



Mr Bruce Watson
Manager Sustainability and Environment
CITIC Pacific Mining Management Pty Ltd
Level 7 45 St Georges Terrace
PERTH WA 6001

Dear Mr Watson

ENVIRONMENTAL PROTECTION ACT 1986: LICENCE

Premises

Eramurra Village: Construction Village Sewage Facility
G08/75

Licence Number: L8387/2009/2

You are advised that your application for a licence to operate the works prescribed under the *Environmental Protection Act 1986* at the above-mentioned location has been approved subject to the attached conditions. Your receipt for the prescribed fee will be forwarded to you separately.

The licence includes attached conditions. Under section 58(1) of the Act, it is an offence to contravene a condition of a licence. This offence carries a penalty of up to \$125,000 and a daily penalty of up to \$25,000.

In accordance with section 102(1)(c) of the Act, you have 21 days to appeal the conditions of the licence. Under section 102(3)(a) of the Act, any other person may also appeal the conditions of the licence. To lodge an appeal contact the Office of the Appeals Convenor on 6467 5190 or by email at admin@appealsconvenor.wa.gov.au.

Where a licence is issued for more than one year it requires payment of an annual fee and will cease to have effect if the fee is unpaid. It is the occupier's responsibility to lodge a fee application and pay the annual fee in sufficient time to avoid incurring a late payment fee and for processing to be completed before the licence anniversary date.

If you have any queries regarding the above information, please contact Damian Thomas on 9168 4218.

Yours sincerely

Stephen Checker
Officer delegated under section 20
of the *Environmental Protection Act 1986*

Thursday, 12 March 2015



Licence

Environmental Protection Act 1986, Part V

Licensee: Pastoral Management Pty Ltd

Licence: L8387/2009/2

Registered office: Level 7, 45 St Georges Terrace
PERTH WA 6001

ACN: 124 021 512

Premises address: Eramurra Village: Construction Village Sewage Facility
G08/75
MARDIE WA 6714
As depicted in Schedule 1

Issue date: Thursday, 12 March 2015

Commencement date: Sunday, 22 March 2015

Expiry date: Saturday, 21 March 2020

Prescribed premises category

Schedule 1 of the *Environmental Protection Regulations 1987*

| Category number | Category description | Category production or design capacity | Approved premises production or design capacity |
|-----------------|---|--|---|
| 54 | Sewage facility: premises – (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters. | 100 cubic metres or more per day | 900 cubic metres per day |

Conditions

This licence is subject to the conditions set out in the attached pages.

.....
Officer delegated under section 20
of the *Environmental Protection Act 1986*



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Environmental Protection Act 1986, Part V

Licensee: Pastoral Management Pty Ltd

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Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the Licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: <http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your Licence. Non-compliance with your Licence is an offence and strict penalties exist for those who do not comply.



Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Other Guidelines which you should be aware of include:

- *Western Australian Guidelines for Biosolids Management*, Department of Environment and Conservation, December 2012 (as amended from time to time).

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

Pastoral Management Pty Ltd (PMPL) operate the Eramurra Village to accommodate up to 2,054 workers on the Sino Iron Project located at Cape Preston. Eramurra Village is approximately 80km south of Karratha, the nearest population centre. The nearest sensitive receptor is located 14 km’s away and is another accommodation village not associated with this facility. The Fortescue River Mouth is a popular recreational area and is located 19 km’s to the north west.

A wastewater treatment plant (WWTP) was constructed in 2009 to service the camp. The WWTP is a turbo membrane bioreactor (T-MBR) type. The WWTP operates effectively within a range of hydraulic loading rates of 270 to 900 m³ per day. The village population of 2,054 results in an approximate throughput of approximately 616m³ per day. This is based on an average approximate use of 300L per day per person.

The WWTP consists of a sequence of tanks including an input tank, balance tank, two trains of anoxic and aeration tanks followed by membrane systems, treated water storage tanks and chlorination tank, with effluent disposal via irrigation and sludge disposal to landfill.

The WWTP discharges to a single spray irrigation field of 21ha. A second irrigation field was constructed on the original works approval however, it has been removed from the licence at the licensee’s request. The second irrigation field has not been used and is not required to maintain loading rates.

The main potential emissions from the WWTP are discharges of treated wastewater via infiltration to land (and potentially to groundwater) and fugitive emissions in the form of odour.

This Licence is the successor to licence L8387/2009/1 and includes conversion to the REFIRE format.

The licences and works approvals issued for the Premises since 18/3/2010 prior to the issue of this Licence are:

| Instrument log | | |
|----------------|------------|--|
| Instrument | Issued | Description |
| L8387/2009/1 | 18/03/2010 | New application |
| L8387/2009/2 | 12/03/2015 | This Licence reissue and conversion to REFIRE format |



Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION



Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'Act' means the *Environmental Protection Act 1986*;

'annual period' means the inclusive period from 1 July until 30 June in the following year;

'AS/NZS 2031' means the Australian Standard AS/NZS 2031 *Selection of containers and preservation of water samples for microbiological analysis*;

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

'AS/NZS 5667.10' means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

'averaging period' means the time over which a limit or target is measured or a monitoring result is obtained;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means:

Manager Licensing (North West)
Department of Environment Regulation
Locked Bag 33 Cloisters Square
PERTH WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9333 7550
Email: industry.regulation@der.wa.gov.au;

'code of practice for the storage and handling of dangerous goods' means document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

'dangerous goods' has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

'environmentally hazardous material' means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

'fugitive emissions' means all emissions not arising from point sources identified in Section 2.5;

'Licence' means this Licence numbered L8387/2009/2 and issued under the Act;



'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

'process equipment' means any wastewater or sludge containment infrastructure or wastewater treatment vessel;

'quarterly' means the 4 inclusive periods from 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March and 1 April to 30 June;

'Schedule 1' means Schedule 1 of this Licence unless otherwise stated;

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

'spot sample' means a discrete sample representative at the time and place at which the sample is taken;

'Waste Code' means the Waste Code assigned to a type of controlled waste for purposes of waste tracking and reporting as specified in the Department of Environment Regulation "Controlled Waste Category List" (July 2014), as amended from time to time; and

'wastewater treatment vessels' means any vessel or tank containment infrastructure associated with the treatment of wastewater.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Licence.

1.2 General conditions

1.2.1 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:

- (a) pollution;
- (b) unreasonable emission;
- (c) discharge of waste in circumstances likely to cause pollution; or
- (d) being contrary to any written law.

1.2.2 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.

1.2.3 The Licensee, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous substances are stored in accordance with the code of practice for the storage and handling of dangerous goods.

1.2.4 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.



1.3 Premises operation

1.3.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit, and/or target in this section.

1.3.2 The Licensee shall only allow waste to be accepted on to the Premises if:

- (a) it is of a type listed in Table 1.3.1;
- (b) the quantity accepted is below any limit listed in Table 1.3.1; and
- (c) it meets any specification listed in Table 1.3.1.

Table 1.3.1: Waste acceptance

| Waste | Waste Code | Quantity Limit | Specification ¹ |
|---------------------------------------|------------|-------------------------|---|
| Putrescible and Organic wastes | | | |
| Sewage | N/A | 900 m ³ /day | Accepted through controlled waste transfer point and sewer inflow only. |

Note 1: Additional requirements for the acceptance of controlled waste are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

1.3.3 The Licensee shall ensure that the wastes accepted onto the Premises are only subjected to the process(es) set out in Table 1.3.2 and in accordance with any process requirements described in that table.

Table 1.3.2: Waste processing

| Waste type | Process | Process requirements |
|------------|---|---|
| Sewage | Physical, biological and chemical treatment | In accordance with the manufactures operating instructions for the installed equipment. |

1.3.4 The Licensee shall manage the irrigation of treated wastewater such that:

- (a) no irrigation generated run-off, spray drift or discharge occurs beyond the boundary of the defined irrigation area(s);
- (b) treated wastewater is evenly distributed over the irrigation area;
- (c) no soil erosion occurs;
- (d) irrigation does not occur on land that is waterlogged; and
- (e) vegetation cover is maintained over the irrigation area.

1.3.5 The Licensee shall manage the wastewater treatment vessels such that:

- (a) overtopping of the vessels does not occur;
- (b) stormwater runoff is prevented from entering the vessels;
- (c) there is no discernible seepage loss from the vessels; and
- (d) vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the vessels.



2 Emissions

2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of section 2 of this Licence.

2.2-2.4 Point source emissions to air, surface water and groundwater

There are no specified conditions relating to point source emissions to air, surface water or groundwater.

2.5 Emissions to land

2.5.1 The Licensee shall ensure that where waste is emitted to land from the emission points in Table 2.5.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.5.1: Emissions to land

| Emission point reference and location on Map of emission points | Emission point reference on Map of emission points | Description | Source including abatement |
|---|--|---|----------------------------|
| L1 | Spray irrigation area | Discharge from irrigation pump station to spray irrigation area | Treated wastewater |

2.5.2 The Licensee shall target emissions to land to meet the levels specified in Table 2.5.2.

Table 2.5.2: Emission targets to land

| Emission point reference | Parameter | Target (including units) | Averaging period |
|----------------------------------|--|--------------------------|------------------|
| Treated wastewater storage tanks | Total Phosphorus | <12 mg/L | Spot sample |
| | Total Nitrogen | <50 mg/L | |
| | Total Suspended Solids | <40 mg/L | |
| | Biochemical Oxygen Demand | <30 mg/L | |
| | <i>Escherichia coli</i> (<i>E.coli</i>) ¹ | <1000 cfu/100ml | |
| | pH | 6-9 pH units | |

Note 1: Actual units above 1 cfu/100mL are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted.

2.6 Fugitive emissions

There are no specified conditions relating to fugitive emissions in this section.

2.7-2.8 Odour and Noise

There are no specified conditions relating to odour or noise in this section.



3 Monitoring

3.1 General monitoring

3.1.1 The licensee shall ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1 unless indicated otherwise in the relevant table;
- (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
- (c) all microbiological samples are collected and preserved in accordance with AS/NZS 2031;
- (d) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

3.1.2 The Licensee shall ensure that quarterly monitoring is undertaken at least 45 days apart;

3.1.3 The Licensee shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

3.1.4 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

3.3 -3.4 Monitoring of point source emissions to air

There are no specified conditions relating to monitoring of point source emissions to air, surface water and groundwater in this section

3.5 Monitoring of emissions to land

3.5.1 The Licensee shall undertake the monitoring in Table 3.5.1 according to the specifications in that table.

Table 3.5.1: Monitoring of emissions to land

| Emission point reference | Parameter | Units | Averaging Period | Frequency |
|--------------------------|----------------------------|-----------|------------------|-----------|
| L1 | pH ¹ | pH units | Spot Sample | Quarterly |
| | Biochemical Oxygen Demand | mg/L | | |
| | Total Suspended Solids | mg/L | | |
| | <i>E.coli</i> ² | cfu/100ml | | |
| | Total Nitrogen | mg/L | | |
| | Total Phosphorus | mg/L | | |

Note 1: In-field non-NATA accredited analysis permitted.

Note 2: Actual units above 1 cfu/100mL are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted.



3.6 Monitoring of inputs and outputs

3.6.1 The Licensee shall undertake the monitoring in Table 3.6.1 according to the specifications in that table.

Table 3.6.1: Monitoring of inputs and outputs

| Input/Output | Monitoring point reference | Parameter | Units | Averaging period | Frequency |
|--|----------------------------|-----------------------------------|---------------------|------------------|------------|
| Treated wastewater discharged to spray irrigation area | Outflow meter M1 | Volumetric flow rate (cumulative) | m ³ /day | Quarterly | Continuous |

3.7-3.9 Process monitoring, ambient environmental quality monitoring and meteorological monitoring

There are no specified conditions relating to process monitoring, ambient environmental quality monitoring or meteorological monitoring in this section.

4 Improvements

There are no specified improvement conditions in this section.



5 Information

5.1 Records

5.1.1 All information and records required by the Licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 5.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.

5.1.2 The Licensee shall ensure that:

- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
- (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.

5.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.

5.1.4 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

5.2 Reporting

5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 120 calendar days after the end of the annual period. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.

| Table 5.2.1: Annual Environmental Report | | |
|---|---|---------------------------------------|
| Condition or table (if relevant) | Parameter | Format or form¹ |
| - | Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken | None specified |
| Table 3.5.1 | Monitoring of emissions to land | None specified |
| Table 3.6.1 | Monitoring of inputs and outputs | None specified |
| 5.1.3 | Compliance | Annual Audit Compliance Report (AACR) |
| 5.1.4 | Complaints summary | None specified |

Note 1: Forms are in Schedule 2

5.2.2 The Licensee shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and licence limits and/or targets.



5.2.3 The Licensee shall submit the information in Table 5.2.2 to the CEO according to the specifications in that table.

Table 5.2.2: Non-annual reporting requirements

| Condition or table (if relevant) | Parameter | Reporting period | Reporting date (after end of the reporting period) | Format or form |
|----------------------------------|--|------------------|--|--|
| - | Copies of original monitoring reports submitted to the Licensee by third parties | Not Applicable | Within 14 days of the CEOs request | As received by the Licensee from third parties |

5.3 Notification

5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO and in accordance with the notification requirements of the table.

Table 5.3.1: Notification requirements

| Condition or table (if relevant) | Parameter | Notification requirement ¹ | Format or form ² |
|----------------------------------|--|--|-----------------------------|
| 1.3.1 and 2.1.1 | Breach of any limit specified in the Licence | Part A: As soon as practicable but no later than 5pm of the next working day Part B: As soon as practicable | N1 |
| - | Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution | | |
| 3.1.4 | Calibration report | As soon as practicable | None specified |

Note 1: No notification requirement in the Licence shall negate the requirement to comply with s72 of the Act.

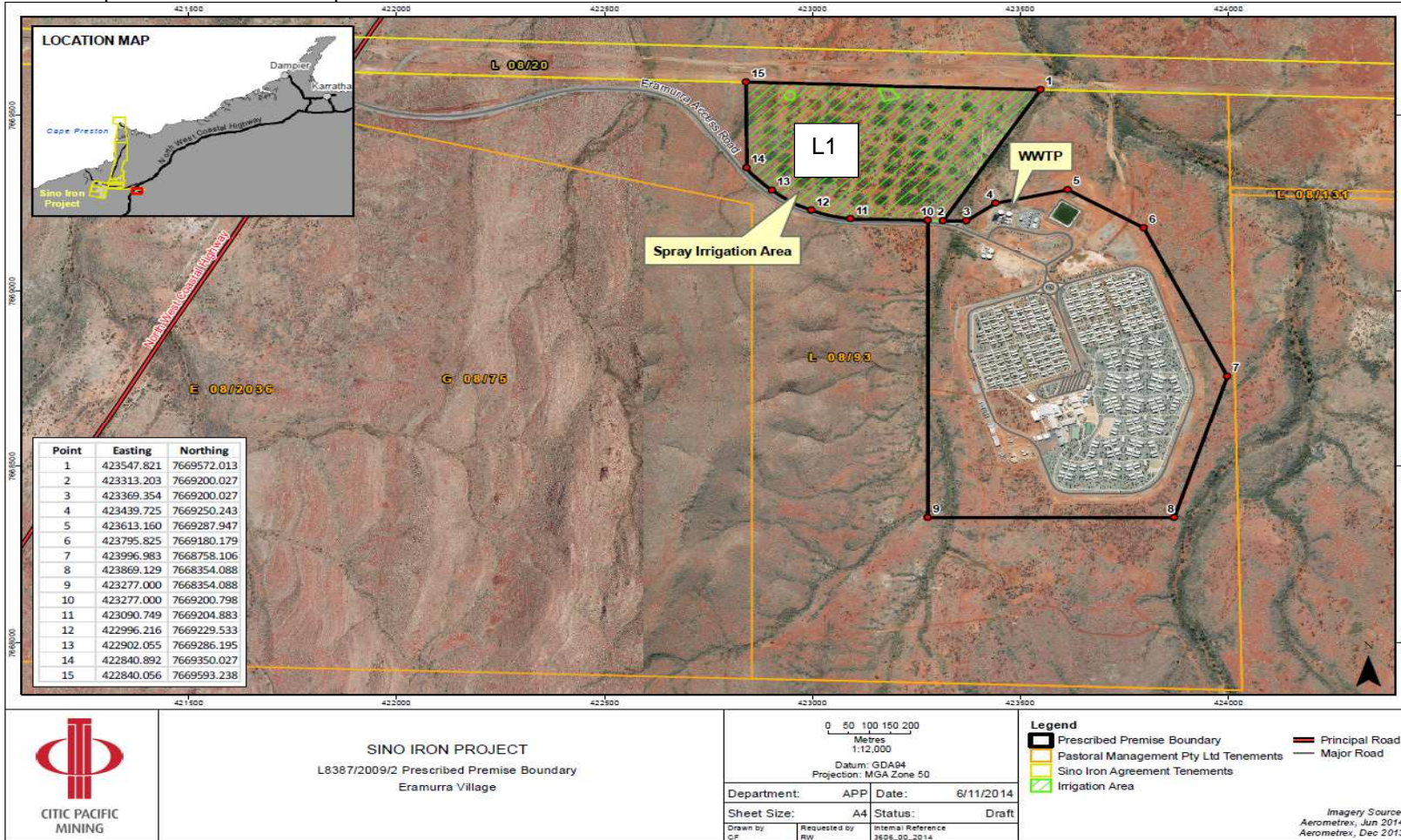
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

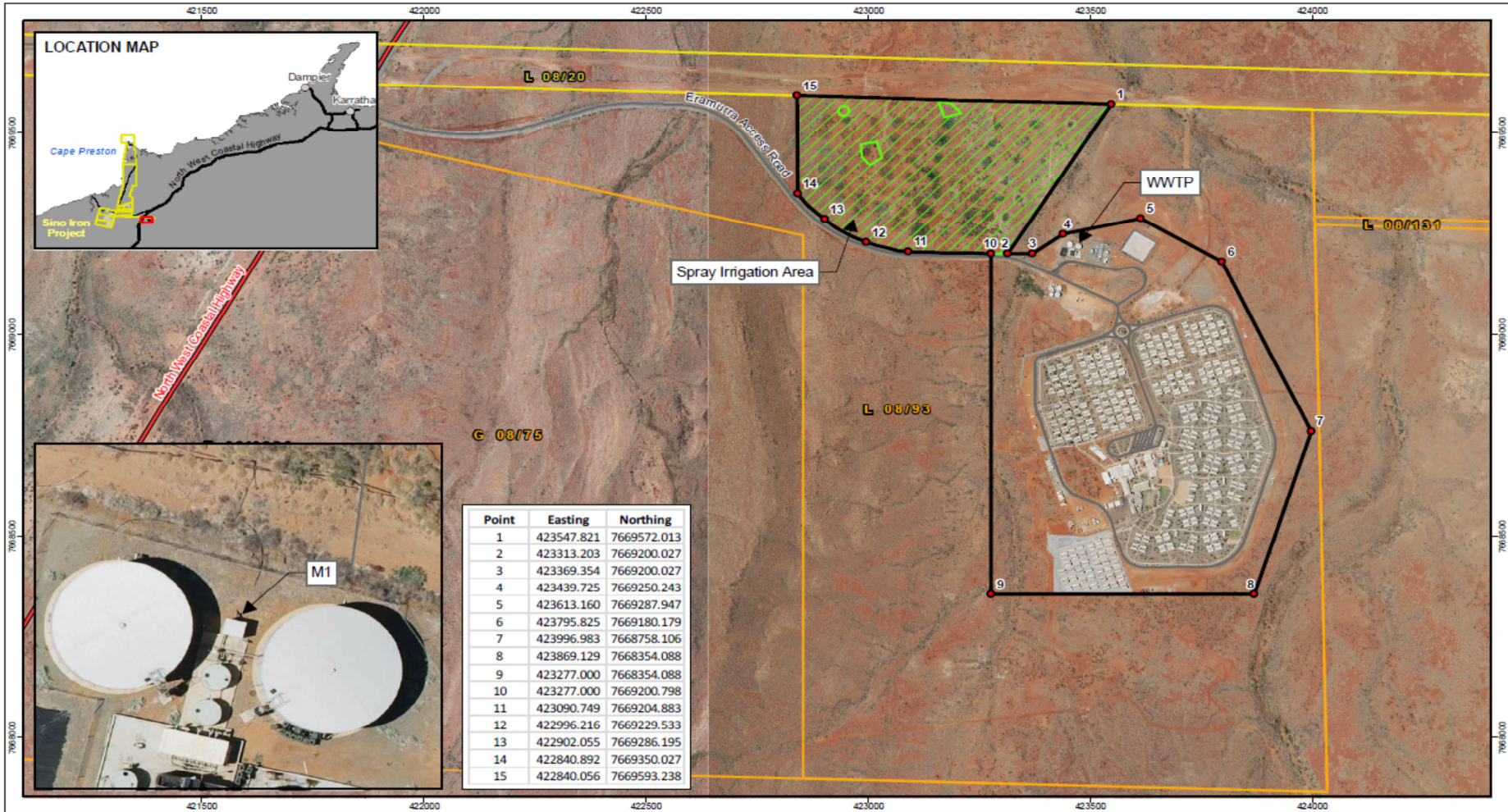
The Premises is shown in the map below. The Black line depicts the Premises boundary. Emission point references as depicted in table 2.5.1 are also shown below





Map of monitoring locations

The locations of the monitoring point M1 defined in Tables 3.6.1 are shown below.





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

| | |
|-------------------------------------|----------------------|
| Licence Number: | Licence File Number: |
| Company Name: | ABN: |
| Trading as: | |
| Reporting period: _____ to _____ | |

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes Please proceed to Section C

No Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:



SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) must only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

| If the licence holder is | | The Annual Audit Compliance Report must be signed and certified: |
|--|--|--|
| An individual | <input type="checkbox"/> <input type="checkbox"/> | by the individual licence holder, or by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf. |
| A firm or other unincorporated company | <input type="checkbox"/> <input type="checkbox"/> | by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation. |
| A corporation | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or by two directors of the licensee; or by a director and a company secretary of the licensee, or if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation. |
| A public authority (other than a local government) | <input type="checkbox"/> <input type="checkbox"/> | by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation. |
| a local government | <input type="checkbox"/> <input type="checkbox"/> | by the chief executive officer of the licensee; or by affixing the seal of the local government. |

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Licence: L8387/2009/2 Licensee: Pastoral Management Pty Ltd
 Form: N1 Date of breach:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

These pages outline the information that the operator must provide.
 Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

| | |
|--------------------------------|--|
| Licence Number | |
| Name of operator | |
| Location of Premises | |
| Time and date of the detection | |

| Notification requirements for the breach of a limit | |
|---|--|
| Emission point reference/ source | |
| Parameter(s) | |
| Limit | |
| Measured value | |
| Date and time of monitoring | |
| Measures taken, or intended to be taken, to stop the emission | |

| Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution | |
|--|--|
| Date and time of event | |
| Reference or description of the location of the event | |
| Description of where any release into the environment took place | |
| Substances potentially released | |
| Best estimate of the quantity or rate of release of substances | |
| Measures taken , or intended to be taken, to stop any emission | |
| Description of the failure or accident | |



Part B

| | |
|---|--|
| Any more accurate information on the matters for notification under Part A. | |
| Measures taken, or intended to be taken, to prevent a recurrence of the incident. | |
| Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission. | |
| The dates of any previous N1 notifications for the Premises in the preceding 24 months. | |

| | |
|---|--|
| Name | |
| Post | |
| Signature on behalf of Pastoral Management Pty Ltd | |
| Date | |



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Pastoral Management Pty Ltd

Licence: L8387/2009/2

Registered office: Level 7, 45 St Georges Terrace
PERTH WA 6001

ACN: 124 021 512

Premises address: Eramurra Village: Construction Village Sewage Facility
G08/75
MARDIE WA 6714

Issue date: Thursday, 12 March 2015

Commencement date: Sunday, 22 March 2015

Expiry date: Saturday, 21 March 2020

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by:

Ty Matson
Licensing Officer

Decision Document authorised by:

Stephen Checker
Manager Licensing



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

Works approval and licence conditions

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.



2 Administrative summary

| Administrative details | | |
|--|---|--|
| Application type | Works Approval <input type="checkbox"/> | |
| | New Licence <input checked="" type="checkbox"/> | |
| | Licence amendment <input type="checkbox"/> | |
| | Works Approval amendment <input type="checkbox"/> | |
| Activities that cause the premises to become prescribed premises | Category number(s) | Assessed design capacity |
| | 54 | 900 cubic metres per day |
| Application verified | Date: 6 January 2015 | |
| Application fee paid | Date: 9 February 2015 | |
| Works Approval has been complied with | Yes <input type="checkbox"/> | No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Compliance Certificate received | Yes <input type="checkbox"/> | No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Commercial-in-confidence claim | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Commercial-in-confidence claim outcome | N/A | |
| Is the proposal a Major Resource Project? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| | | Referral decision No: Managed under Part V <input checked="" type="checkbox"/> Assessed under Part IV <input type="checkbox"/> |
| Is the proposal subject to Ministerial Conditions? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| | | Ministerial statement No: EPA Report No: |
| Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| | Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| Is the Premises within an Environmental Protection Policy (EPP) Area | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| If Yes include details of which EPP(s) here. | | |
| Is the Premises subject to any EPP requirements? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP. | | |



3 Executive summary of proposal and assessment

Pastoral Management Pty Ltd (PMPL) operates the Eramurra Village: Construction Village Sewage Facility. Eramurra Village houses the workforce for both the construction and operation of the nearby Sino Iron Project.

PMPL is a wholly owned subsidiary of Citic Pacific Limited (CITIC). CITIC is incorporated in Hong Kong and its major shareholder is the government of the People's Republic of China. CITIC is developing the Sino Iron Project at Cape Preston.

The Sino Iron Project is a major resource project requiring the construction of a mine, tailings storage facility, desalination plant, port facilities and associated infrastructure. The Sino Iron Project was assessed under Part 4 of the *Environmental Protection Act 1986* and is subject to Ministerial Statements 635, 764, 822 and 823. Neither Eramurra Village nor the wastewater treatment plant (WWTP) were assessed as part of the Sino Iron Project and as such are not subject to Ministerial conditions.

Eramurra Village is located approximately 80 km south of Karratha, the nearest population centre. The nearest sensitive receptor is located approximately 13 km to the west. These are accommodation camps associated with other unrelated projects. A public recreation area is located at the Fortescue River Mouth 18 km to the northwest.

The WWTP is a turbo membrane bioreactor (T-MBR) system. The WWTP operates effectively within a range of hydraulic loading rates from 270 to 900 m³ per day. The construction accommodation village has a maximum population of 2,054 people with a wastewater production rate of 300L per person per day resulting in a maximum throughput of approximately 616 m³ per day.

The WWTP consists of a sequence of tanks including an input tank, balance tank, two trains of anoxic and aeration tanks, followed by membrane systems, treated water storage tanks and chlorination tank, with effluent disposal via irrigation and sludge disposal to a licensed landfill.

DER has not re-assessed the acceptability or impacts of emissions and discharges from the premises or revisited any existing emission control levels. Where conditions have been added or removed these have been justified in section 4. This licence is the successor to L8387/2009/1 and has been converted to a new format REFIRE licence.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DEC's Policy Statement - Limits and targets for prescribed premises (2006), and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

| DECISION TABLE | | | | |
|----------------------------------|---|------------|---|-----------------------------------|
| Works Approval / Licence section | Condition number W = Works Approval L = Licence | OSC or NSC | Justification (including risk description & decision methodology where relevant) | Reference documents |
| Premises operation | L1.3.1 | OSC | L1.3.1 has been added to require the licensee to investigate any limit breaches associated with the design capacity of 900 m ³ per day. | Application supporting documents. |
| | L1.3.2 | OSC | L1.3.2 has been included to limit the waste volume (as per design capacity) and type (sewage) able to accepted for onsite treatment. This condition also defines the waste receival points at the premises. | |
| | L1.3.3 | OSC | L1.3.3 requires that the facility is operated in accordance with the operating instructions for the installed equipment. | |
| | L1.3.4 | OSC | L1.3.4 outlines the management requirement for the irrigation area. On the previous version of this licence two irrigation areas were included. The licensee was only using the larger irrigation area of 21 ha whilst a smaller irrigation area was not used. This licence version has removed the second irrigation area at the licensee's request. | |
| | L1.3.5 | OSC | L1.3.5 is included to set management requirements for the wastewater treatment vessels to reduce the risk of effluent being released to the environment. The plant has been designed to include both high and low level alarms that will further mitigate risk. | |
| Emissions general | L2.1.1 | OSC | Emissions have previously been assessed and have not been reassessed in this document. | N/A |



| DECISION TABLE | | | | |
|---|---|-------------------|---|--|
| Works Approval / Licence section | Condition number W = Works Approval L= Licence | OSC or NSC | Justification (including risk description & decision methodology where relevant) | Reference documents |
| Emissions to land including monitoring | L2.5.1 | OSC | Previous licence condition 2 has been converted to OSC L2.5.1 to authorise treated wastewater to be discharged to the spray irrigation area. | Application supporting documents |
| | L2.5.2 | OSC | The previous licence version did not include limits or targets for parameters of the treated wastewater discharged to the irrigation area. Monitoring requirements were, however, imposed. The initial Environmental Assessment Report (EAR) discussed targets which have been introduced into the licence in condition L2.5.2. The imposed targets are in line with <i>Australian Guidelines for the Sewage System- Effluent Management Class C water quality targets</i> and the stated manufactures output estimates. | <i>Australian Guidelines for the Sewage System- Effluent Management Class C water quality targets</i> |
| Monitoring general | L3.1.1 | OSC | This condition lists the Australian Standards that are to be used for sampling during the monitoring program. It further stipulates that all samples are to be tested by an NATA laboratory. Table 3.5.1 outlines the parameters required to be tested for. It is acknowledged that due to its relatively isolated location, the 6 hour holding time limit as stipulated by AS5667.1 is not achievable for pH. This parameter is allowed to be measured in field by the licensee. All other holding times are achievable. | Australian Standard AS/NZS 5667.1 – Water Quality – Sampling – Guidance on the Design of sampling programs, sampling techniques and the preservation and handling of samples |
| | L3.5.1 | OSC | Condition 3 has been replaced by condition L3.5.1 and Table 3.5.1. The licensee was previously required to sample monthly for the parameters listed. This requirement has been changed to quarterly. This will bring this licence in line with other sites managed by the licensee. This WWTP does not have a history of exceedances and the increase in the sampling periods does not present an unacceptable environmental risk. | Previous Licence and EAR L8387/2009/1 |



| DECISION TABLE | | | | |
|---|---|-------------------|--|---|
| Works Approval / Licence section | Condition number W = Works Approval L= Licence | OSC or NSC | Justification (including risk description & decision methodology where relevant) | Reference documents |
| Monitoring of inputs and outputs | L3.6.1 | OSC | Condition 7 of the previous licence has been replaced by condition L3.6.1. This condition requires the monitoring of outflows from the WWTP via the installed continuous flow meter. The (previous daily) recording requirement has been amended to a quarterly average. This is in line with other WWTPs managed by the licensee. | Application supporting documents Previous Licence and EAR L8387/2009/1 |
| Licence Duration | N/A | N/A | This facility was previously licensed for five years. No significant issues have resulted in that time that have either been reported or detected during inspections. Current DER policy permits the issuance of the licence for 5 years. | AER and AACR reports received. DER Inspection Reports. |



5 Advertisement and consultation table

| Date | Event | Comments received/Notes | How comments were taken into consideration |
|---|---|--------------------------------------|--|
| 16/02/2015 | Application advertised in the West Australian (or other relevant newspaper) | No submissions | N/A |
| 12/01/2015, 25/02/2015 and 09/03/2015 | Proponent sent a copy of draft instrument | Minor comments provided by Proponent | Comments considered as necessary |



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

| Likelihood | Consequence | | | | |
|----------------|---------------|----------|----------|----------|---------|
| | Insignificant | Minor | Moderate | Major | Severe |
| Almost Certain | Moderate | High | High | Extreme | Extreme |
| Likely | Moderate | Moderate | High | High | Extreme |
| Possible | Low | Moderate | Moderate | High | Extreme |
| Unlikely | Low | Moderate | Moderate | Moderate | High |
| Rare | Low | Low | Moderate | Moderate | High |