



Mr Paul Collie
Environmental Manager
Pilbara Iron Pty Ltd
GPO Box B66
PERTH WA 6838

Dear Mr Collie

ENVIRONMENTAL PROTECTION ACT 1986 – AMENDMENT TO LICENCE

Licence: L8139/2007/2

Premises: Parker Point (Kangaroo Hill) Wastewater Treatment Plant

Further to my letter dated 8 January 2015, please find enclosed your amended *Environmental Protection Act 1986* licence.

If you have any questions or objections relating to the licence, please do not hesitate to contact the enquiries officer above on (08) 9182 2009 for clarification or discussion of any grievances you have.

If you are concerned about, or object to any aspect of the amendment, you may lodge an appeal with the Minister for Environment within 21 days from the date on which this licence is received. The Office of the Appeals Convenor can be contacted on 6467 5190 to find out the procedure and fee.

Members of the public may also appeal the amendments. The Appeals Registrar at the Office of the Appeals Convenor can be contacted after the closing date of appeals to check whether any appeals were received.

Yours sincerely

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

Thursday, 22 January 2015

enc: *Environmental Protection Act 1986* Licence L8139/2007/2, Partial Decision Document
copy to: City of Karratha



LICENCE FOR PRESCRIBED PREMISES *Environmental Protection Act 1986*

LICENCE NUMBER: L8139/2007/2

FILE NUMBER: DER2013/001072

LICENSEE

Pilbara Iron Pty Ltd
Level 22, Central Park
152-158 St Georges Terrace
PERTH WA 6000
ACN: 107 216 535

PREMISES

Parker Point (Kangaroo Hill) Wastewater Treatment Plant
Part of L3116/3469
BURRUP WA 6714
(as depicted in Attachment 1)

PRESCRIBED PREMISES CATEGORY

Schedule 1 of the *Environmental Protection Regulations 1987*

CATEGORY NUMBER	CATEGORY DESCRIPTION	CATEGORY PRODUCTION OR DESIGN CAPACITY	PREMISES PRODUCTION OR DESIGN CAPACITY
54	Sewage facility	100 cubic metres or more per day	186 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*

ISSUE DATE Thursday, 9 February 2012

COMMENCEMENT DATE: Sunday, 12 February 2012

AMENDMENT DATE: Thursday, 22 January 2015

EXPIRY DATE: Saturday, 11 February 2017

CONDITIONS OF LICENCE

Environmental Protection Act 1986

LICENCE NUMBER: L8139/2007/2

FILE NUMBER: DER2013/001072

DEFINITIONS

In these conditions of licence, unless inconsistent with the text or subject matter:

'Australian Standard 5667' means the most recent version and relevant parts of the Australian and New Zealand series of guidance standards for Water Quality Sampling AS/NZS 5667;

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

'CEO' for the purpose of correspondence means;

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

'cfu/100 mL' means colony forming units per 100 millilitres;

'kg/ha/year' means kilograms per hectare per year;

'mg/L' means milligrams per litre;

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

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

'Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF' means the most recent edition of the Standard Methods for Examination of Water and Wastewater as published by the American Public Health Association (APHA), the American Water Works Association (AWWA) and the Water Environment Federation (WEF), generally abbreviated to APHA-AWWA-WEF;

'WWTP' means Wastewater Treatment Plant; and

'Western Australian guidelines for biosolids management' means the document titled *Western Australian guidelines for biosolids management, December 2012* published by the Department of Environment and Conservation as amended from time to time.

GENERAL CONDITIONS

DISCHARGE TO LAND

- 1 The licensee shall ensure that all effluent discharged consists only of treated wastewater.
- 2 The licensee shall ensure that effluent is only discharged to the irrigation area.

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WWTP MONITORING

- 3 The licensee shall record the monthly cumulative volume of treated wastewater discharged for the purpose of irrigation and this data shall be included in the Annual Environmental Report in tabular form.
- 4 The licensee shall ensure that water quality monitoring occurs during the operation of the WWTP, such that water quality of the effluent is monitored at the frequency stated in column 2 of Table 1 for the parameters in column 1 of Table 1.

Table 1: Parker Point (Kangaroo Hill) WWTP water quality monitoring requirements

Column 1	Column 2
Parameters	Monitoring Frequency
Biochemical Oxygen Demand (mg/L)	Quarterly
Total Suspended Solids (mg/L)	Quarterly
pH	Quarterly
Total Nitrogen (mg/L)	Quarterly
Total Phosphorus (mg/L)	Quarterly
<i>E.coli</i> (cfu/100 mL)	Quarterly

- 5 The licensee shall collect and preserve all water samples in accordance with the relevant parts of Australian Standards 5667.
- 6 The licensee shall ensure that all parameters requiring laboratory analyses are conducted by an organisation with NATA accreditation for the specified parameters in accordance with the current Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF.
- 7 The licensee shall compare the results of the water quality monitoring required by condition 4, to the targets stated in column 2 of Table 2, for the parameters in column 1 of Table 2 and present this information in the Annual Environmental Report along with corrective actions for any exceedances of these targets.

Table 2: Parker Point (Kangaroo Hill) WWTP effluent quality criteria

Column 1	Column 2
Parameter	Target Discharge
Biochemical Oxygen Demand (mg/L)	<20
Total Suspended Solids (mg/L)	<30
pH (pH value)	6-9
Total Nitrogen (mg/L)	<20
Total Phosphorus (mg/L)	<7
<i>E.coli</i> (cfu/100 mL)	10 000

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NUTRIENT LOADING RATES FOR IRRIGATION AREA

- 8 The licensee shall for the parameters listed in column 1 of Table 3 aim not to exceed the targets listed in column 2 of Table 3 and present this information in the Annual Environmental Report along with corrective actions for any exceedances of these targets.

Table 3: Nutrient loading rates for the Parker Point (Kangaroo Hill) WWTP irrigation area

Column 1	Column 2
Parameter	Target
Total Nitrogen	480 kg/ha/year
Total Phosphorus	120 kg/ha/year

STORMWATER MANAGEMENT

- 9 The licensee shall manage the WWTP in a manner such that:
- (a) stormwater runoff resulting from the roof and site drainage shall not enter the WWTP;
 - (b) overtopping of the treatment tanks does not occur;
 - (c) there is no discernible seepage loss from the plant and irrigation holding tank;
 - (d) vegetation and floating debris (emergent or otherwise) shall be prevented from growing within the treatment tanks; and
 - (e) treated wastewater is directed to the irrigation holding tank for spray irrigation.

DISPOSAL OF BIOSOLID AND OTHER RESIDUALS

- 10 The licensee shall dispose of sludge and biosolids in accordance with the Western Australian guidelines for biosolids management or to a licensed or registered landfill facility.
- 11 The licensee shall ensure that sludge is immediately removed offsite or stored onsite within a hardstand area or concrete bed.
- 12 The licensee shall ensure that the storage area referred to in condition 11 is bunded to enable the containment and recovery of any liquid matter.

REPORTING CONDITIONS

ANNUAL ENVIRONMENTAL REPORT

- 13 The licensee shall provide the CEO, by **30 April** each year, a copy of an Annual Environmental Report containing data collected, as required by any condition of this licence, during the period beginning **1 January** the previous year and ending on **31 December** in the same year.

ANNUAL AUDIT COMPLIANCE REPORT

- 14 The licensee shall by **30 April** in each year, provide to the CEO an Annual Audit Compliance Report in the form of Attachment 2 to this licence, signed and certified in the manner required by Section C of the form, indicating the extent to which the licensee has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the premises, during the period beginning **1 January** the previous year and ending on **31 December** in the same year.

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ATTACHMENT 1 – PLAN OF PREMISES



ISSUE DATE: Thursday, 9 February 2012

AMENDMENT DATE: Thursday, 22 January 2015

CONDITIONS OF LICENCE

Environmental Protection Act 1986

LICENCE NUMBER: L8139/2007/2

FILE NUMBER: DER2013/001072

ATTACHMENT 2 – ANNUAL AUDIT COMPLIANCE REPORT

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:

ISSUE DATE: Thursday, 9 February 2012

AMENDMENT DATE: Thursday, 22 January 2015

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CONDITIONS OF LICENCE

Environmental Protection Act 1986

LICENCE NUMBER: L8139/2007/2

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SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each Licence condition that was not complied with.

a) Licence condition not complied with:	
b) Date(s) when the non compliance occurred, if applicable:	
c) Was this non compliance reported to DER?:	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to DER verbally Date _____ <input type="checkbox"/> Reported to DER in writing Date _____	<input type="checkbox"/> No
d) Has DER taken, or finalised any action in relation to the non compliance?:	
e) Summary of particulars of the non compliance, and what was the environmental impact:	
f) If relevant, the precise location where the non compliance occurred (attach map or diagram):	
g) Cause of non compliance:	
h) Action taken, or that will be taken to mitigate any adverse effects of the non compliance:	
i) Action taken or that will be taken to prevent recurrence of the non compliance:	

Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:

ISSUE DATE: Thursday, 9 February 2012

AMENDMENT DATE: Thursday, 22 January 2015

CONDITIONS OF LICENCE

Environmental Protection Act 1986

LICENCE NUMBER: L8139/2007/2

FILE NUMBER: DER2013/001072

SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may 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"/> by the individual licence holder, or <input type="checkbox"/> 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"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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"/> by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or <input type="checkbox"/> by two directors of the licensee; or <input type="checkbox"/> by a director and a company secretary of the licensee, or <input type="checkbox"/> if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or <input type="checkbox"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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"/> by the chief executive officer of the licensee; or <input type="checkbox"/> 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)

ISSUE DATE: Thursday, 9 February 2012

AMENDMENT DATE: Thursday, 22 January 2015



Partial Decision Document

Environmental Protection Act 1986, Part V

Proponent: Pilbara Iron Pty Ltd

Licence: L8139/2007/2

Registered office: Level 22, Central Park
152-158 St Georges Terrace
PERTH WA 6000

ACN: 107 216 535

Premises address: Parker Point (Kangaroo Hill) Wastewater Treatment Plant
Part of L3116/3469
BURRUP WA 6714

Issue date: Thursday, 9 February 2012

Commencement date: Sunday, 12 February 2012

Expiry date: Saturday, 11 February 2017

Decision

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

Decision Document prepared by:

Sonya Poor
Licensing Officer

Decision Document authorised by:

Fiona Esszig
A/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 type="checkbox"/> Licence amendment <input checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	54	186 cubic metres per day
Application verified	Date: N/A	
Application fee paid	Date: N/A	
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 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

Pilbara Iron Pty Ltd (Pilbara Iron) operate the Parker Point (Kangaroo Hill) wastewater treatment plant (WWTP), which treats up to 186 cubic metres per day (m³/day) of sewage. Treated wastewater is discharged to a dedicated 2.01 hectare (ha) spray irrigation field.

The WWTP is located adjacent to the Kangaroo Hill Camp on lease L3116/3469. The camp accommodates workers primarily involved in the Dampier Port Upgrade and is located approximately 1.6 kilometres (km) north-east of the town of Dampier and 500 metres (m) east of the Parker Point administration buildings.

During this amendment conducted in December 2014 the licence has had mainly administrative changes made. Unless referred to in the decision table, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels. Where conditions have been added or removed from the existing licence these have been justified in Section 4.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* 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.

Note: This licence is a non-REFIRE licence. Where applicable references have been made to the non-REFIRE licence conditions.

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	Licence condition 9.	N/A.	During this amendment condition 9(b) has been changed to remove reference to overtopping except as a result of an extreme rainfall event. The WWTP should be operated to ensure overtopping of treatment tanks does not occur.	General provision of the <i>Environmental Protection Act 1986</i> . <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> .
Emissions to land including monitoring	Licence condition 8.	N/A.	DER's assessment and decision making are detailed in Appendix A.	General provision of the <i>Environmental Protection Act 1986</i> .
Monitoring general	Licence conditions 5 and 6.	N/A.	Pilbara Iron test some parameters in the field (i.e. pH) rather than at a NATA accredited laboratory. The previous wording did not allow for the intent of the Standard Methods for Examination of Water and Wastewater (the Standard) to be met. During this amendment the condition has been reworded to ensure	General provisions of the <i>Environmental Protection Act</i>

consultation table

	Comments received/Notes	How comments were taken into consideration
aft	The proponent has requested that reference to the Department of Water, WQPN 22 – “Irrigation with nutrient-rich wastewater” be removed considering that Total Reactive Phosphorus, which the WQPN refers to cannot be analysed by laboratories given the type of effluent being sampled	Documents updated accordingly



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



Appendix A

Emissions to land including monitoring

The existing WWTP performance standard for nitrogen (20 mg/L) and phosphorus (7 mg/L) are within the Australian Guidelines for Sewerage Systems – Effluent Management. Table 2 demonstrates that the nutrient loading rates for nitrogen and phosphorus for the irrigation field are above the targets of 480 kilograms per hectare per year (kg/ha/year) for nitrogen and 120 kg/ha/year for phosphorus.

Table 2: Nutrient loading rates for the irrigation field

Parameter	Nitrogen	Phosphorus
Maximum throughput	186 m ³ /day	
Irrigation area	2.01 ha	
Effluent quality	20 mg/L	7 mg/L
Nutrient loading	675 kg/ha/year	236.4 kg/ha/year
Target	480 kg/ha/year	120 kg/ha/year

The 2013 Annual Environmental Report for the WWTP indicates that the WWTP generally performs under these performance standards. Quarterly results for nitrogen varies between 15.5 and 11.8 mg/L and for phosphorus 3.6 and 1.2 mg/L.

Emission Description

Emission: Discharge from the WWTP to the spray irrigation fields.

Impact: Contamination of surrounding environment and potential impacts on the ecology of ground and surface water from the addition of nutrients and heavy metals.

Controls:

- Sprinklers designed to ensure no wind drift and operated to ensure no ponding; and
- High evaporation rates in the region.

Risk Assessment

Consequence: Insignificant

Likelihood: Unlikely

Risk Rating: Low

Regulatory Controls

During this amendment targets for nutrient loading rates for the irrigation areas have been added to the licence with corrective actions for any exceedances of these targets being reported in the Annual Environmental Report. Pilbara Iron discharges treated effluent to a 2.01 ha spray irrigation field. The inclusion of this condition, puts the onus on Pilbara Iron to target the total nitrogen and total phosphorus discharged to the spray irrigation field in line with the Department of Water, Water Quality Protection Note (WQPN) 22 – *Irrigation with nutrient-rich wastewater* for risk category D.

Residual Risk

Consequence: Insignificant

Likelihood: Rare

Risk Rating: Low