changes being approved by the Council	This amendment was not included in the November 2004 licence, and remains a recommendation of this current audit. For ERA consideration
3	As a matter of courtesy and in accordance with the requirements of its Operating Licence, that Council in future provides OWR (Office of Water Regulation, now replaced by Economic Regulation Authority as Administrator of water services Licences)with details of its annual Financial Plan for the treatment facility and the rate it proposes for the forthcoming year.	This is no longer a requirement of the current Licence. Closeout Recommended
4	That the requirement for emergency callers to be advised of the proposed response within 1 hour be amended to apply only to members of the public – as distinct from Council's staff or other Authorities	This is not a requirement of the current (November 2004) Licence. Closeout Recommended

SUMMARY TABLE - NOVEMBER 2002 ASSET MANAGEMENT REVIEW & ACTION TAKEN				
5	The Asset register is transferred to a spread sheet base in order to facilitate more detailed and recoverable records of asset age, condition, maintenance and costs etc	The Asset Register has been transferred to a spread sheet base and is stored on electric media <b>Done – Closeout Recommended</b>		
6	Existing prints of drawings associated with the facility be copied as transparent reproducible "masters" and stored for security, at a location apart from the existing working copies.	The Manufacturer's drawings and manuals have been copied to electric media (compact discs) and copies are held in various copies of the Asset management plan documentation <b>Done – Closeout Recommended.</b>		

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#### SECTION 3 – OPERATIONAL AUDIT - RESULTS & CONCLUSIONS

#### **3.1 – SUMMARY TABLE OF AUDIT RESULTS**

The following table (*overleaf*) summarises the results of the Operational Audit.

#### **3.2 – GENERAL COMMENTS AND RECOMMENDATIONS FROM AUDIT**

The Shire of East Pilbara operates the Newman Waste Water Treatment Plant and its associated effluent disposal system efficiently and competently. The services are provided in accordance with the relevant DOE and Health Department requirements and (with two minor exceptions) fully in accordance with Its Operating Licence issued by the Economic Regulation Authority

The audit found that that Shire does not meet the requirement of **Clause 15** (b) of its Operating Licence, which requires "the Licensee to provide annual notification to all customers that the water supplied is not suitable for drinking". The Shire's opinion is that as the water is supplied only if available, on an ad hoc basis and without a charge or contract, those who take the water are not Customers. The Auditor's view is that irrespective of the supply arrangements, those who take the water are customers and should be advised annually in accordance with the requirements of the Licence.

#### It is therefore recommended that the Shire advise all groups or individuals who take water from the effluent disposal system be advised annually that the water is not suitable for drinking.

The audit found that the Shire does meet the requirement of **Clause 18** (a) that "*prior* to making major changes to the operation of the wastewater treatment plant the Licensee will hold a public meeting to obtain customer views." The Auditor considers the Shire meets this requirement by distributing to its ratepayers copies of its annual Principal Activities Plan - detailing proposed works expenditure and income for the forthcoming five years, for comment prior to presentation to Council.

The present Licence requirement is appropriate to changes proposed within a townsite rather than at a remotely located treatment facility several kilometres from the Newman townsite.

It is also noted that no major changes have occurred (or are likely to occur), which would be likely to affect the Ratepayers or Customers, of Newman

It is therefore again recommended that Clause 18 (a) of the Licence be amended to reflect the thorough procedures existing and the environmental location of the plant.

Compliance F	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT Compliance Key (right hand column) to be assigned by Auditor – (a) – <b>Exceeds Requirement.</b> (b) – <b>Meets Requirements</b> (c) – <b>Meets Requirements – Improvement Suggested</b> (d) – <b>Does not meet Requirement</b>					
Operating Licence Clause or Schedule	rating nce se or Obligations Specific Compliance Issues Auditor's Notes / Comments Compliance Issues					
Clause 2 – Licence						
2 (a)	The Licence is granted under Part 3 of the Act	None	None			
2 (b)	The Licence permits the provision of water services within the operating Areas described in Schedule 1	Are the services provided within the Operating Area shown in Schedule 1	Yes	Meets Requirement		
4 - General Duty to provide services						
(a)	The Licensee is to	Are the services provided ?	Shire provides services. Ample evidence from	Meets		

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT					
Compliance I	Key (right hand column) to	b be assigned by Auditor $-(a)$ – <b>Exceeds Requirem</b>	-	<b>D</b>		
		(c) – Meets Require	ements – Improvement Suggested (d) – Does not meet	Requirement		
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key		
	provide services		plant inspections, brochures documentation etc	Requirement		
(b)	The Licensee is to undertake operate and maintain services	Are the services undertaken, operated and maintained ?	The services are competently operated and maintained by the Shire	Meets Requirement		
5 – Regulation s prescribing standards of service						
	The Licensee shall comply with regulations related to standards of service	Have regulations been made ? Has the Licensee complied with any regulations issued ?	No regulations have been gazetted	Not Applicable		

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT					
Compliance k	Key (right hand column) to	be assigned by Auditor $-(a)$ – <b>Exceeds Requirem</b>	•	<b>D</b>		
Operating Licence Clause or Schedule	Licence     Obligations     Specific Compliance Issues     Auditor's Notes / Comments					
6 – Asset Manageme nt System						
(a)	The Licensee is to : (i) - provide for an asset management system for its water services(ii) - notify the Authority of any system changes.	Are Asset Management Plans in place for the Licensees water services ? Has the Authority been advised of any changes to the plans ?	Yes, a thorough asset management plan has been prepared and implemented. The plan is being continuously reviewed and developed. Current manuals were supplied to the Authority on 21 <sup>st</sup> December 2005	Meets Requirement Meets Requirement		
(b)	The asset management system will set out the measures to be undertaken for maintenance of assets and operation of	Does the system set out procedures for operation and maintenance of the services ?	Written procedures set out daily, weekly inspections, maintenance and operation, testing, reporting etc	Meets Requirement		

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT					
Compliance I	Key (right hand column) to	o be assigned by Auditor – (a) – <b>Exceeds Requirem</b>	-			
Operating Licence Clause or Schedule	Obligations	(c) – Meets Require Specific Compliance Issues	ements – Improvement Suggested (d) – Does not meet Auditor's Notes / Comments	Compliance Key		
	services					
8 – Technical Standards						
	The Licensee is to comply with the technical standards published by the Authority under Section 38 of the Act	Have Technical standards been published and have they been complied with ?	No technical standards have been published	Not Applicable		

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance H	Key (right hand column) to	be assigned by Auditor $-(a)$ – <b>Exceeds Requirem</b>		<b>D</b> • • •	
Operating Licence Clause or Schedule	Licence     Obligations     Specific Compliance Issues     Auditor's Notes / Comments				
10 – Accounting Records					
	Consistent with the the requirements of the <i>Local Government Act</i> 1995 the Licensee shall prepare its accounts such that an operating statement which adequately describes its income and expenditure on an	Are the accounts prepared in accordance with the <i>Local Government Act 1955 ?</i> Do the accounts adequately describe the income and expenditure for its water services on an accruals basis ?	Auditor sighted CEO note of compliance for annual reports of 2003,04 & 2005 Yes – the annual reports adequately set out the necessary details	Meets Requirement Meets Requirement	
11 – Prices or Charges	accruals basis				
	In setting prices or charges the Licensee will comply with the	Do prices and charges comply with the foregoing Acts ?	Rates for sewerage services have been prepared in accordance with the Health Act – as	Meets Requirement	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT					
Compliance I	Key (right hand column) to	b be assigned by Auditor – (a) – <b>Exceeds Requiren</b>	nent. (b) – Meets Requirements			
		(c) – Meets Requir	ements – Improvement Suggested (d) – Does not meet	Requirement		
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key		
	requirements of the Health Act 1911 and the Local Government Act 1995		sewerage rates cannot be levied under the Local Government Act. Copy of the minute verifying compliance with the Health Act was sighted			
12 – Methods or Principles to be applied in the provision of water services						
(a)	If contracting out of its services, the Licensee remains responsible for compliance with		Shire contracts only for electrical and mechanical Services under Shire staff direction	Not Applicable		

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT					
Compliance I	Key (right hand column) to	b be assigned by Auditor – (a) – <b>Exceeds Requirem</b> (c) – <b>Meets Require</b>	ement. (b) – Meets Requirements ements – Improvement Suggested (d) – Does not meet	Requirement		
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key		
	the terms of its Licence					
(b)	The Licensee shall ensure that its services are available for connection to any lands within its operating area subject to conditions set by the Licensee to ensure the safety, reliability and financial viability of the service and compliance with its Licence.	Does the Licensee set conditions for connection of its services ? Does the Licensee ensure that its conditions are complied with ?	The land within the operating area is wholly occupied by the treatment facility. The only connection possible is to the town sewerage collection system – which is operated by the Shire. As the Shire operates both systems, conditions are not appropriate.	Not Applicable		

Compliance I	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT					
Operating Licence Clause or Schedule	Licence     Obligations     Specific Compliance Issues     Auditor's Notes / Comments     Compliance					
14 – Specific Informati on to be provided						
(a)	The Authority shall be informed within five days of the occurrence of overflows from wastewater infrastructure	Have overflows occurred ? Have the interruptions been reported ?	No overflows have occurred from the plant – which in any event has overflow storage capacity for five days of flow.	Not Applicable		
(b)	The Authority may require a detailed report within 14 days of request	Were detailed reports requested ? Was the report submitted within 14 days of request ?	Reports not requested	Not Applicable		
(c)	The Licensee shall report	Has the benchmark information requested at	Copies of information provided for 2004, 03 and 2005	Meets Requirement		

Compliance	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT					
1			ements – Improvement Suggested (d) – Does not meet	Requirement		
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key		
	the information set out in Schedule 3 –within 30 days of the end of the financial year	Schedule 3 been provided Volume of non-potable water supplied to 30 <sup>th</sup> June Has the information been provided within 30 days of the end of the financial year.80	were sighted The information was generally provided on time	Meets Requirement		
15 – Performan ce of Functions by the Licensee						
(a)	The licensee shall comply with the quality & performance standards in Sched.	Has the Licensee complied with the standards for emergency response and customer complaints set out in Schedule 2	Compliance reports for 2003, 04 and 05 were noted. Standards were met.	Meets Requirement		

Compliance	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance		b be assigned by Auditor – (a) – <b>Exceeds Requiren</b> (c) – <b>Meets Require</b>	ements – Improvement Suggested (d) – Does not meet	Requirement	
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key	
(b)	2 The Licensee shall provide annual notification to all customers that the water supplied is not suitable for drinking.	Has the Licensee provided such annual notification ?	Shire supplies treated non-potable water (when available) as a community service, free of charge and on an ad hoc basis to the town ambulance service, Lions animal park, service station and race course. Annual notices are not sent out as those taking the water are not considered by the Shire to be customers. Auditor considers this argument is invalid and that notices should be sent out irrespective of the supply arrangements	Does not meet requirement	
(c)	The Licensee shall implement an emergency telephone	Has the emergency telephone reporting system	The Depot Supervisor's mobile phone number is displayed on a sign at the treatment plant. The	Meets Requirement	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance I	Key (right hand column) to	be assigned by Auditor – (a) – <b>Exceeds Requiren</b>	nent. (b) – Meets Requirements		
		(c) – Meets Require	ements – Improvement Suggested (d) – Does not meet	Requirement	
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key	
	system enabling a customer to report an emergency and within 1 hour receive advice of the action to be taken by the Licensee	been implemented ? Is the 1 hour advice limit being implemented ?	Supervisor, who has a detailed knowledge of the plant and is on 24 hours call, has authority to take appropriate action and has been instructed to advise action to be taken within 1 hour		
( <b>d</b> )	The Licensee shall maintain and operate its sewerage scheme so that sewage does not overflow to customer's properties	Are appropriate procedures and facilities in place which are intended to prevent or mitigate against overflows occurring ?	Yes. The plant has an overflow storage basin with capacity to store five days of flow. In addition there physical provision to use additional overflow capacity outside the plant boundary – with prior Health Department and DEP approval.	Meets Requirement	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance	xey (right hand column) to	b be assigned by Auditor – (a) – <b>Exceeds Requirem</b> (c) – <b>Meets Require</b>	ments – Improvement Suggested (d) – Does not meet	Requirement	
Operating				Compliance Key	
16 – Terms & Conditions of Customer Contracts					
(a)	The Licensee may enter into agreements with customers to provide water services	Has the Licensee entered agreements to provide water services ?	No	Not Applicable	
(b)	The Licensee may not enter into contracts which modify, excludes restricts the licence conditions – without the approval of the Authority	Has the Licensee entered agreements which exclude, modify or restrict the conditions of the licence – without the Authority's approval	Not Applicable	Not Applicable	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance F	Key (right hand column) to	b be assigned by Auditor – (a) – <b>Exceeds Requirem</b> (c) – <b>Meets Require</b>	ement. (b) – Meets Requirements ements – Improvement Suggested (d) – Does not meet	Requirement	
Operating Licence Clause or Schedule	Operating Licence Clause or     Obligations     Specific Compliance Issues     Auditor's Notes / Comments			Compliance Key	
18 – Consumer Consultati on					
(a)	Prior to making significant changes to a water service, the Licensee will: Hold a public meeting to obtain customer views on the proposals	Have significant changes been made to the water supply system ? Were public meetings held ?	Significant changes have not been made to the system. The annual capital works program is circulated to all ratepayers for information and comment during a period of 45 days prior to presentation to Council for adoption	Not Applicable	
(b)	Allow customers to raise matters of concern regarding the water supply system at	Is there provision for customers to raise concerns at Council meetings ?	Yes – Shire notices and newspaper advertisements advise the dates of next Council meeting and opportunity for ratepayers to attend and ask questions	Meets Requirement	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance I	Key (right hand column) to	b be assigned by Auditor – (a) – <b>Exceeds Requirer</b> (c) – <b>Meets Requir</b>	nent. (b) – Meets Requirements rements – Improvement Suggested (d) – Does not mee	et Requirement	
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key	
	public question time in accordance with the Local Government Act 1995				
19 – Customer Service Charter					
(a)	On an annual basis, the Licensee will produce and invite public submissions on, a report detailing the costs, means of funding, income and expenditure, and measures used to assess the performance	<ul> <li>Has the Licensee ?</li> <li>Prepared and issued a report as required</li> <li>Invited public comment on the report ?</li> </ul>	Yes - the annual capital works program is circulated to all ratepayers for information and comment during a period of 45 days prior to presentation to Council for adoption	Meets Requirement	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance I	Key (right hand column) to	b be assigned by Auditor – (a) – <b>Exceeds Requirer</b> (c) – <b>Meets Requir</b>	nent. (b) – Meets Requirements rements – Improvement Suggested (d) – Does not mee	t Requirement	
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key	
	of the wastewater treatment plant				
(b)	The Licensee will produce an information brochure describing the service and including information enabling customers to make suggestions or complaints. This shall be publicly displayed at the Shire offices and made available to customers on request	<ul> <li>Has the Licensee:</li> <li>Prepared an information brochure as required ?</li> <li>Is the brochure publicly displayed at the Shire's offices ?</li> <li>Are copies of the brochure made available on request ?</li> </ul>	Yes – copy provided Yes – brochure is on display with other hand-out pamphlet material Yes – all pamphlets are available free of charge	Meets Requirement	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance I	Key (right hand column) to	be assigned by Auditor – (a) – <b>Exceeds Requirem</b>	-	<b>D</b> • •	
Operating Licence Clause or Schedule	Licence Obligations Obligations Specific Compliance Issues Auditor's Notes / Comments				
20 – Dispute Resolution					
(a) & (b) (i), (ii), (iii)	The Licensee shall establish a system for, recording, managing and resolving within 21 days customer complaints regarding water services. Or, for matters which must be referred to Council, within 7 days after the first ordinary Council meeting following expiry of the 21 days period.	<ul> <li>Has Licensee ?</li> <li>Established a complaints procedure as required under sub-clause 20 (a) of the licence.</li> <li>Recorded details of each Customer complaint and its outcome and; provided an Officer trained to deal with customer complaints, with authority (or access to authority)to settle complaints or make recommendations to Council as to the payment of monetary compensation.</li> </ul>	Yes - Standard complaints form sighted, together with provision for noting follow up procedures, action taken and 21 days settlement requirement stated. Yes – But no complaints during this current audit period.	Meets Requirement Meets Requirement	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT					
Compliance I	Key (right hand column) to	be assigned by Auditor – (a) – <b>Exceeds Requirem</b>		<b>.</b>		
Operating		(c) – Meets Require	ements – Improvement Suggested (d) – Does not meet	-		
Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key		
		• Made arrangements necessary to ensure that complaints may (if possible) be resolved within the above periods	Yes – requirement stated on the follow up procedures	Meets Requirement		
(c)	A Customer may refer a complaint to the Water Services Plan- ing Branch (WSPB) of Dept of Water	• Have customers referred complaints to the WSPB	No complaints have been received	Not Applicable		
( <b>d</b> )	Unless a dispute is a matter applicable to section 3.22 of the <i>Local Government Act</i> 1995, where a dispute has not been resolved within 21 days, the Licensee shall inform	• Has the need to so inform a customer arisen ?	The need to so inform a Customer has not occurred	Not Applicable		

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance I	Key (right hand column) to	be assigned by Auditor – (a) – <b>Exceeds Requirem</b> (c) – <b>Meets Require</b>	ements – Improvement Suggested (d) – Does not	meet Requirement	
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key	
	the customer of the option of referring the matter to WSPB.				
(e)	WSPB may mediate the dispute or direct the Licensee or Customer to binding arbitration.	• Has WSPB mediated or directed disputants to arbitration ?	No disputes have occurred	Not Applicable	
( <b>f</b> )	During the process of sub-clause (e) above, the Licensee shall promptly cooperate with WSPB requests for information, documents, staff availability etc	<ul> <li>Have requests been made by WSPB ?</li> <li>Has the appropriate cooperation been provided by the Licensee?</li> </ul>	No requests have been made	Not Applicable	

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance I	Key (right hand column) to	b be assigned by Auditor – (a) – <b>Exceeds Requirem</b>	ement. (b) – Meets Requirements ements – Improvement Suggested (d) – Does not meet	Bequirement	
Operating Licence Clause or Schedule	Obligations	(c) – Meets Require Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key	
(g)	If requested, the Licensee shall provide WSPB with details of complaints and names and addresses of complainants	<ul> <li>Have requests been made by WSPB ?</li> <li>Has the information been provided by the Licensee ?</li> </ul>	No requests have been made	Not Applicable	
21 – Customer Surveys					
(a) & (b)	If the Authority considers an issue to be of concern to customers, it may require the Licensee (not more frequently than once every 12 months) to commission an	<ul> <li>Has the Authority made requests for a Customer Survey ?</li> <li>Has the Licensee complied with the Authority requests?</li> </ul>	The Authority has made no requests for a Customer Survey to be undertaken	Not Applicable	

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Compliance H	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT Compliance Key (right hand column) to be assigned by Auditor – (a) –Exceeds Requirement. (b) – Meets Requirements				
		(c) – Meets Require	ements – Improvement Suggested (d) – Does not meet	Requirement	
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key	
	independent Customer Survey in accordance with conditions and parameters provided by the Authority				
Schedule 1	The Licensee may				
Operating Areas	provide non-potable water services in its Licence Operating Area	• Are the water services provided within the Licence Operating Area ?	Yes – the operating area encompasses the treatment plant boundaries	Meets Requirement	
Schedule 2					
Performan ce Standards	The Licensee shall achieve the performance standards set in Schedule 2	<ul> <li>Are 90% of customers receiving the standard for odours ?</li> <li>Is the treatment and disposal of sewage and treated effluent achieving standards applicable to relevant permits, licences, by-laws</li> </ul>			

	SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY TABLE OF NOVEMBER 2005 AUDIT				
Compliance I	Key (right hand column) t	to be assigned by Auditor – (a) – <b>Exceeds Requirem</b>	nent. (b) – Meets Requirements		
		(c) – Meets Require	ements – Improvement Suggested (d) – Does not meet	Requirement	
Operating Licence Clause or Schedule	Obligations	Specific Compliance Issues	Auditor's Notes / Comments	Compliance Key	
		<ul> <li>etc?</li> <li>Is the minimum standard for plant breakdown being achieved ?</li> <li>Are 90% of Customers receiving the standard for emergency notification and response</li> <li>Are 90 % of Customers receiving the standard for resolution of complaints within 21 days</li> </ul>	Yes – all standards have been met and reported annually to the Authority	Meets Requirement	
Schedule 3					
Informatio n to be provided to ERA annually	See Schedule 3	Has the required information been provided ?	Yes all benchmark information has been provided annually	Meets Requirement	

# SECTION 4 – ASSET MANAGEMENT REVIEW – RESULTS & CONCLUSIONS

#### 4.1 – SUMMARY TABLE OF ASSET MANAGEMENT REVIEW RESULTS

The table *overleaf* summarises the results of the Asset Management Review.

# 4.2 – GENERAL COMMENTS AND RECOMMENDATIONS FROM THE REVIEW

The Asset Management Review undertaken on 4<sup>th</sup> January 2005 concludes that the preparation and implementation of the Asset Management system - for the Newman Waste Water Treatment Plant is assessed overall as "excellent" in terms of the assessment guidelines prepared by the Economic Regulation Authority.

The following assessments were made for each item of the review

1.	Asset Creation / Acquisition	Good
2.	Environmental Analysis	Good
3.	Asset Systems Analysis	Excellent
4.	Risk Analysis & Contingency Planning	Excellent
5.	Financial Planning	Excellent
6.	Capital Expenditure Planning	Excellent
7.	Review	Largely Adequate

As a consequence of the above review,

*it is recommended* that the existing detailed and comprehensive spare parts list be improved by the addition of summary information regarding the role and in- plant location of the listed spares, in addition to the details of appropriate Suppliers

*it is also recommended that the adequacy and currency of the Asset Management Plan be reviewed annually as a matter of policy.* 

*it is acknowledged* that the Shire has transferred its drawings and Manufacturer's operation manuals to electric media as recommended by the 2002 review

SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY SUMMARY OF 2005 ASSET MANAGEMENT REVIEW			
Activity	Output	Auditor's Comments Notes	Asset Management Effectiveness
1 - Asset Creation / Acquisition	<ul> <li>In the asset creation / acquisition phase:</li> <li>Have the strategic objectives of the asset been identified?</li> <li>Have life cycle costs been considered?</li> <li>Has the need for new assets been determined and full project evaluation process been followed including comparative assessment of non-asset solutions?</li> <li>Have documents recording relevant details on the asset been collected.?</li> </ul>	<ul> <li>Yes – the objectives and basic regulatory obligations are set out in item 2.1 of the Asset Management Plan</li> <li>No - Life cycle costs are not particularly relevant as maintenance and capital expenditure planning is based on progressive replacement of asset components to maintain condition Yes – However new assets are usually minor to improve process efficiency or operational convenience. As the plant capacity is far in excess of expected future requirements, there is no reason to provide new larger capacity or alternative treatment assets</li> <li>Comprehensive details of assets, location, spares held, detailed drawings and original operations manuals are recorded and have been transferred to electronic media as recommended by the previous audit. The spare parts list – whilst detailing manufacturer's part numbers etc could be improved by detailing their role in the system</li> </ul>	Good
2 - Environmental Analysis	Have the performance requirements, availability of service, capacity, continuity, emergency response been documented.	Yes	
	• Are the asset system	The objectives are set out in item 2.1 of the Asset Management Plan	

SUMMARY OF 2005 ASSET MANAGEMENT REVIEW				
Activity	Output	Auditor's Comments Notes	Asset Management Effectiveness	
3 - Environmental Analysis (continued)	<ul> <li>objectives documented?</li> <li>Have opportunities and threats in the system environment been assessed?</li> <li>Are regulatory obligations and statutory / regulatory</li> </ul>	Yes – The operating environment has been described and a comprehensive assessment of electrical and operating risks undertaken The regulatory obligations of the ERA Operating Licence and DEP Treatment and Dept Health Effluent Disposal Licenses – as well as monitoring, testing, quality standards and	Good	
3 - Asset System Analysis	<ul> <li>requirements documented?</li> <li>Are the asset system components documented?</li> <li>Has asset condition and performance been assessed?</li> </ul>	reporting requirements are clearly stated. Yes – all assets and spares held (including manufacturer's part numbers) are comprehensively recorded. The condition of concrete structures was assessed and recommended repairs undertaken. Mechanical equipment of the treatment plant is maintained in good condition due to strict inspection, maintenance planning and replacements as deemed necessary		
	<ul> <li>Does the asset management plan include an asset register and plans of asset system components?</li> <li>Does the register record asset type, location, material and an assessment of asset's physical / structural</li> </ul>	Yes – the Asset Register is comprehensive Yes – assets are maintained in good condition by the inspection, reporting, maintenance and replacement practices of the Shire	Excellent	

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Activity	Output	Auditor's Comments Notes	Management Effectiveness	
3 - Asset System Analysis (continued)	<ul> <li>condition.</li> <li>Are systems in place to assess asset and practice efficiency?</li> </ul>	Yes – significant data recording, performance and Licence compliance monitoring and testing systems are in place to assess efficiency and compliance		
	<ul> <li>Assets assessed for capability and deficiencies of current assets to meet performance requirements?</li> <li>Are practices covering operating rules and maintenance documented?</li> <li>Do maintenance plans cover preventive and corrective maintenance?</li> </ul>	These assessments are made in terms of condition and need for maintenance or replacement, rather than impending inadequacy – as the capacity of the plant is far in excess of its current or foreseeable future loading. Yes - Operating and maintenance documentation is thorough. Yes		
4 – Risk Analysis & Contingency Planning	<ul> <li>Has a risk assessment of the assets been conducted?</li> <li>Has the probability and consequences of asset failure been identified?</li> <li>Are appropriate contingency plans in place?</li> </ul>	A comprehensive risk assessment has been undertaken for the electrical installation and for the operations of the treatment plant overall. Probability and consequences of failure are noted and appropriate contingency procedures noted. A significant and relevant number of important long delivery spares are held to reduce the risk of long term plant failure.	Excellent	

	SUMMARY OF 2005 ASSET MANAGEMENT REVIEW				
Activity	Output	Auditor's Comments Notes	Asset Management Effectiveness		
5 – Financial Planning	<ul> <li>Does the financial plan provide projections of operating statements (profit &amp; loss)and statement of financial position (balance sheets)?</li> <li>Does the financial plan cover the financial objectives and strategies and actions to achieve the objectives?</li> <li>Does the financial plan identify the source of funds for the capital expenditure plan?</li> <li>Is the source of funds for operations, maintenance and administration identified in the financial plan provide firm predictions on income for the next 5 years and reasonable indicative predictions beyond</li> </ul>	The Financial Plan for the treatment plant is a sub-set of the overall annual financial plan for the Shire. The financial plan includes estimates of income from rates levied under the Health Act and contributions from Water Corporation, together with projected costs for the forthcoming 5 years and actual costs from the previous year. Costs are estimated for operations, maintenance and capital expenditure. As the income generally exceeds annual costs, the excess is held in a reserve fund ,which is used for planned and unexpected capital works. Yes – based on a rolling 5 year capital expenditure plan. Yes – from the reserve fund Yes – from rates and Water Corporation contributions.	Excellent		

SUMMARY OF 2005 ASSET MANAGEMENT REVIEW			
Activity	Output this period?	Auditor's Comments Notes	Asset Management Effectiveness
6 – Capital Expenditure Planning	<ul> <li>Has a capital expenditure plan been prepared?</li> <li>Does the plan cover the issues to be addressed, the actions proposed, the centre of responsibilities and deadline dates?</li> <li>Does the plan provide reasons for capital expenditure and timing of expenditure?</li> </ul>	<ul> <li>Yes – a comprehensive 5 year rolling capital expenditure plan is in place.</li> <li>Yes – but these matters are covered in considerations associated with formulation of each year's plan, but are not detailed in the final plan – which broadly indicates the works to be undertaken and the year(s) in which they are planned to occur.</li> <li>In detailed considerations, but not in the final plan presented to Council</li> </ul>	Excellent
7 - Review	Is a review process in place to ensure that asset management plans are kept current?	A formal review process is not in place. Council considers the plan to be continually developing and is informally reviewed annually as part of capital expenditure planning. Whilst this is possibly sufficient, Auditor considers this process should be formalised	Largely Adequate

#### SHIRE OF EAST PILBARA – NEWMAN SEWERAGE - NON-POTABLE WATER SUPPLY

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#### **REFERENCE DOCUMENTS**

- 1. Shire of East Pilbara Operating Licence (Non-Potable Water Supply) (Sewerage Services) dated 15/11/2004
- 2. Economic Regulation Authority "Scope and Guidelines for Water Service Licence: Operational Audit and Asset Management Reviews"
- 3. Shire of East Pilbara Newman Wastewater Treatment Plant "Report on Operational Audit & Asset Management Review, October 1999 to October 2002" – Barry Robbins Engineering & Project Management
- 4. Shire of East Pilbara— Customer Service Brochure, amended as requested by ERA on 17<sup>th</sup> November 2005
- 5. Shire of East Pilbara Newman Wastewater Scheme –Asset Management Manual (Revision B) including:
  - System Description
  - Asset Components Register
  - Building Structures
  - Mechanical & Electrical Services
  - List of Mandatory Spares
  - Risk Assessments and Follow-Up
  - Capital Expenditure Planning
  - Financial Provision
- 6. Shire of East Pilbara Newman Wastewater Scheme Draft Operations Manual (Revision C) including:
  - Asset Planning
  - Regulatory Environment
  - Operating & Maintenance Procedures
  - Contingency Plans
  - Regulatory Reporting Requirements
  - DEP Licence and Associated Reports
  - Operational Risk Assessment
- 7. File of Collected Information requested by Auditor in Pre-Audit Check Listincluding
  - Current Operating Licence and selected correspondence between Shire and ERA
  - DEP Operating Licence and Annual Reports for 2002/03, 2003/04 and 2004/05
  - Annual Reports for the above periods in connection with ERA Operating Licence
- 8. Shire of East PilbaraNewman Wastewater Scheme Information Brochure (amended to include information requested by ERA on 17<sup>th</sup> November 2005
- Shire of East Pilbara statement accompanying annual reports of 2003, 2004 & 2005 (by Chief Executive Officer) that reports have been prepared in accordance with the Local Government Act 1995
- 10. Shire of East Pilbara copy of page 9 of Special Council Meeting Minutes of 17<sup>th</sup> August 2005 advising that rates for the maintaining and running of the Sewerage Traetment Plant will be raised under the Health Act

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