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**SHIRE OF EAST PILBARA**

**REPORT**

**2008 OPERATIONAL AUDIT AND ASSET  
MANAGEMENT REVIEW**

**OF**

**NEWMAN - NON-POTABLE WATER SUPPLY,  
SEWERAGE SERVICES**

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## **TABLE OF CONTENTS**

### **EXECUTIVE SUMMARY**

Introduction

Objectives and Scope

Audit Period Time Frame and date of Audit

Operational Audit

Asset Management Review

### **REPORT**

## **2008 OPERATIONAL AUDIT & ASSET MANAGEMENT REVIEW**

### **NEWMAN WASTE WATER TREATMENT PLANT**

1 – Introduction	Page 1
2 – Objectives and Scope	3
2.1 – Operational Audit	3
2.2 – Asset Management Review	3
3- Key Documents Inspected During Audit and Review	4
4 – Audit Period and Date of Audit	6
5 – Key Shire Personnel and Audit Participants	6
6 – Preliminary Risk Assessment	6
7 – Review of Recommendations from Previous Audit & Review	7
8 – Operational Audit – Detailed Findings	8

9 – Asset Management Review - Detailed Findings	18
10 – General Conclusions Resulting from the Audit and Review	25
10.1 – Operational Audit	25
10.2 – Asset Management Review	25
11 – Post Audit & Review Implementation Plan	26
12 – Confirmation of Audit	27

## **APPENDIX 1**

Preliminary Risk Assessments and Evaluation Criteria for Operational Audit and Asset Management Review  
pages 28 - 36

## **EXECUTIVE SUMMARY**

## EXECUTIVE SUMMARY

### 1. INTRODUCTION

The Shire of East Pilbara (SEP) operates the Newman Waste Water Treatment Plant under the provisions of Water Licence No. 17 issued by the Economic Regulation Authority of Western Australia (ERA) in accordance with the provisions of the *Water Services Licensing Act 1995*.

Under Clause 37 (1) of the *Act*, operational audits are required to be undertaken not less than once in 36 months, or such longer period allowed by the Authority. The purpose of an operational audit is to assess the effectiveness of methods used by the Licensee to achieve and maintain the quality and performance standards specified by the licence.

Similarly, Section 36 of the *Act* and Clause 6 of the licence require that the licensee provides and maintains an Asset Management System for the ongoing operations, maintenance, monitoring the condition of and future replacement of its assets. An independent review of the asset management system is required to be undertaken not less than once in 36 months, or such longer period allowed by the Authority.

### 2. OBJECTIVES AND SCOPE

#### • Operational Audit

*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. .

The purpose of this audit is to determine the effectiveness of measures taken by the Shire (over the period 1<sup>st</sup> December 2005 to 30<sup>th</sup> November 2008) to maintain the quality and performance standards referred to in its Operating Licence, dated 15<sup>th</sup> November 2004, for the Wastewater Treatment Plant 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.

A detailed description of the scope of the audit investigations is given in the main report

- **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 ERA with a report by an independent expert on the effectiveness of the system.

This review will provide the Authority with an independent opinion on whether or not the Shire has in place the appropriate systems for the planning, construction, operation and maintenance of its water services assets

A detailed description of the scope of the asset management review investigations is given in the main report

### **3. AUDIT PERIOD TIME FRAME AND DATE OF AUDIT**

The Operational Audit and Asset Management Review covers the period from 1<sup>st</sup> December 2005 to 30<sup>th</sup> November 2008.

The audit and review was undertaken during a visit to the Shire's office on 8<sup>th</sup> and 9th January 2009.

### **4. SUMMARY OF CONCLUSIONS**

The **Operational Audit concludes** that the Shire of East Pilbara operates the Newman Waste Water Treatment Plant efficiently and competently. The services are provided fully in accordance with the relevant DEC and Health Department

requirements and (with one exception) fully in accordance with its Operating Licence issued by the Economic Regulation Authority

The **Asset Management Review** concludes that the Shire of East Pilbara manages its assets professionally, methodically and efficiently. However, whilst the Asset Management Plan contains detailed information regarding operations, maintenance, risk analysis, contingency planning etc, much of this information is contained wholly or partly within the asset management manual, and other written and electronic documents. The post audit management plan presented later in this report sets out actions considered necessary to edit and amalgamate the various sections of the plan into a single document

- **Operational Audit**

The bases for interpretation of the compliance rating levels (1 to 5) used during the Operational Audit are provided in the copy of *ERA's Guidelines* Table 1 (*overleaf*):

Table 1 of this report (*also overleaf*) summarises the Auditor's assessment of the Shire's compliance with its operating licence for the Newman WWTP. The table also indicates the audit priority assigned to each licence requirement, during a preliminary risk analysis conducted prior to the audit.

Yellow colouring in the Table 1 indicates that a requirement was not triggered (eg, report not requested or not necessary) or the requirement was not appropriate (eg, Industry codes have not been issued)



### Compliance Rating Scale (ERA Guidelines Table No.1)

Compliance Status	Rating	Description of Compliance
COMPLIANT	5	Compliant with no further action required to maintain compliance
COMPLIANT	4	Compliant apart from minor or immaterial recommendations to improve the strength of internal controls to maintain compliance
COMPLIANT	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
NON-COMPLIANT	2	Does not meet minimum requirements
SIGNIFICANTLY NON-COMPLIANT	1	Significant weaknesses and/or serious action required

**Table-1 – Summary of Operational Audit Effectiveness.**

Operating Area	Licence Reference	Consequence 1 = minor 2 = moderate 3 = major	Likelihood A = likely B = probable C = unlikely	Inherent Risk Low, Medium, High.	Adequacy of Controls Strong, Moderate, Weak.	Compliance Rating See compliance Table above				
						1	2	3	4	5
<b>OPERATING AREAS</b>										
Water Services in designated operating area	2 (b) Sch 1	1	C	Low	Strong					5
<b>PROVISION OF SERVICES</b>										
Provide, maintain and operate services	4 (a),(b)	2	C	Medium	Strong					5
<b>SERVICE REGULATIONS</b>										
Compliance with Regulations	5	1	C	Low	Strong					5
<b>ASSET MANAGEMENT SYSTEM</b>										
ASM in place, details notified, reviews undertaken and reported	6 (a), (b)	2	C	Medium	Strong				4	
System operated according to ASM	6 (c)	1	C	Low	Strong				4	
<b>OPERATIONAL AUDIT</b>										
Audit undertaken and reported	7 (a), (b), (c), (d)	1	C	Low	Strong					5
<b>TECHNICAL STANDARDS</b>										
Technical Standards met	8	1	C	Low	Strong					5
<b>INDUSTRY CODES</b> Not applicable	9									

<b>ACCOUNTING RECORDS</b>														
Prepared in accord with Local Govt Act 1995	10	1	C	Low	Strong									5
<b>PRICES OR CHARGES</b>														
Set in accord with Health Act 1911 and Local Govt. Act 1995	11	1	C	Low	Strong									5
<b>PROVISION OF SERVICES</b>														
Licensee to ensure contracted services comply with Licence	12, (a)	1	C	Low	Strong									5
Water services available in Operating Area	12 (b)	1	C	Low	Strong									5
<b>PROVISION OF INFORMATION TO ERA</b>														
Reporting overflows within five days	14 (a)	1	C	Low	Strong									
Provision of ERA requested report within 14 days	14 (b)	1	C	Low	Strong									
Annual report to ERA within 30 days of end financial year	14 (c) Sch.3	1	C	Low	Strong									5
<b>PERFORMANCE OF FUNCTIONS</b>														
Compliance with Quality & performance standards	15 (a), Sch.2	2	C	Medium	Strong								4	
Annual notification that supply is not potable	15 (b) Sch 2	2	C	Medium	Strong			3						
Emergency telephone notification and action advice in place	15(c) Sch. 2	2	C	Medium	Strong									5
No overflows	15(d) Sch.2	2	C	Medium	Strong									5
<b>CUSTOMER CONTRACTS</b>														
Licensee may enter into contracts for supply	16 (a)	1	C	Low	Strong									5
Contract which modify, restrict or excludes the lease to be approved in writing by ERA	16 (b)	1	C	Low	Strong									
<b>OBLIGATIONS TO PUBLIC AUTHORITIES</b>														
Wastewater treatment plant to have and be operated in accord with DEP Licences	17	2	C	Medium	Strong									5
<b>CONSUMER CONSULTATION</b>														
Public meeting held to receive customer views on plant operation changes	18 (a)	1	C	Low	Strong									5
Provision for customers to raise matters of concern during Council meeting public question time	18 (b)	1	C	Low	Strong									5
<b>CUSTOMER CHARTER / INFORMATION BROCHURE</b>														
Annual report prepared and comment sought from customers	19 (a)	1	C	Low	Strong									5
														5
Annual Brochure in place, displayed in Shire office and available on request	19 (b)	1	C	Low	Strong									5
<b>DISPUTE RESOLUTION</b>														
Recording & Response to complaints	20 (a) , (b) Sch 2	2	C	Low	Strong									5
Advice to Customer of Rights	20 (c),	2	C	Low	Strong									5
Responsiveness (eg solution within 21 days)	20 (d), (e), (f), (g)	2	C	Medium	Moderate									5
<b>CUSTOMER SURVEYS</b>														
ERA may request customer surveys	21	1	c	Low	Strong									

- Asset Management Review**

*ERA's Guidelines* Table 3, below indicates the basis of assessment of the compliance rating levels (1 to 5) during the Asset Management Review

Table 2 (*overleaf*), summarises the Auditor's assessment of the effectiveness of the Shire's Asset Management Plan for the Newman WWTP.

### Asset Management Review Effectiveness Rating Scale

(*ERA Guidelines Table No.3*)

Effectiveness	Rating	Description
Continuously Improving	5	Continuously improving organisation capability and process effectiveness
Quantitatively Controlled	4	Measurable performance goals established and monitored
Well Defined	3	Standard processes documented, performed and coordinated
Planned and Tracked	2	Performance is planned, supervised, verified and tracked
Performed Informally	1	Base practices are performed
Not Performed	0	Not performed(indicate if not applicable)

Table 2 – Summary of Asset Management

## Review Compliance

Asset Management Process	Effectiveness Rating					
	0 <i>Not performed</i>	1 <i>Performed Informally</i>	2 <i>Planned and tracked</i>	3 <i>Well defined</i>	4 <i>Quantitatively controlled</i>	5 <i>Continuously improving</i>
1 - Asset Planning					4	
2 – Asset Creation						5
3 – Asset Disposal						5
4 - Environmental Analysis						5
5 - Operations						5
6 - Maintenance						5
7 - Management System					4	
8 – Risk Management						5
9 – Contingency Planning					4	
10 – Financial Planning						5
11 – Capital Expenditure Planning						5
12 – Management Plan Review				3		

**REPORT**

**ON**

**2008 OPERATIONAL AUDIT & ASSET MANAGEMENT REVIEW**

**NEWMAN WASTE WATER TREATMENT PLANT**

**SHIRE OF EAST PILBARA**  
**REPORT ON THE 2008 OPERATIONAL AUDIT & ASSET MANAGEMENT**  
**REVIEW**  
**NEWMAN WASTE WATER TREATMENT PLANT**

**1 - INTRODUCTION**

The Newman Waste Water Treatment Plant (WWTP) was constructed by BHP in 1981 and operated by the company until 1990, when the sewage collection and treatment facilities were taken over and operated by the 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 (2005) 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 (when water is available) the High School playing field, some verges within the townsite and the race course outside the townsite.

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

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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 Environment & Conservation (DCE) 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 of 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 the 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

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addition, Council has arrangements with local companies for the provision of Electrical, Mechanical and Cranage services associated with plant repair and maintenance.

## 2 – OBJECTIVES AND SCOPE

### 2.1 – Operational Audit

*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.

The purpose of this audit is to determine the effectiveness of measures taken by the Shire (over the period 1<sup>st</sup> December 2005 to 30<sup>th</sup> November 2008) to maintain the quality and performance standards referred to in its Operating Licence, dated 15<sup>th</sup> November 2004, for the Wastewater Treatment Plant 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. Specifically, the audit addressed:

- **Process** – the effectiveness of systems and procedures in place, including internal controls
- **Outcome** – the actual performance against prescribed standards in the licence
- **Output** – proper records confirming that procedures are followed and controls maintained.
- **Integrity** and completeness of reporting to ERA.
- **Compliance** with any individual licence conditions, or requests / directions for follow up by ERA

### 2.2 - 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

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Operational Audit, *the Act* requires the Shire to provide the ERA with a report by an independent expert on the effectiveness of the system.

Such a review provides the Authority with an independent opinion on whether or not the Shire has in place the appropriate systems for the planning, construction, operation and maintenance of its water services assets

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, documented as contingency plans and reduced by specific practices - such as stocking selected spare parts or equipment items subject to extended delivery or repair periods, overflow storage etc
- The existence and effectiveness of systems implemented for the assessment, planning, financing and construction of new, replacement and major maintenance works and disposal of redundant assets.
- 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.
- The review also identifies any aspects of the asset management system, which are considered to require correction, amendment, or improvement.

### **3 – KEY DOCUMENTS INSPECTED DURING THE AUDIT & REVIEW**

1. Shire of East Pilbara - Operating Licence (Non-Potable Water Supply) – (Sewerage Services) dated 15/11/2004
2. Economic Regulation Authority – “*Audit Guidelines: Electricity, Gas and Water Licences, September 2006*”

3. Shire of East Pilbara – Newman Wastewater Treatment Plant “*Report on Operational Audit & Asset Management Review, December 2002 to November 2005*” – Barry Robbins Engineering & Project Management
  4. Shire of East Pilbara— Newman Wastewater Scheme Treatment Information Brochure 2008
  5. Shire of East Pilbara - Newman Wastewater Scheme Draft Operations Manual (Revision D) including:
    - Asset Planning
    - Regulatory Environment
    - Operating & Maintenance Procedures for Sewage & Reticulation Operations
    - Surveillance of Retic System
    - Contingency Plans
    - Risk Analysis
    - Chlorination System
    - Regulatory Reporting Requirements: DEC, ERA, Dept Minerals & Energy (Dangerous Goods), Dept Health
    - DEC Licence
    - Operational Risk Assessment
    - **Appendices** *DEC Licence & associated reports, Operating & Maintenance Procedures, Operational Risk Assessment, Dept Health – Requirements for an Operations & Maintenance Manual, Shire of East Pilbara Scheme Information Brochure,*
  6. – File of Collected Information requested by Auditor prior to the audit- including
    - Current Operating Licence and selected correspondence between Shire and ERA
    - DEC Operating Licence and Annual Reports for 2005/06, 2006/07 and 2007/08
    - Annual Reports for the above periods in connection with ERA Operating Licence
  7. Electric Media copies of Manufacturer’s (William Boby) *Operations and Maintenance Manual and Drawings for the WWTP, Asset Register, Spare parts lists, Equipment Brochures for Orbal, Tow Bro and Inlet Screens*
  8. Shire of East Pilbara – statement accompanying annual reports of 2006, 2007 & 2008 (by Chief Executive Officer) that reports have been prepared in accordance with the Local Government Act 1995
  9. Copies of Laboratory reports associated with DEC Licence
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10. Shire of East Pilbara – copy of page 9 of *Special Council Meeting Minutes of 25<sup>th</sup> July 2008* advising that rates for the maintaining and running of the Sewerage Treatment Plant will be raised under the *Health Act*
11. Minutes of Technical Services Group Meetings during 2007 & 2008

#### **4 – AUDIT PERIOD AND DATE OF AUDIT**

This Operational Audit and Asset Management Review covers the period from 1<sup>st</sup> December 2005 to 30<sup>th</sup> November 2008.

The audit and review was undertaken during a visit to the Shire's office on 8<sup>th</sup> and 9<sup>th</sup> January 2009

#### **5 – KEY SHIRE PERSONNEL AND AUDITOR PARTICIPANTS**

The audit and review was undertaken by Barry Robbins – of Barry Robbins Engineering & Project Management - with Mr Mel Rowe – The Shire's Consultant / Manager for the plant.

Discussions were also held with Mr A Cooper – Chief Executive Officer, Mr G Logie – Director, Technical Services, M/s S Appleton - Corporate Finance and Mr A Jones – Plant Operator

Auditor's time input was 59 hours

#### **6 – PRELIMINARY RISK ASSESSMENT**

The level of risks resulting from non-compliance with relevant licence standards and the adequacy of internal controls was assessed by preparing a Preliminary Risk Assessment in accordance with ERA's "*Audit Guidelines: Electricity, Gas and Water Licences – September 2006*" The preliminary assessment was discussed with the Shire's Consultant and Authority representatives in Perth prior to inclusion in the Management Plan for the review. The overall levels of risk - associated with non-compliance with each requirement of the licence, were used to prioritise areas of the Licence requiring more detailed assessment.

Copies of the Auditor's preliminary risk assessments for the Shire's wastewater treatment plant at Newman and its Asset Management Plan are attached as Appendix 1. **The Preliminary Operational Risk Assessment** suggests that (although assessed as overall risk level 4 – the second lowest), investigation, priority should be assigned to the following licence clauses during the Operational Audit:

- 6 – Asset Management
- 15 – Performance of Functions
- 17 – Possession of and operation in accordance with DEP licence.
- 20 – Dispute Resolution

Similarly, the **Preliminary Asset Management System Risk Assessment** suggests that the review be based on

**Priority 2** - (the second highest), to process Nos. 5. Operations and 6. Maintenance Priority 2 was assigned on the basis of the importance to plant operations of daily and annual operations and maintenance practices

**Priority 4** (the second lowest), to process Nos, 1. Asset Planning, .2. Asset Creation, 4. Environmental Analysis, 7. Asset Management System, 10. Financial Planning, 11. Capital Expenditure Planning and 12. Review.

**Priority 5** (the lowest), to process Nos.3 Asset Disposal, 8 Risk Management, and 9 Contingency Planning

The Auditor confirmed the ranking of the preliminary risk analyses during the subsequent audit and review processes.

## **7 – REVIEW OF RECOMMENDATIONS FROM THE PREVIOUS AUDIT & REVIEW**

A review was undertaken of the level of implementation of recommendations from the previous (2005) audit. The 2008 Auditor's assessment of the level of compliance with the previous recommendations is set out in the following Tables:

## 2005 - Operational Audit Recommendations

*2005 Operational Audit Recommendation 1 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.*

*No evidence – not in information brochure – **Not completed***

*2005 Operational Audit Recommendation 2-that Clause 18 (a) of the Licence be amended to reflect the thorough procedures existing and the environmental location of the plant.*

***Comment** – Clause 18 (a) remains unchanged. Auditor considers the change remains appropriate.*

## 2005 - Asset Management Review Recommendations

*2005 Asset Management Review Recommendation 1 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*

***Comment - Implemented** regarding Supplier information. **Not implemented** regarding role and in-plant location of spares*

*2005 Asset Management Review Recommendation 2 - that the adequacy and currency of the Asset Management Plan be reviewed annually as a matter of policy.*

***Comment - Implemented in part** There is no written evidence to indicate a review has been undertaken annually. However, it is noted that the current Asset Management Plan booklet is Rev D (dated December 2008)whereas that reviewed in 2005 was Rev C*

## 8 – OPERATIONAL AUDIT – DETAILED FINDINGS

Table 3 (commencing second page overleaf) sets out the assessed level of compliance, together with the Auditor’s comments, for each requirement of the Shire’s Licence.

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The compliance levels assigned to each requirement of the Licence are set out in the following Table No.1 taken from ERA's "Audit Guidelines: Electricity, Gas and Water Licences – September 2006"

**Compliance Rating Scale (ERA Guidelines Table No.1)**

<b>Compliance Status</b>	<b>Rating</b>	<b>Description of Compliance</b>
COMPLIANT	5	Compliant with no further action required to maintain compliance
COMPLIANT	4	Compliant apart from minor or immaterial recommendations to improve the strength of internal controls to maintain compliance
COMPLIANT	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
NON-COMPLIANT	2	Does not meet minimum requirements
SIGNIFICANTLY NON-COMPLIANT	1	Significant weaknesses and/or serious action required

<b>TABLE 3 - 2008 OPERATIONAL AUDIT COMPLIANCE ASSESSMENT</b>				
<b>Operating Licence Clause or Schedule</b>	<b>Licence Requirements</b>	<b>Auditor Comment</b>	<b>Compliance</b>	<b>Action Required</b>
2 (b) Schedule 1	Services to be provided within the operating area delineated in Schedule 1	<i>Services are provided within the Licensed Operating Area</i>	5	
4 (a) 4 (b)	<b>Duty to Provide Services</b> To provide the water services Undertake, maintain and operate the water services	<i>Services are provided, maintained and operated by the Licensee</i>	5 5	
5	<b>Service Regulations</b> The Licensee shall comply with Standards of service regulations	<i>No Regulations have been issued</i>	Not Applicable	
6 (a) 6 (b)	<b>Asset Management System</b> The Licensee shall (i) provide an asset management system for its assets, (ii) notify details and any changes to the Authority, (iii) & (iv) provide an independent experts audit as required by the Licence The asset management system shall set out the measures to undertake the maintenance and operation of the assets and services.	<i>The asset management plan has been in place for many years, details were initially provided to the Authority - but do not appear to have been updated. Audits have been undertaken at the required intervals</i>  <i>The system complies</i>	5 5	<i>The latest version of the Asset Management Plan should be provided to the Authority</i>

6 (c)	The Licensee shall maintain and operate the works as set out in the asset management system	<i>The works are so maintained and operated</i>	5	
7 (a) (b) (c) (d)	<b>Operational Audit</b> The Licensee must provide the Authority with an operational audit ,undertaken at not more than 36 months intervals - by an independent expert and in accordance with the scope set by the Authority	<i>Audit provided</i>	5	
8	<b>Technical Standards</b> The Lessee shall comply with Technical Standards published by the Authority in the <i>Government Gazette</i>	<i>No standards have been published</i>	Not Applicable	
9	<b>Industry Codes</b>	<i>None specified</i>	Not Applicable	
10	<b>Accounting Records</b> Accounting records shall be consistent with the requirements of the Local Government Act and Include a statement which accurately describes income and expenditure in relation to the water services provided	<i>Auditor sighted CEO note of compliance for annual reports of 2006,07&amp; 2008</i>  <i>The annual reports adequately set out the necessary details</i>	5	
11	<b>Prices or Charges</b> Prices or charges for water services shall comply with the relevant provisions and regulations of the <i>Health Act 1911</i> and the <i>Local Government Act 1995</i>	<i>Licensee does not charge for its water supply services. Operating costs are met from a property rate struck under the Health Act and a contribution from Water Corporation which delivers waste water to WWTP</i>  <i>Copy of the minute verifying compliance with the Health Act was sighted</i>	5	



<p><b>12</b></p> <p><b>12 (a)</b></p> <p><b>12 (b)</b></p>	<p><b>Methods or Principles to be applied in the provision of water services</b></p> <p>If contracting out of its services, the Licensee remains responsible for compliance with the terms of its Licence</p> <p>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.</p>	<p><i>Licensee has arrangements with local firms for the supply as required of mechanical, electrical and craneage services. Provision of these outside services are undertaken under Licensee supervision and control</i></p> <p><i>Lands within the operating area are wholly occupied by the WWTP. The only connection is the Council's own system for the supply of irrigation water for the Town ovals and some public areas when water is available. Use of the water for irrigation is undertaken in accordance with Health Department requirements</i></p>	<p>5</p> <p>5</p>	
<p><b>14 (a)</b></p> <p><b>14 (b)</b></p> <p><b>14 (c)</b></p> <p><b>Schedule 3</b></p>	<p><b>Specific Information to be provided</b></p> <p>The Licensee shall inform the Authority of the occurrence of any of the following events within five days of their occurrence – overflows from wastewater/ sewerage infrastructure.</p> <p>The Authority may require a detailed report to be provided within 14 days of request</p> <p>The Licensee shall report the information set out in Schedule 3. The reports are due within 30 days of the end of each financial year</p>	<p><i>No overflows have occurred.</i></p> <p><i>Reports have not been requested</i></p> <p><i>Schedule 3 reports for 2006, 2007 and 2008 noted</i></p>	<p>5</p> <p>5</p> <p>5</p>	

<b>15 &amp; Schedule 2</b>	<b>Performance of functions by the Licensee</b>			
<b>15 (a)</b>	The Licensee shall comply with the quality and performance standards set out in Schedule 2	<i>Licensee complies except regarding written notification that water supplied is unsuitable for drinking</i>	4	
<b>15 (b)</b>	The Licensee shall provide annual notification to all customers that the water supplied is not suitable for drinking	<i>Notification previously provided annually with rates notice – but not 2008. Notices are provided at irrigation points</i>	3	<b>Should be written into the information brochure</b>
<b>15 (c) &amp; Schedule 2</b>	The Licensee shall implement an emergency telephone system so a customer can report an emergency and receive advice within one hour of the action to be taken by the Licensee. An emergency is an event which causes, or threatens to cause, harm to people, the environment, or property.	<i>The Depot Supervisor's mobile phone number is displayed on a sign at the treatment plant. The 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</i>	4	<b>Should be written into the information brochure</b>
<b>15 (d)</b>	The Licensee shall maintain and operate its sewerage scheme so that sewage does not overflow on customer's properties.	<i>The plant is well maintained and operated. Is 5 Km from the townsite and surrounded by crown land. There is overflow storage for 5 days on-site – and also off-site for use with Health Department approval. There have been no overflows.</i>	5	
	No unacceptable odours from the plant	<i>There have been no unacceptable odours. Emergency procedures document state action if odours occur</i>	5	
<b>Schedule 2</b>	Wastewater treatment and disposal in accordance with all legal requirements	<i>The plant is operated in accordance with DEC Licence No. L 6870/1993/11 and the disposal system in accordance with Health Department Regulations</i>	5	
<b>Schedule 2</b>	Wastewater treatment plant failures are minimised.	<i>The plant is well operated and maintained. There have been only minor failures</i>	5	
<b>Schedule 2</b>	Complaints be resolved within 21 days	<i>Written complaints procedures are in place. A special officer is designated to record complaints and to coordinate a response There have been no complaints. See also sub clause 20</i>	5	

<p><b>16 (a)</b></p> <p><b>16 (b)</b></p>	<p><b>Terms and Conditions of Customer Contracts</b></p> <p>The Licensee may enter into agreements with customers to provide water services</p> <p>The Licensee may not enter into an agreement with a Customer that excludes, modifies or restricts the terms and conditions of the Licence without prior written approval of the Authority</p>	<p><i>There are no agreements to provide water services</i></p> <p><i>There are no agreements to provide water services</i></p>	<p><b>Not Applicable</b></p>	
<p><b>17</b></p>	<p><b>Obligations to Public Authorities and other Licensees</b></p> <p>Wastewater treatment plants operated by the Licensee shall have relevant licenses from the Department of Conservation and be operated in compliance with those licenses.</p>	<p><i>The plant is operated in accordance with DEC licence L6870/1993/11. Annual reports to DEC noted indicate compliance</i></p>	<p><b>5</b></p>	
<p><b>18 (a)</b></p> <p><b>18 (b)</b></p>	<p><b>Consumer Consultation</b></p> <p>Prior to making major changes to the operation of the wastewater treatment plant, the Licensee will hold a public meeting to obtain Customer views</p> <p>The Licensee shall 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></p>	<p><i>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</i></p> <p><i>The dates of Council meetings are advertised in newspapers and agendas always include an item for discussion/ comment on the water Services. Agenda items noted.</i></p>	<p><b>5</b></p> <p><b>5</b></p>	

<p><b>19 (a)</b></p> <p><b>19 (b)</b></p>	<p><b>Customer Service Charter</b></p> <p>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 of the wastewater treatment plant</p> <p>The Licensee will produce an information brochure describing the service including information enabling customers to make suggestions or complaints. This shall be publicly displayed at Shire offices and made available to customers on request</p>	<p><i>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</i></p> <p><i>Brochure noted, on display and available free – as are all display pamphlets.</i></p> <p><b>Auditor considers the brochure should contain advice: that water supplied is not suitable for drinking and emergency reporting procedures,</b></p>	<p>5</p> <p>4</p>	<p><i>Add non-potable advice, and emergency information to brochure</i></p>
<p><b>20 (a)</b></p> <p><b>20(b)</b></p>	<p><b>Dispute Resolution</b></p> <p>The Licensee shall establish a system for recording, managing and resolving within 21 days, complaints by customers regarding a provided or requested water service, or for matters which must be considered by Council, within 7 days after the first Council meeting following expiration of the 21 days period</p> <p>To ensure the effectiveness of such a process, the Licensee shall as a minimum:</p> <p>(i) Record details of each Customer complaint and it's outcome.</p> <p>(ii) Provide an officer trained to deal with Customer complaints who is authorised to, or has access to, another officer who has the authority to make the necessary decisions to settle Customer complaints or disputes and where applicable, make recommendations to Council as to the payment of monetary compensation; and</p>	<p><i>The Shire has a system for recording complaints as a matter of policy. The standard complaints form includes the requirement for resolution within 21 days</i></p> <p><i>An officer of the Technical Services Department of Council has been assigned to undertake receipt, recording and coordinating a response to complaints related to the water service</i></p>	<p>5</p> <p>5</p>	

20 (c)	<p>(iii) Make such arrangements as are necessary to ensure that if possible, complaints can be resolved in the timeframe set out in sub-clause (a)</p> <p>Where a dispute arises between a Customer and the Licensee regarding a provided or requested water service, the Customer may refer the dispute to the Office of Water Policy</p>	<p><i>See above</i></p> <p><i>Not a Licence condition</i></p>	5	
20 (d)	<p>Unless the complaint or dispute is a matter in relation to which section 3.22 of the <i>Local Government Act 1995</i> applies where a dispute has not been resolved within 21 days, the Licensee shall inform the customer of the option of referring the complaint to the Office of Water Policy.</p> <p>The Office of Water Policy may:</p>	<p><i>No complaints have been received</i></p>	<p><b>Not Applicable for Audit period</b></p>	
20 (e)	<p>(i) Mediate the dispute, or</p> <p>(ii) Direct the Licensee or Customer to binding arbitration</p>	<p><i>Not a Licence condition</i></p> <p><i>Not a Licence condition</i></p>		
20 (f)	<p>During the process of investigation and conciliation, the Licensee shall make every endeavour to promptly cooperate with the Office of Water Policy's (or its representative's) requests, which shall include the expeditious release of any information or documents requested by the Office of Water Policy and the availability of the relevant staff of the Licensee.</p>	<p><i>No complaints have been received</i></p>	<p><b>Not Applicable for Audit period</b></p>	
20 (g)	<p>The Licensee shall, on request provide the Office of Water policy with details of complaints made and the names and addresses of customers who have made complaints</p>	<p><i>No complaints have been received</i></p>	<p><b>Not Applicable for Audit period</b></p>	

<p><b>21(a)</b></p>	<p><b>Customer Surveys</b>                  Where an issue arises that the Authority considers to be of concern to customers, the Authority may require the Licensee to commission an independent customer survey that shall address and conform to the conditions and parameters set out in writing by the Authority</p>	<p>No requests for survey were received</p>	<p><b>Not Applicable for Audit period</b></p>	
<p><b>21 (b)</b></p>	<p>Such a survey will not be required more frequently than once every 12 months</p>	<p>Not a Licensee condition</p>	<p><b>Not Applicable</b></p>	

## 9 – ASSET MANAGEMENT REVIEW – DETAILED FINDINGS

Table 4 (*overleaf*) sets out the assessed level of Effectiveness, together with the Auditor's comments, for each aspect of the Shire's Asset Management Plan. The effectiveness levels assigned to each aspect are set out in the following Table - taken from ERA's "Audit Guidelines: Electricity, Gas and Water Licences – September 2006"

### Asset Management Review Effectiveness Rating Scale

(ERA Guidelines Table No.3)

Effectiveness	Rating	Description
Continuously Improving	5	Continuously improving organisation capability and process effectiveness
Quantitatively Controlled	4	Measurable performance goals established and monitored
Well Defined	3	Standard processes documented, performed and coordinated
Planned and Tracked	2	Performance is planned, supervised, verified and tracked
Performed Informally	1	Base practices are performed
Not Performed	0	Not performed(indicate if not applicable)

**TABLE 4 - 2008 ASSET MANAGEMENT REVIEW – EFFECTIVENESS RATINGS**

Key Process	Outcome	Auditor Remarks	Effectiveness Rating					
			0	1	2	3	4	5
<b>1 Asset Planning</b> Asset planning strategies are focused on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price)	Does the Asset Planning process integrate and state the requirements of the Shire, its Customers and regulatory authorities	<i>The planning process adequately covers the background, responsibilities to the ratepayers of Newman, public safety, and identifies the regulatory authorities associated with the operation of the service - and the extent to which they are involved</i>					4	
	Does the AMP address all the major aspect of the of the management, operations and maintenance of the water services	<i>The AMP addresses the major aspects of the management, operations and maintenance of the water supply. However, Auditor considers improvements could be made with respect to the assets register, spare parts list and the general format of some sections of the plan</i>					4	
	Is the AMP to date and implemented in practise.	<i>The plan is currently up to date – but remains subject to improvement as above.</i>					4	
	Does the AMP set out lines of responsibility and reporting	<i>Lines of responsibility are adequate for the service. Recording and reporting of regulatory results and operations /maintenance issues is very good</i>					4	
<b>2 Asset Creation &amp; Acquisition</b> means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay	<ul style="list-style-type: none"> <li>Have the strategic objectives of the asset been identified?</li> </ul>	<i>The objectives and basic regulatory obligations are set out in Section 1,2 and 3 of the Asset Management Plan Manual</i>						5
	<ul style="list-style-type: none"> <li>Have life cycle costs been considered?</li> </ul>	<i>Life cycle costs are not particularly relevant as maintenance and capital expenditure planning is based on progressive replacement of asset components to maintain condition</i>						5
	<ul style="list-style-type: none"> <li>Has the need for new assets been determined and full project evaluation</li> </ul>	<i>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</i>						5



	<p>process been followed including comparative assessment of non-asset solutions?</p> <ul style="list-style-type: none"> <li>Have documents recording relevant details on the asset been collected.?</li> </ul>	<p><i>alternative treatment assets</i></p> <p><i>Details of assets, location, spares held, detailed drawings and original operations manuals have been transferred to electronic media as recommended by a previous audit. The spare parts list – whilst detailing manufacturer’s part numbers etc, could be improved by detailing their role in the system.</i></p>							5
<p><b>3 Asset Disposal</b> Effective asset disposal frameworks incorporate consideration of alternatives for the disposal of surplus, obsolete, under performing or unserviceable assets. Alternatives are evaluated in cost-benefit terms</p>	<p>Effective management of the disposal process will minimise holdings of surplus and under-performing assets and will lower service costs</p>	<p><i>Apart from fixed items such as control building, connecting pipework and fencing, the STP has only three major process assets. These are screening and grit collection, activated sludge and clarifier processes. The plant as a whole has more than adequate capacity for the foreseeable future and asset replacement due to inadequate capacity is unlikely. A well defined operations and maintenance program ensures that major plant assets are kept in excellent operating condition – thus negating the need to plan for replacement of major items</i></p>							5
<p><b>4 Environmental Analysis</b> examines the asset system environment and assesses all external factors affecting the asset system</p>	<p>Are threats and opportunities in the system assessed ?</p> <p>Have service and performance standards been achieved during the audit period ?</p> <p>Did any breaches occur and how were they addressed ?</p> <p>Are managing and reporting processes adequate</p>	<p><i>In October 2005, threats to the system were subject to a Risk Analysis in accordance with Schedule 1 of AS/NZS 4360:2004, and a Risk Assessment Register prepared. The analysis and register are contained in the Asset Management Manual</i></p> <p><i>The Technical Services Group Sewage and Reticulation of the water service meet approximately quarterly to review plant operations. performance, standards, maintenance and risk factors. Minutes of meetings obtained</i></p> <p><i>Recorded results and reports to regulatory authorities were noted to achieve the required standards</i></p> <p><i>One Health Department breach noted in late 2008. A Health Department request for explanation was replied to by Shire’s Consultant. The breach was minor and resulted from a maintenance operation at the plant</i></p> <p><i>The managing and reporting processes are excellent</i></p>							5
									5
									5

<p><b>5 Asset Operations</b> Operations functions relate to the day to day running of assets and directly affect service levels and costs</p>	<p>Do operations plans adequately document the processes and knowledge of staff in the operation of assets so that service levels can be consistently achieved.</p>	<p><i>Operational requirements are very well documented. Procedures for inspections, equipment checks, water sampling, sludge wasting and associated controls are well set out.</i></p> <p><i>The responsibilities for both up and down line reporting are well understood and discharged.</i></p> <p><i>Service levels are consistently achieved</i></p>						5
<p><b>6 .Asset Maintenance</b> Maintenance functions relate to the up keep of assets and directly affect service levels and costs</p>	<p>Do maintenance plans cover the scheduling and resourcing of the maintenance tasks so that work can be done on time and on cost</p>	<p><i>Daily and regular maintenance and associated checks are well documented in the maintenance plan. Responsibility for reporting equipment malfunctions and arrangements for correction/ repair are well understood by both operational and administrative staff of the Technical Services, Sewage and Reticulation Group.</i></p> <p><i>Arrangements are in place with local mechanical, electrical and crane hire companies to support Council staff in facilitating repairs and maintenance.</i></p> <p><b><i>The list of spare parts is still lacking information regarding the plant location of the spares held</i></b></p>						5
<p><b>7. Asset Management Information Systems (MIS)</b> is a combination of processes, data and software that support the asset management functions.</p>	<p>Does the asset management information system provide authorised, complete and accurate information for the day to day running of the asset management system. The focus of the review is the accuracy of performance information used by the Licencee to monitor and report on service standards</p>	<p><i>The system for recording and distributing information related to the day to day operations, maintenance and performance of the plant - in addition to collation of data, reporting to regulatory authorities is well coordinated.</i></p> <p><i>During the last 18 months Council has employed a permanent officer in the technical services branch, whose responsibility is to initiate and follow up on ordering spares , equipment etc. This officer also coordinates input to a computer based system that tracks cost/ budgets etc across the general council and water services areas</i></p> <p><i>This aspect of the system is expected to develop further with time</i></p>					4	4
<p><b>8. Risk Management</b> involves the identification of risks and their management within an acceptable level of risk</p>	<p>Are the policies and procedures covering risk management and contingency planning adequate</p>	<p><i>In 2005,threats to the system were subject to a Risk Analysis (by the Technical Services, Sewage and Reticulation Group) in accordance with Schedule 1 of AS/NZS 4360:2004 in October 2005. – and a Risk Assessment Register prepared – also in 2005. The analysis and register are contained in the Asset Management Manual</i></p>						5

	Have the risk management policies and procedures been applied in practice Is staff understanding and training on risk management adequate	<i>Operating and management staff of the water service (The Technical Services, Sewage and Reticulation Group) meet approximately quarterly to review plant operations. performance, standards, maintenance and risk factors.</i>  <i>Minutes of meetings obtained</i>							5
									5
<b>9. Contingency Planning</b> Contingency plans document the steps to deal with the unexpected failure of an asset	Have contingency plans been developed and are they current Have contingency plans been tested. If so, do the results confirm that any improvements identified have been actioned.	<i>Precautions in place to reduce or eliminate the impact of operational emergencies are identified in the Risk Management Plan</i>  <i>The precautions are obvious and uncomplicated - including holding of significant major spares subject to long delivery periods. Testing is not necessary.</i>  <b>Auditor considers that "precautions" should be expanded to "contingency plans" and included in the risk management register</b>						4	
								4	
<b>10 – Financial Planning</b> The Financial Planning component of the asset management plan brings together the financial elements of the service delivery to ensure its financial viability over the long term	Does the financial plan state the financial objectives and strategies and actions to achieve the objectives.  Does the financial plan identify the source of funds for capital expenditure and current costs  Does the financial plan provide projections of operating statements(profit & loss)and statement of financial position(balance sheets) Does the financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period.	<i>The Financial Plan for the treatment plant is a sub-set of the overall annual financial plan for the Shire – which must be prepared at the commencement of each financial year.</i>  <i>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.</i>  <i>As the income generally exceeds annual costs, the excess is held in a reserve fund , which is used for planned and unexpected capital works.</i>  <i>The plan is based on a rolling 5 year capital expenditure plan.</i>							5
									5
									5
									5

	Does the financial plan provide for the operations and maintenance, administration and capital expenditure requirements of the services. Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary	Yes  Yes – from the reserve fund							5  5
<b>11. Capital Expenditure Planning</b> 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. Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least ten years, preferably longer. Projections over the next five years would usually be based on firm estimates	Is there is a capital expenditure plan that covers issues to be addressed, actions proposed,, responsibilities and dates. Does the plan provides reasons for capital expenditure and timing of expenditure Is the capital expenditure plan consistent with asset life and condition identified in the asset management plan. Is there is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.	<i>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.</i>  <i>A comprehensive 5 year rolling capital expenditure plan is in place. The capital expenditure planned, the year of intended expenditure and the reason are set out</i>  <i>The controlling issue for capital expenditure is a maintenance, and mechanical / electrical equipment replacement program intended to maintain existing assets in peak working condition.</i>  <i>The capital expenditure program for the WWTP is a sub-section of the Council's annual budget /estimates</i>							5  5  5  5

<p><b>12. Review of Asset Management System</b> The asset management system is regularly reviewed and up-dated.</p>	<p>Is there a review process in place to ensure that the asset management plan and the asset management system described therein are kept current. Independent reviews (eg, internal audits) are performed on the asset management system</p>	<p><i>The asset management system has been reviewed and re-issued (from Rev A to Rev D over the recent 12 years mainly as a result of License reviews and a general appreciation of the need for such reviews)</i></p> <p><i>Auditor considers that regular meetings of the Technical Services Sewage and Reticulation - in addition to the installation of replacement equipment at the plant, will automatically trigger the need for a review of the system. Minutes of three previous meetings were provided</i></p> <p><i>Despite the above, Auditor considers that the Shires' consultant should undertake and sign off on a review following significant additions / alterations to the plant- or otherwise at least annually</i></p>				3		
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## 10 – GENERAL CONCLUSIONS RESULTING FROM THE AUDIT AND REVIEW

### 10.1 – Operational Audit

The Shire of East Pilbara operates the Newman Waste Water Treatment Plant efficiently and competently. The services are provided fully in accordance with the relevant DEC and Health Department requirements and (with one exception) 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) Schedule 2** of its Operating Licence, which requires “*the Licensee to provide annual notification to all customers that the water supplied is not suitable for drinking*”. As a consequence ,the audit found that the Shire does not comply with its obligation under **Clause 15 (a) Schedule 2** of its Licence – which requires the Licensee to comply with all requirements of the Schedule 2. The Auditor’s view is that those who take the water and those with free access to public areas where water is supplied for irrigation purposes are “customers” and should be advised annually in accordance with the requirements of the Licence.

Actions suggested to fulfil the above requirements are given in the following Post Audit Implementation Plan

### 10.2 - Asset Management Review

The Asset Management Review concluded that the Shire of East Pilbara manages its assets professionally, methodically and efficiently. However, whilst the Asset Management Plan contains detailed information regarding operations, maintenance, risk analysis, contingency planning etc, much of this information is contained wholly or partly within the asset management manual, and other written and electronic documents The material is generally not cross referenced and therefore not readily available to other than those with a detailed historical knowledge of the treatment plant and its operations.

Actions suggested to correct the above requirements are given in the following Post Asset Management Review Implementation Plan

## 11 - POST AUDIT & REVIEW IMPLEMENTATION PLAN

### Operational Audit

Clause / Schedule	Requirement	Auditor Recommendation	For Action by and timing
15 (a), (b) Schedule 2	Performance of Functions	<p>That advice that water supplied is not suitable for drinking be included in the Shire's water Services brochure.</p> <p>That the brochure also includes information regarding emergency telephone numbers and procedures.</p> <p>That the brochure be posted to each customer and ratepayer annually – and that the brochure continue to be on display and available free of charge at Council's offices</p>	<p>DTS / M Rowe</p> <p>All by end of April 2009</p>

### Asset Management Review

Management Process	Reviewer Recommendation	For Action by and timing
<b>Asset Management Brochure</b>	<p>That the operations, maintenance, regulatory requirements etc. of the WWTP and Effluent Reticulation / Distribution System respectively, be contained in two separate documents or as distinct separate sections of a single AMB document</p> <p>That all relevant printed material not included in the AMB be included within the text of the AMB and that disc copies of electronic information be contained in a pocket attached to an inside cover of the brochure.</p> <p>That all material be appropriately titled and included in a logical sequence within the brochure and all areas appropriately cross-referenced</p> <p>That a general arrangement plan of the plant which identifies major items of equipment should be included in the AMB. Similarly, an organisation diagram showing lines of responsibility and general duties should be included.</p>	<p>M Rowe (All by end August 2009)</p> <p>M Rowe</p> <p>M Rowe</p> <p>M Rowe</p>
<b>6 – Asset Maintenance</b>	That the list of spare parts held be extended to include the plant location of such spares	M Rowe – end of August 2009
<b>9-Contingency Planning</b>	<p>That precautions listed in the risk management register should be expanded in more detail and included as “contingency plans” in the risk management register – or as a separate section of contingency plans.</p> <p>The above should include the procedure for loan of a standby generator from BHP in the event of a power failure.</p>	<p>M Rowe</p> <p>End of August 2009</p>

<b>12 – Management Plan Review</b>	That a review of the management plan be undertaken at least annually and following major plant alterations or extensions. Such reviews should consider the need to amend operating, maintenance procedures, spare parts lists and assets register etc  The annual reviews should wherever possible, be undertaken by the Technical Services Group or the Shire’s Consultant, who should sign off the review to file	M Rowe  First review by end of April 2009
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## **12 – CONFIRMATION OF AUDIT**

This report, its conclusions and recommendations are an accurate result of investigations - both prior to and during, my site visit to conduct the audit and review on 8<sup>th</sup> January 2009.

B M Robbins

*Barry Robbins Engineering & Project Management*

Date:-



## **APPENDIX 1**

### **PART A - PRELIMINARY RISK ASSESSMENTS FOR OPERATIONAL AUDIT AND ASSET MANAGEMENT REVIEW**

### **PART B - OPERATIONAL AUDIT, COMPLIANCE & RISK ASSESSMENT CRITERIA**

### **PART C – ASSET MANAGEMENT EFFECTIVENESS CRITERIA**

## APPENDIX 1 - PART A

### PRELIMINARY RISK ASSESSMENTS

The Preliminary Risk Analyses for both the Operational Audit and the Asset Management Review have been prepared in order to prioritise the nature and extent of audit testing to be undertaken for each licence condition/schedule (for the audit) and for each of the twelve processes (of the asset management review) .

The analysis is based on the procedures set out in ERA's "Audit Guidelines: Electricity, Gas and Water Licences – September 2006"

The basis for assessing "Consequence", "Likelihood," "Inherent Risk" "Controls" and "Audit Priority" are given in ERA Guideline Table Nos. 6, 7, 8, 9, 10

- OPERATIONAL AUDIT – PRELIMINARY RISK ASSESSMENT**

Operating Area	Licence Reference	Consequence	Likelihood	Inherent Risk	Adequacy of Controls	Audit Priority
<b>OPERATING AREAS</b>						
Water Services in designated operating area	2 (b) Sch 1	1	C	Low	Strong	5
<b>PROVISION OF SERVICES</b>						
Provide, maintain and operate services	4 (a),(b)	2	C	Medium	Strong	5
<b>SERVICE REGULATIONS</b>						
Compliance with Regulations	5	1	C	Low	Strong	5
<b>ASSET MANAGEMENT SYSTEM</b>						
ASM in place, details notified, reviews undertaken and reported	6 (a), (b)	2	C	Medium	Strong	4
System operated according to ASM	6 (c)	1	C	Low	Strong	5
<b>OPERATIONAL AUDIT</b>						
Audit undertaken and reported	7 (a), (b), (c), (d)	1	C	Low	Strong	5
<b>TECHNICAL STANDARDS</b>						
Technical Standards met	8	1	C	Low	Strong	5
<b>INDUSTRY CODES</b>						
Not applicable	9					
<b>ACCOUNTING RECORDS</b>						
Prepared in accord with Local Govt Act 1995	10	1	C	Low	Strong	5

<b>PRICES OR CHARGES</b>						
Set in accord with Health Act 1911 and Local Govt. Act 1995	11	1	C	Low	Strong	5
<b>PROVISION OF SERVICES</b>						
Licencee to ensure contracted services comply with Licence	12, (a)	1	C	Low	Strong	5
Water services available in Operating Area	12 (b)	1	C	Low	Strong	5
<b>PROVISION OF INFORMATION TO ERA</b>						
Reporting overflows within five days	14 (a)	1	C	Low	Strong	5
Provision of ERA requested report within 14 days	14 (b)	1	C	Low	Strong	5
Annual report to ERA within 30 days of end financial year	14 (c) Sch.3	1	C	Low	Strong	5
<b>PERFORMANCE OF FUNCTIONS</b>						
Compliance with Quality & performance standards	15 (a), Sch.2	2	C	Medium	Strong	4
Annual notification that supply is not potable	15 (b) Sch	2	C	Medium	Strong	4
Emergency telephone notification and action advice in place	15(c) Sch. 2	2	C	Medium	Strong	4
No overflows	15(d) Sch.2	2	C	Medium	Strong	4
<b>CUSTOMER CONTRACTS</b>						
Licensee may enter into contracts for supply	16 (a)	1	C	Low	Strong	5
Contract which modify, restrict or excludes the lease to be approved in writing by ERA	16 (b)	1	C	Low	Strong	5
<b>OBLIGATIONS TO PUBLIC AUTHORITIES</b>						
Wastewater treatment plant to have and be operated in accord with DEP Licences	17	2	C	Medium	Strong	4
<b>CONSUMER CONSULTATION</b>						
Public meeting held to receive customer views on plant operation changes	18 (a)	1	C	Low	Strong	5
Provision for customers to raise matters of concern during Council meeting public question time	18 (b)	1	C	Low	Strong	5
<b>CUSTOMER CHARTER / INFORMATION BROCHURE</b>						
Annual report prepared and comment sought from customers	19 (a)	1	C	Low	Strong	5
Annual Brochure in place, displayed in Shire office and available on request	19 (b))	1	C	Low	Strong	5
<b>DISPUTE RESOLUTION</b>						
Recording & Response to complaints	20 (a) , (b) Sch 2	2	C	Low	Strong	5
Advice to Customer of Rights	20 (c),	2	C	Low	Strong	5
Responsiveness (eg solution within 21 days)	20 (d), (e), (f), (g)	2	C	Medium	Moderate	4
<b>CUSTOMER SURVEYS</b>						
ERA may request customer surveys	21	1	c	Low	Strong	5

- **ASSET MANAGEMENT REVIEW – PRELIMINARY RISK ASSESSMENTS**

<b>Management Process</b>	<b>Consequence</b>	<b>Likelihood</b>	<b>Inherent Risk</b>	<b>Controls Adequacy</b>	<b>Review Priority</b>
1- <b>Asset Planning</b>	Moderate	Unlikely	Medium	Strong	4
2 – <b>Asset Creation</b>	Moderate	Unlikely	Medium	Strong	4
3 – <b>Asset Disposal</b>	Minor	Unlikely	Low	Strong	5
4 <b>Environmental Analysis</b>	Moderate	Unlikely	Medium	Strong	4
5 - <b>Operations</b>	Major	Probable	High	Strong	2
6 <b>Maintenance</b>	Major	Probable	High	Strong	2
7 <b>Management System</b>	Moderate	Probable	Medium	Strong	4
8 – <b>Risk Management</b>	Minor	Unlikely	Low	Strong	5
9 – <b>Contingency Planning</b>	Minor	Unlikely	Low	Strong	5
10 – <b>Financial Planning</b>	Moderate	Unlikely	Medium	Strong	4
11 – <b>Capital Expenditure Planning</b>	Moderate	Unlikely	Medium	Strong	4
12 – <b>Management Plan Review</b>	Minor	Probable	Low	Strong	4

## APPENDIX 1 - PART B

### OPERATIONAL AUDIT, COMPLIANCE & RISK ASSESSMENT CRITERIA

The following tables have been copied from The Economic Regulation Authority's publication "*Audit Guidelines: Electricity, Gas and Water Licences – September 2006.*"

#### OPERATIONAL AUDIT

##### Compliance Rating Scale (ERA Guidelines Table No.1)

Compliance Status	Rating	Description of Compliance
COMPLIANT	5	Compliant with no further action required to maintain compliance
COMPLIANT	4	Compliant apart from minor or immaterial recommendations to improve the strength of internal controls to maintain compliance
COMPLIANT	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
NON-COMPLIANT	2	Does not meet minimum requirements
SIGNIFICANTLY NON-COMPLIANT	1	Significant weaknesses and/or serious action required

##### Types of Compliance Risk (ERA Guidelines Table No.5)

Type of Risk	Example
Non-compliance with supply quality	Public health and safety issues, quality not fit for purpose
Non-compliance with supply reliability	Delays in new connections, supply disruptions /inadequacies
Non-compliance with consumer protection	Customer service levels not met, higher prices charged
Non-compliance with legislation/licence	Breach of industry acts & regulations, other licence conditions not met, eg performance reporting

**Consequence Ratings (ERA Guidelines Table No.6)**

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

**Likelihood Ratings (ERA Guidelines Table No.7)**

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

**Inherent Risk Rating (ERA Guidelines Table No.8)**

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

**Description of Inherent Risk Rating (ERA Guidelines Table No.9)**

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

**Adequacy Rating for Existing Controls (ERA Guidelines Table No.10)**

Level	Description
<b>3 Strong</b>	Strong controls sufficient for the identified task
<b>2 Moderate</b>	Moderate controls that cover significant risks; improvement possible
<b>1 Weak</b>	Controls are weak or non-existent and have minimal impact on the risks

**Assessment of Audit Priority (ERA Guidelines Table No.11)**

<b>Inherent Risk</b>	<b>Adequacy of Existing Controls</b>		
	<b>Weak</b>	<b>Moderate</b>	<b>Strong</b>
<b>High</b>	Audit Priority 1	Audit Priority 2	
<b>Medium</b>	Audit Priority 3	Audit Priority 4	
<b>Low</b>	Audit Priority 5		



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**APPENDIX 1 - PART C**
**ASSET MANAGEMENT EFFECTIVENESS & RISK ASSESSMENT CRITERIA**

The following table have been copied from The Economic Regulation Authority's publication "*Audit Guidelines: Electricity, Gas and Water Licences – September 2006.*"

**Asset Management Review Effectiveness Rating Scale**

(ERA Guidelines Table No.3)

<b>Effectiveness</b>	<b>Rating</b>	<b>Description</b>
Continuously Improving	5	Continuously improving organisation capability and process effectiveness
Quantitatively Controlled	4	Measurable performance goals established and monitored
Well Defined	3	Standard processes documented, performed and coordinated
Planned and Tracked	2	Performance is planned, supervised, verified and tracked
Performed Informally	1	Base practices are performed
Not Performed	0	Not performed (indicate if not applicable)