



Licence

Environmental Protection Act 1986, Part V

Licensee: BHP Billiton Iron Ore Pty. Ltd.

Licence: L8679/2012/1

Registered office: Level 31 Brookfield Place
125 – 137 St George's Terrace
PERTH WA 6000

ACN: 008 700 981

Premises address: Mooka Rail Construction Camp
E669867 N7731497 E669241 N7731452
E669241 N7732118 E668241 N7732118
E668241 N7733631 E669625 N7733631
E671219 N7731777 E671374 N7731819
E671698 N7730628 E671254 N7730509
E671561 N7729355 E669721 N7729355
E668891 N7730803 E670030 N7730921
Zone 50
BOODARIE WA 6722 as depicted in Schedule 1

Issue date: Thursday, 24 January 2013

Commencement date: Monday, 28 January 2013

Expiry date: Saturday, 27 January 2018

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 m ³ or more per day	200 m ³ per day

Conditions

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

Date signed: 18 February 2016

.....
Steve Checker
Manager Licensing (Waste Industries)
Officer delegated under section 20
of the *Environmental Protection Act 1986*



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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. The DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

The DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process the DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. The 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.



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

The Mooka Camp area is located adjacent to the existing BHPBIO Newman to Port Hedland rail alignment and the rail access road corridor. BHP Billiton Iron Ore Pty Ltd (BHPBIO) has constructed a wastewater treatment plant (WWTP) at the Mooka Camp to service a temporary construction workforce of approximately 519 personnel. The WWTP employs a Submerged Aerated Filter based on Moving Bed Bio-film Reactor technology via an enclosed tank system. The WWTP has the capacity to treat up to 200 m³ per day although BHPBIO only expects to treat 182 m³ per day under normal operating conditions. Treated wastewater is disposed of via discharge to a 5.6 ha sprayfield containing native vegetation.

The nearest sensitive receptor is the residential town of South Hedland which is located 10 km north of the WWTP.

This Licence is the result of an amendment sought by the Licensee to remove the requirement for photo point monitoring of vegetation within the sprayfield.

The licences and works approvals issued for the Premises since 01/03/2012 are:

Instrument log		
Instrument	Issued	Description
W5099/2011/1	01/03/2012	Works approval issued
L8679/2012/1	24/01/2013	New licence issued
L8679/2012/1	18/02/2016	Proponent application for amendments to remove photo point monitoring of vegetation. Licence amendment to remove targets and update to new 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 to 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 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;
Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au

'freeboard' means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

'Licence' means this Licence numbered L8679/2012/1 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;

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

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



- 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 version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.2 General conditions

- 1.2.1 The Licensee shall immediately recover, or remove and dispose of spills of sewage, partially treated sewage and sewage sludge 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 in this section.
- 1.3.2 The Licensee shall only allow waste to be accepted onto the Premises if:
- (a) it is of a type listed in Table 1.3.2;
 - (b) the quantity accepted is below any limit listed in Table 1.3.2; and
 - (c) it meets any specification listed in Table 1.3.2.

Table 1.3.2: Waste acceptance			
Waste	Waste Code	Quantity Limit	Specification
Sewage	N/A	200 m ³ per day	Accepted through Waste Water Pump Station

- 1.3.3 The Licensee shall ensure that the wastes accepted onto the Premises are only subjected to the processes set out in Table 1.3.3 and in accordance with any process limits described in that table.

Table 1.3.3: Waste processing		
Waste type	Process	Process Requirement
Sewage	Biological, physical and chemical treatment	Treatment of sewage waste shall not exceed the treatment capacity of 200 m ³ per day.
Sewage sludge	Storage	In accordance with the document titled "Western Australian guidelines for biosolids management" (Department of Environment and Conservation 2012) as amended from time to time.
Treated Wastewater	Disposal	Disposal of up to 200 m ³ per day (annual average) to Sprayfield to irrigate native vegetation.

- 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;
 - (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:
- (a) implement security measures at the site to prevent as far as is practical unauthorised access to the site;
 - (b) undertake regular inspections of all security measures and repair damage as soon as practicable; and
 - (c) ensure the entrance gates are closed and locked when the site is closed or unmanned.
- 1.3.6 The Licensee shall dispose of grit, screenings, sludge and biosolids to a licensed landfill facility.



2 Emissions

2.1 General

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

2.2 Emissions to land

- 2.2.1 The Licensee shall ensure that where waste is emitted to land from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this Licence.

Table 2.2.1: Emissions to land

Emission point reference	Description	Source including abatement
Sprayfield Pump	Discharge to Sprayfield	Treated wastewater pipeline from wastewater treatment plant

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;
 - (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; and
 - (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 the flow meters used on the Premises to comply with the conditions of this Licence are maintained and calibrated in accordance with the manufacturer's specifications.
- 3.1.4 Where the requirements for sampling, calibration or maintenance cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, the Licensee shall bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

3.2 Monitoring of emissions to land

- 3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of emissions to land

Emission point reference	Parameter	Units	Frequency
Final Storage Tank	Biochemical Oxygen Demand;	mg/L	Quarterly
	Total Suspended Solids;	mg/L	
	Total Dissolved Solids;	mg/L	
	pH ¹ ;	-	
	Total Nitrogen as N;	mg/L	
	Total Phosphorus; and <i>E. coli</i> .	mg/L cfu/100mL	

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



3.3 Monitoring of inputs and outputs

3.3.1 The Licensee shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

Table 3.3.1: Monitoring of inputs and outputs					
Input/Output	Monitoring Point Reference	Parameter	Units	Averaging period	Frequency
Treated wastewater discharged to the Sprayfield	Sprayfield Pump	Volumetric flow rate (cumulative)	m ³ per day	Monthly	Continuous

4 Information

4.1 Records

4.1.1 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 4.1.1(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.

4.1.2 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.

4.1.3 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.

4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 92 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table, which was collected during the annual period.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form ¹
-	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 1.3.2	Waste acceptance	Tabular
Table 1.3.3	Waste processing	Tabular
Table 3.2.1	Monitoring of emissions to land	Tabular
Table 3.3.1	Monitoring of inputs and outputs	Tabular
4.1.2	Compliance	Annual Audit Compliance Report (AACR)
4.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2



4.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:

- a) an assessment of the information contained within the report against monitoring results from the previous three annual periods;
- b) calculation of the annual Total Nitrogen and Total Phosphorus loading rates applied to the Sprayfield during the annual period, and an assessment of these loading rates against the loading rates from the previous three annual periods; and
- c) quantities of sludge removed during each desludging event that occurred during the annual period.

4.2.3 The Licensee shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.

Table 4.2.2: 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

4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
1.3.1; 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 usual working day.	N1
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	Part B: As soon as practicable	
3.1.4	Calibration report	As soon as practicable.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

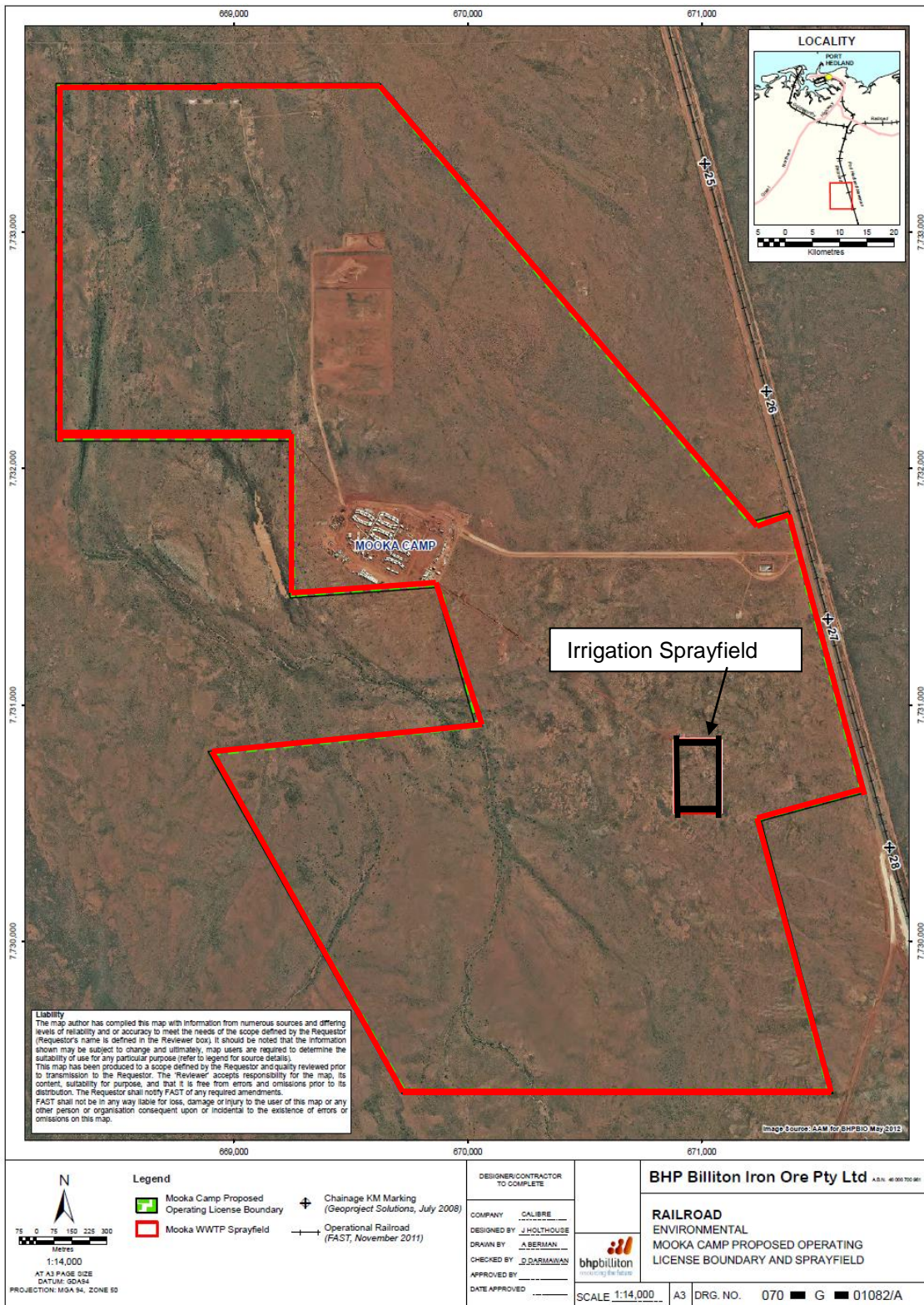
Note 2: Forms are in Schedule 2



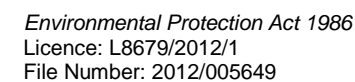
Schedule 1: Maps

Premises map

The Premises is shown in the map below. The red line depicts the Premises boundary.



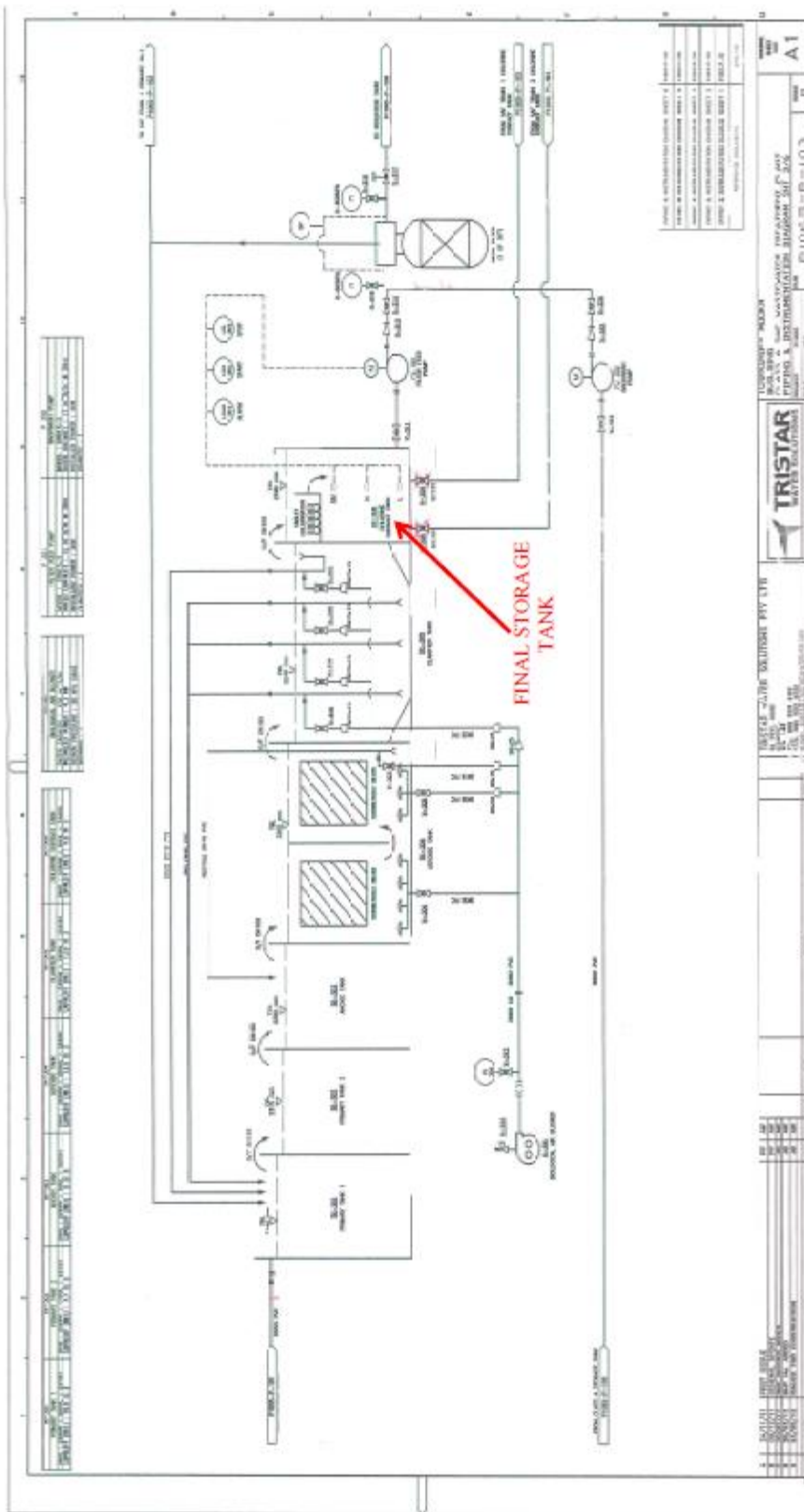
The location of the emission point defined in Table 2.2.1 and the monitoring point defined in Table 3.3.1 are shown below.





Maps of monitoring locations

The location of the monitoring point defined in Table 3.2.1 is 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: Trading as:	ABN:
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 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 the DER?:	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to the DER verbally Date _____ <input type="checkbox"/> Reported to the 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:



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"/> <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: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____

SEAL (if signing under seal)

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____



Licence: L8679/2012/1
Form: N1

Licensee: BHP Billiton Iron Ore Pty. Ltd.
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 BHP Billiton Iron Ore Pty. Ltd.	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: BHP Billiton Iron Ore Pty. Ltd.

Licence: L8679/2012/1

Registered office: Level 31 Brookfield Place
125 – 137 St George's Terrace
PERTH WA 6000

ACN: 008 700 981

Premises address: Mooka Rail Construction Camp
E669867 N7731497 E669241 N7731452
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E668891 N7730803 E670030 N7730921
Zone 50
BOODARIE WA 6722.

Issue date: Thursday, 24 January 2013

Commencement date: Monday, 28 January 2013

Expiry date: Saturday, 27 January 2018

Decision

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

Decision Document prepared by: Sarah Greenwood
Licensing Officer

Decision Document authorised by: Steve Checker
Delegated Officer



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1 Purpose of this Document

This decision document explains how the DER has assessed and determined the application and provides a record of the DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to the 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.



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	200 m ³ 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		
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

The Mooka Camp area is located adjacent to the existing BHPBIO Newman to Port Hedland rail alignment and the rail access road corridor. BHP Billiton Iron Ore Pty Ltd (BHPBIO) has constructed a wastewater treatment plant (WWTP) at the Mooka Camp to service a temporary construction workforce of approximately 519 personnel. The WWTP employs a Submerged Aerated Filter based on Moving Bed Bio-film Reactor technology via an enclosed tank system. The WWTP has the capacity to treat up to 200 m³ per day although BHPBIO only expects to treat 182 m³ per day under normal operating conditions. Treated wastewater is disposed of via discharge to a 5.6 ha sprayfield containing native vegetation.

The nearest sensitive receptor is the residential town of South Hedland which is located 10 km north of the WWTP.

This Licence is the result of an amendment sought by the Licensee to remove the requirement for photo point monitoring of vegetation within the sprayfield. There have been no changes to the operation of the premises and as such, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels except for ambient environmental quality monitoring.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and the 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	Justification (including risk description & decision methodology where relevant)	Reference documents
Premises operation	L1.3.1 – 1.3.6	Licence conditions 1.3.1 – 1.3.6 have been added to the licence to limit the type of waste accepted at the premises, how the waste is processed, the types of infrastructure to contain the waste, how the treated wastewater is managed for disposal to the sprayfield, security measures at the premises, and regulate the disposal of waste products.	
Emissions general	L2.1.1	Descriptive limits will be set through condition 2.2.1 of the licence and therefore a condition regarding recording and investigation of exceedances of limits has been included.	N/A
Emissions to land including monitoring	L2.2.1 L3.2.1	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Treated wastewater effluent being discharged to the Sprayfield. <i>Impact:</i> Contamination of surrounding land and surface water drainage systems. Potential impacts on ecology of surface water from the addition of nutrients and Total Dissolved Solids. <i>Controls:</i> The proponent proposes to direct treated effluent water to a dedicated 5.6 ha spray irrigation field containing native vegetation.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Regulatory Controls</u> Previous licence condition 2 has been converted to condition 2.2.1. Previous licence condition 7 has been converted to condition 3.2.1 and Table 3.2.1.</p> <p>Previous licence condition 8 listed target discharge values for various parameters of the final treated wastewater. In accordance with the DER's licensing process, the targets are not considered necessary if the environmental risk is low. As the assessed environmental risk is low, previous licence condition 8 has been deleted.</p> <p><u>Residual Risk</u> <i>Consequence</i>: Minor <i>Likelihood</i>: Rare <i>Risk Rating</i>: Low</p>	
Odour	N/A	Previous licence condition 1 regulated the emission of odour from the premises. Fugitive odour emissions are sufficiently regulated under section 49 of the <i>Environmental Protection Act 1986</i> . The Licensee has a statutory responsibility to comply with the Act during operation of the premises. Therefore previous licence condition 1 has been deleted and no specific conditions for fugitive odour emissions have been included on the licence.	
Monitoring general	L3.1.1 – 3.1.4	<p>As there is a requirement for monitoring of emissions to land conditions 3.1.1 – 3.1.4 have been included under general monitoring.</p> <p>Previous licence conditions 3 and 4 have been converted to condition 3.1.1. Previous licence condition 5 has been converted to condition 3.1.3.</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Monitoring of inputs and outputs	3.3.1	Due to the addition of licence conditions 1.3.2 and 1.3.3 under Premises Operation, previous licence condition 6 has been converted to licence condition 3.3.1 to monitor the output of treated wastewater discharged to the Sprayfield.	
Ambient quality monitoring	N/A	<p>Previous licence condition 9 required photo point monitoring of the vegetation at four sites within the Sprayfield and four control sites outside the Sprayfield. Previous licence condition 10 required a comparison of the photo point monitoring between the Sprayfield sites and the control sites to determine if there are any negative impacts to the native vegetation from irrigating with treated wastewater.</p> <p>As part of the licence amendment package BHPBIO submitted an environmental assessment of the photo point monitoring of native vegetation at the four Sprayfield sites in comparison to the four control sites outside of the Sprayfield, to determine if there are any negative impacts to the native vegetation from irrigating with treated wastewater. The assessment report advises no negative impacts to date have occurred to the suite of flora species present within the Sprayfield.</p> <p><u>Emission Description</u> <i>Emission:</i> Treated wastewater effluent being discharged to the Sprayfield. <i>Impact:</i> Adverse impacts on native vegetation with in the sprayfield from application of waste water containing salts and nutrients. Proponent-commissioned ecologist report advises that photo monitoring from November 2013 – July 2015 indicates no impacts have occurred. <i>Controls:</i> Distribution of wastewater; use of sprinklers to facilitate evaporation; operational/licence controls managing ponding and erosion</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>As the environmental risk of negative impacts to native vegetation from irrigating with treated wastewater is low and monitoring suggests no impact to date, photo point monitoring is therefore not required. Previous licence conditions 9 and 10 have been deleted.</p> <p><u>Residual Risk</u> <i>Consequence</i>: Insignificant <i>Likelihood</i>: Rare <i>Risk Rating</i>: Low</p>	
Information	L4.1 – 4.3	Previous licence condition 11 has been converted to condition 4.2.1. Previous licence condition 12 has been converted to condition 4.1.2.	
Licence Duration	N/A	The licence has been issued for five years and there are no issues that warrant the alteration of the licence duration for this amendment.	

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
29/01/16	Proponent sent a copy of draft instrument	16/02/16: There is no flow meter installed to measure Inputs. There is a flow meter to measure Outputs.	Modification of Table 3.3.1 to remove monitoring of Inputs.



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