



Government of **Western Australia**
Department of **Environment Regulation**

Your ref L6606/1995/9
Our ref 2012/006879
Enquiries Abnesh Chetty
Phone (08) 9080 5534
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Ms Lara Bruhns
General Manager
BHP Billiton Nickel West Pty Ltd
PO Box 8301
PERTH WA 6849

Dear Ms Bruhns

ENVIRONMENTAL PROTECTION ACT 1986: LICENCE GRANTED

Licence: L6606/1995/9

Premises: Leinster Town Wastewater Treatment Plant

A licence under the *Environmental Protection Act 1986* (the Act) has been granted for the above premises. The Department of Environment Regulation will advertise the issuing of this licence in the public notices section of *The West Australian*.

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 Convener 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 Abnesh Chetty on 9080 5534.

Yours sincerely

Steve Checker
Officer delegated under Section 20
of the *Environmental Protection Act 1986*

26 March 2015

enc: *Environmental Protection Act 1986* Licence (L6606/1995/9)



Licence

Environmental Protection Act 1986, Part V

Licensee: BHP Billiton Nickel West Pty Ltd

Licence: L6606/1995/9

Registered office: Level 41 City Square
125 St Georges Terrace
PERTH WA 6000

ACN: 004 184 598

Premises address: Leinster Town Wastewater Treatment Plant
LEINSTER WA 6437
Being Lot 995 on Plan 184483, part of Lot 512 on Plan 72427 and part of Lot 59 on Plan 220367 and within GPS coordinates listed below and as depicted in Schedule 1.

	Northing	Easting		Northing	Easting
Point 1	270887.6	6912022.6	Point 6	273030.2	6910939.5
Point 2	271627.4	6912298.3	Point 7	271940.4	6911433.0
Point 3	271992.1	6911990.2	Point 8	271213.6	6911158.7
Point 4	272987.7	6911137.5	Point 9	270887.6	6912022.6
Point 5	273082.0	6911051.7			

Issue date: Thursday, 26 March 2015

Commencement date: Saturday, 4 April 2015

Expiry date: Friday, 3 April 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	600 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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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 with 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 the Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

BHP Billiton Nickel West Pty Ltd owns the Leinster wastewater treatment plant (WWTP) located approximately 1.4km northwest from the Leinster town centre. The WWTP treats effluent waste from the town in addition to the occasional effluent waste from the Leinster Nickel Operation, located approximately 11km to the north. The Leinster WWTP is a registered waste disposal site on the WA Controlled Waste Tracking System.

The WWTP has the capacity to process up to 600 cubic metres (m³) per day of effluent. Key steps in the Leinster WWTP treatment process include pre-treatment, aeration tanks, treated effluent including the evaporation pond facility and solid waste products.

The land system and landform pattern around Leinster consist primarily of ironstone hills and ridges of various reliefs draining to lower colluvial and alluvial plains. The Leinster Town WWTP is located on the edges of such an alluvial plain. Groundwater occurs at least 10 metres depth in valleys and at greater depth in up-lying areas. The closest substantial aquifer is that developed by the 11-Mile Well potable borefield located approximately 5km east of the facility.

This Licence is a successor to licence L6606/1995/8.

The licences and works approvals issued for the Premises since 31/01/2011 are:

Instrument log		
Instrument	Issued	Description
W4830/2010/1	31/01/2011	Works approval for the upgrade of the WWTP facility including screening apparatus, aeration tanks, pumps and pipework
L6606/1995/7	21/02/2013	Licence amendment
L6606/1995/8	03/04/2014	Licence reissue
L6606/1995/8	10/10/2014	Licence amendment to REFIRE format
L6606/1995/9	26/03/2015	Licence reissue

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 August until 31 July 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 (Waste North)
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;

'controlled waste' has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;

'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;



'freeboard' means the distance between the surface level of the contents of the pond and the top of a pond embankment at its lowest point;

'fugitive emissions' means all emissions not arising from point sources;

'hardstanding' means a surface with a permeability of 10^{-9} metres/second or less;

'leachate' means liquid released by or water that has percolated through waste and which contains some of its constituents;

'Licence' means this Licence numbered L6606/1995/9 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 period' means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March;

'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;

'usual working day' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia; 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 materials 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.
- 1.2.5 The Licensee shall implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises.

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	Specification¹
Sewage	N/A	600 cubic metres per day	Accepted through sewer inflow(s) only
Septage waste (Sewage) – domestic wastes from apparatus for the treatment of sewage	K210		Waste from the Leinster Nickel Operation and septic systems from Leinster town

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 waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.3.3.

Table 1.3.3: Containment infrastructure		
Vessel or compound	Material	Requirements
Inlet works	Grit and screenings	Collected in sealed bags and stored in bins on a hardstand area
Sewage sludge drying compound	Biosolids	Temporary or permanent infrastructure to consist of a hardstand or lined area (lined to achieve a permeability of less than 10 ⁻⁹ m/s or equivalent), capable of preventing surface run-off of leachate and sludge and which includes a leachate collection system
	Leachate	Returned to aeration tanks
Biosolid storage	Dried biosolids	Stored in sealed skip bins
Evaporation pond	Treated wastewater	In situ soils used for construction of embankment walls
Seepage interception trench	Treated wastewater	In situ soils used for construction of the trench; seepage returned by pump to the evaporation ponds



- 1.3.4 The Licensee shall manage all evaporation ponds such that:
- (a) overtopping of the ponds does not occur;
 - (b) a freeboard equal to, or greater than, 300mm is maintained;
 - (c) the integrity of the containment infrastructure is maintained; and
 - (d) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or internal pond embankments.
- 1.3.5 The Licensee shall manage the wastewater treatment vessels such that:
- (a) overtopping of the wastewater treatment vessels does not occur;
 - (b) stormwater runoff is prevented from entering the wastewater treatment vessels;
 - (c) there is no discernible seepage loss from the wastewater treatment vessels; and
 - (d) vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the wastewater treatment 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 in this section.

2.5 Emissions to land

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

2.6 Fugitive emissions

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

2.7 Odour

2.7.1 The Licensee shall ensure that odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the Premises.

2.8 Noise

There are no specified conditions relating to 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;
- (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.

3.2–3.4 Monitoring of point source emissions to air, surface water or groundwater

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

3.5 Monitoring of emissions to land

There are no specified conditions relating to monitoring of emissions to land in this section.

3.6 Monitoring of inputs and outputs

There are no specified conditions relating to monitoring of inputs and outputs in this section.

3.7 Process monitoring

3.7.1 The Licensee shall undertake the monitoring in Table 3.7.1 according to the specifications in that table.

Table 3.7.1: Process monitoring						
Monitoring point reference	Process description	Parameter	Units	Averaging period	Frequency	Method
P1	Discharge from wastewater treatment plant to evaporation pond	Volumetric flow rate (cumulative)	m ³ /day	Continuous	Monthly	None specified
		pH ¹	-			
		5-day Biochemical Oxygen Demand	mg/L	Spot sample	Quarterly	
		Total Dissolved Solids				
		Total Suspended Solids				
		Total Nitrogen				
		Total Phosphorus				
Escherichia coli ²	cfu/100 mL					

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

Note 2: Actual units above 1 CFU/100 mL 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.

3.8-3.9 Ambient environmental quality and meteorological monitoring



There are no specified conditions relating to ambient environmental quality 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 90 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 incidents that have occurred during the annual period and any action taken	None specified
3.7.1	Volumes of treated wastewater discharged to the evaporation ponds	None specified
	Results of treated wastewater analysis	
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.

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 CEO's 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 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
-	Any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	Part A: As soon as practicable but no later than 5pm of the next usual working day Part B: As soon as practicable	N1

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

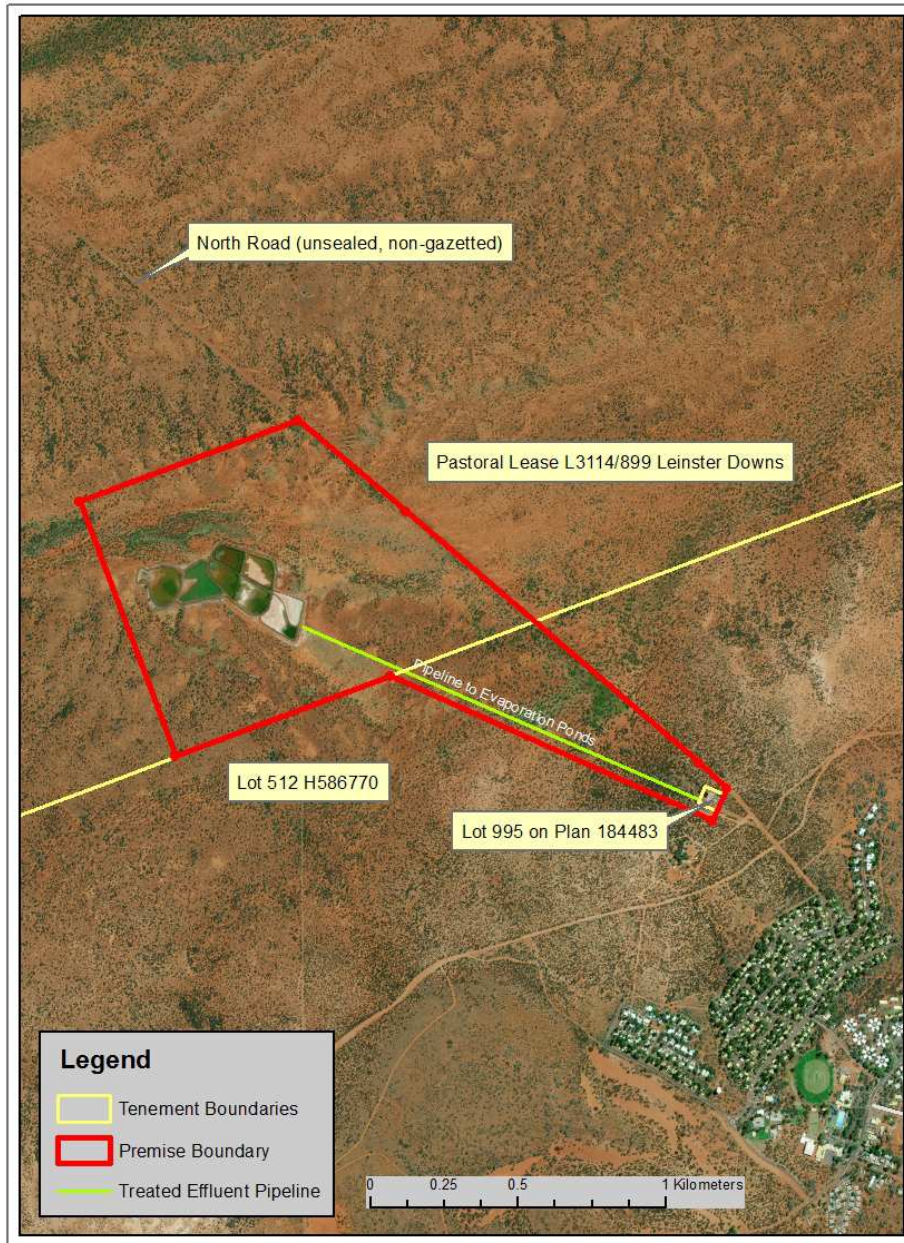
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

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



 Nickel West Stainless Steel Materials Grid: GDA 1994 MGA Zone 51 Map ID: .mxd	Author: Aaron Gleeson	 Leinster Town WWTP Premise Boundary
	Date: 17/02/2014	
	Scale: 1:10,515	
	Figure No: 1 of 1	



Map of monitoring locations

The location of the monitoring point defined in Table 3.7.1 is shown below.



 Nickel West Stainless Steel Materials Grid: GDA 1994 MGA Zone 51	Author: Rebecca Nixon	 Leinster Townsite Wastewater Treatment Plant Monitoring Point
	Date: 31/05/2014	
	Scale: 1:1,000	



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.

Licence: L6606/1995/8 Licensee: BHP Billiton Nickel West Pty Ltd
Form: AACR Period :
Name: Annual Audit Compliance Report

Annual Audit Compliance Report

Section A: Statement of compliance with licence conditions

Were all conditions of licence complied with within the annual period?		
Yes	<input type="checkbox"/>	Initial Sections A & B, then proceed to Section C
No	<input type="checkbox"/>	Initial Section A, then 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

a) Licence condition not complied with?	
b) Date(s) b) Date(s) and time(s) the non-compliance occurred, if applicable?	
c) Was this non-compliance reported to DER?	
<input type="checkbox"/> Yes, and <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 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	

Please use a separate page for each licence condition that was not complied with. Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:



Section C: Signature and certification

This AACR must only be signed by a person(s) with legal authority to sign it as defined 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 AACR 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 (CEO) of DER to sign on the Licensee's behalf.
a corporation	<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 Corporations Act 2001; 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 CEO of DER.
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 CEO of DER.
a local government	<input type="checkbox"/> <input type="checkbox"/>	by the CEO 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 AACR 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: L6606/1995/9
Form: N1

Licensee: BHP Billiton Nickel West 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 Nickel West Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: BHP Billiton Nickel West Pty Ltd

Licence: L6606/1995/9

Registered office: Level 41 City Square
125 St Georges Terrace
PERTH WA 6000

ACN: 004 184 598

Premises address: Leinster Town Waste Water Treatment Plant
LEINSTER WA 6437
Being Lot 995 on Plan 184483, part of Lot 512 on Plan 72427 and part of
Lot 59 on Plan 220367

Issue date: Thursday, 26 March 2015

Commencement date: Saturday, 4 April 2015

Expiry date: Friday, 3 April 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: Abnesh Chetty
Licensing Officer

Decision Document authorised by: Steve Checker
Acting Manager Licensing Waste Industries
(North)



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1 Purpose of this document

This decision document explains how DER has assessed and determined the application for a works approval or licence, 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 inclusions of any optional standard conditions are 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	Assessed design capacity
	54	600 cubic metres per day
Application verified	Date: 05 February 2015	
Application fee paid	Date: 17 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		
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 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, e.g. Site is subject to SO ₂ requirements of Kwinana EPP.		



3 Executive summary of proposal

BHP Billiton Nickel West Pty Ltd owns the Leinster Waste Water Treatment Plant (WWTP) located approximately 1.4 kilometres northwest from the town of Leinster. The WWTP treats effluent waste from the town in addition to the occasional effluent waste from the Leinster Nickel Operation, located approximately 11 kilometres to the north.

Approximately 150 tonnes per annum of sewage comes from Leinster mine site however this figure may vary depending on underground operations. An additional 10-20 tonnes per annum is collected from septic systems within the town of Leinster (not via sewer inflows) and transported as a controlled waste to the facility for treatment. The Leinster WWTP is a registered disposal site on the WA Controlled Waste Tracking System. The WWTP has the capacity to process up to 600 cubic metres (m³) per day of effluent.

The key aspects of the Leinster WWTP include pre-treatment, aeration tanks, treated effluent and evaporation pond facility, and solid waste products. The raw sewage enters the wastewater treatment plant through a gravity sewer main, via a rotary screw screen. The screened effluent is gravity fed into a Demand Aeration Tank (DAT) with a pump continuously recirculating flow between the DAT and an Intermittent Aeration Tank (IAT), which operates on an aerate-settle-decant cycle. A surface aerator in each tank operates during the aeration stage in order to achieve nitrification of ammonia to nitrate. After aeration, the surface aerators are stopped in order to create an anoxic environment suitable for denitrification of nitrate into gaseous nitrogen. The tanks are allowed to settle before the treated effluent is siphoned to a decant pond. The IAT has an emergency overflow pipeline to a bunded catch pit (decommissioned component from the old treatment plant) for the unlikely event of a system failure or high flow.

The treated effluent in the decant pond is then pumped via a buried pipeline to the evaporation pond facility. The quantity of effluent sent to the evaporation pond facility is measured by a continuous flow meter which is read on a monthly basis. The evaporation pond facility consists of a series of eight ponds, providing approximately 80,000m³ of effluent containment. The ponds are fenced and locked to prevent unauthorised access. The effluent is manually rotated between the ponds on an as needs basis dependent on rain, evaporation rates and sewage quantities.

In addition to the treated effluent, two solid waste products are created during the treatment process: filter screenings and activated sludge. Screenings are contained within long tubular bags which reduce odour and handling risk. The bagged screenings are contained within lockable bins on a hardstand area. The activated sludge is pumped intermittently from the IAT to the drying beds for drying. Liquid drained from the drying beds is pumped back to the aeration tanks.

The screenings are classified as a Controlled Waste under the *Environmental Protection (Controlled Waste) Regulations 2004*. As such, these wastes are handled and disposed of at the Nickel West Leinster Minesite Class II restricted access waste facility. This facility is also listed as a Controlled Waste Disposal Facility for Category 1.02 (septage wastes - wastes from apparatus for the treatment of sewage) on the Controlled Waste Tracking System.

Historical lateral seepage of the evaporation ponds has previously been identified, as acknowledged by DER during previous inspections of the facility. Measures taken by Nickel West Leinster to mitigate potential negative impacts from the seepage on the surrounding environment include:

- Installation of a seepage interception trench in 2012 to collect seepage from the most problematic areas of the facility. Liquid collecting in the trench is pumped back into the evaporation ponds when required.



- Cycling treated effluent disposal between the individual ponds to promote evaporation from the shallow water, with a specific bias towards evaporation cells supported by the interception trench.
- Vegetation condition monitoring (conducted annually since 2009) at four sites surrounding the evaporation pond facility.

This Licence is the successor to licence L6606/1995/8. As part of this re-issue, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels. No changes to the requirements of the conditions on the previous licence have been made. The licence will be issued for a period of five years.



DECISION TABLE				
Licence section	Condition number L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Premises Operation	1.3.4	OSC	<p>REFIRE condition 1.3.4(d) has been included to require the Licensee to prevent vegetation from encroaching onto pond surfaces or internal pond embankments. The Licensee has a regular spraying program in place but is currently unable to clear the internal banks of all vegetation due to access and safety considerations (it is acknowledged that low level shallow rooted vegetation will remain on the pond embankments due to safety and access restrictions when implementing control techniques).</p> <p>Previous licence condition S1 has been removed as the impacts of the sludge removal operation are considered adequately managed with no requirement to notify DER in advance of the works. Condition S3 of the previous licence has been removed as the off-site removal of waste is regulated by other mechanisms.</p>	N/A
Licence Duration	N/A	N/A	<p>This Licence is the successor to licence L6606/1995/8. As part of this re-issue, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels. The licence will be reissued for a standard period of 5 year. There are no factors that warrant the reduction of the licence duration.</p>	N/A



5 Advertisement and consultation table

Date	Event	Comments received/notes	How comments were taken into consideration
16/03/2015	Proponent sent a copy of draft instrument	Further clarification required in the decision document regarding compliance with condition 1.3.4(d)	Proponent told that no changes to the requirements of the conditions on the previous licence have been made. Therefore information from previous decision document transferred directly which stated that low level shallow rooted vegetation will remain on the pond embankments due to safety and access restrictions when implementing control techniques.
23/03/2015	Consultation comments received from Licensee.	Licensee advised DER to proceed with the re-issued licence and decision document.	N/A



6 Emissions and discharges risk assessment framework

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