



Licence

Environmental Protection Act 1986, Part V

Licensee: Poseidon Nickel Limited

Licence: L6933/1996/14

Registered office: Unit 8 Churchill Court
331-335 Hay Street
SUBIACO WA 6008

ACN: 060 525 206

Premises address: Black Swan Nickel Mine
Mining tenements M27/39 and M27/200
KALGOORLIE WA 6430
As per Schedule 1 of the licence

Issue date: Thursday, 25 April 2013

Commencement date: Saturday, 27 April 2013

Expiry date: Thursday, 26 April 2018

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
5	Processing and beneficiation of metallic or non-metallic ore	50 000 tonnes or more per year	Design capacity 3 000 000 tonnes per annual period
6	Mine dewatering	50 000 tonnes or more per year	450 000 tonnes per annual period

Conditions

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

Date signed: 17 Decmeber 2015

.....
Tim Gentle
Manager – Industry Regulation (Resources 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. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

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

Licence requirements

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

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

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

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

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



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

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 Black Swan Nickel Mine (BSN) is situated on mining tenements M27/39, M27/200, M27/214 and M27/216, which are located approximately 53 kilometres north-east of Kalgoorlie. There is no residential housing around the Premises and the closest other licensed premise is the Gordon Sirdar Mine site, which is approximately 8 kilometres to the south-west. The mine site lies on the Mt Vettors Pastoral Lease.

This mine site is considered to be of medium priority (or risk) rating when considered against factors of likelihood and consequence of failure, complexity of operations, community concern and past performance. The main activities of significance at this site are the three tailings storage facilities (TSF's) and the processing mill which constitute Category 5.

There is potential for contaminated water and slurry impacting on the environment through either surface spills damaging vegetation and entering surface water systems, or from infiltration of contaminated water entering groundwater systems. The milling process and the transportation of material to the mill has the potential to generate large amounts of dust.

The premises is also licensed as category 6, mine dewatering, which is currently the primary activity given that the site has been in care and maintenance since 16 February 2009 and remains in this status.

The Licence was transferred on 16 April 2015 from Black Swan Pty Ltd to Poseidon Nickel Limited, following the sale which occurred on 27 March 2015.

This Licence amendment is to assess the reduction of ambient groundwater monitoring frequency from quarterly to six monthly during care and maintenance.



The licences and works approvals issued for the premises since 12 April 2000 are as follows:

Instrument log		
Instrument	Issued	Description
L6933/1996/4	12/4/2000	Licence reissue
L6933/1996/5	14/05/2001	Licence reissue
L6933/1996/6	1/5/2002	Licence reissue
L6933/1996/7	14/5/2003	Licence reissue
L6933/1996/7	26/05/2003	Licence amended to increase throughput to 610,000 tpa
L6933/1996/8	31/05/2004	Licence reissue
L6933/1996/9	31/5/2005	Licence reissue
L6933/1996/9	30/05/2005	Removed conditions 8 to 11 (TSF, Storm water and Pipeline)
L6933/1996/10	12/8/2005	Licence reissue and Lion Ore completed takeover from MPI
L6933/1996/11	13/10/2005	Licence reissue
L6933/1996/12	26/04/2007	Licence reissue and TSF lift to AHD71
L6933/1996/13	27/04/2010	Licence reissue and rectify administrative error and include new monitoring bores
W1990/1996/1	20/06/1997	Construction of second, Cygnet TSF and evaporation pond
W3951/1996/1	19/04/2004	Construction of third TSF (Black Swan)
W4347/1996/1	14/08/2007	TSF Lift Works Approval and amendment for extension
L6933/1996/14	27/04/2013	Licence re-issue and conversion to REFIRE format
L6933/1996/14	12/02/2015	Minor amendment to amend incorrect AER submission date, change parameters of flow rate for monitoring total volume in process monitoring, change premises production for dewatering and add appropriate suite of metals to ambient groundwater monitoring.
L6933/1996/14	16/04/2015	Licence transfer from Black Swan Nickel Pty Ltd to Poseidon Nickel Limited.
L6933/1996/14	17/12/2015	Licence amendment to reduce monitoring frequency whilst in care and maintenance.

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*;

'alkaline' means any liquid with a pH greater than 7.0;

'annual period' means the inclusive period from 1 January until 31 December in the same year;

'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 5667.11' means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*;

'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;

Director General

Department Administering the Environmental Protection Act 1986

Locked Bag 33

CLOISTERS SQUARE WA 6850

Telephone: (08) 9333 7510

Facsimile: (08) 9333 7550

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 L6933/1996/14 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;

'quarterly' 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;

'saline' means any liquid containing greater than 14,000mg/L total dissolved solids (TDS);



'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; and

'usual working day' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.

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.

1.1.5 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 Premises operation

1.2.1 The Licensee shall ensure that all pipelines containing tailings, decant recovery, process water or mine dewater are either:

- (a) equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures;
- (b) equipped with automatic cut-outs in the event of a pipe failure; or
- (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.

1.2.2 The Licensee shall ensure that tailings and/or decant water and/or effluent are only discharged into containment cells and/or dams or ponds with the relevant infrastructure requirements and at the locations specified in Table 1.3.1.

Table 1.3.1: Containment infrastructure		
Containment point reference	Material	Infrastructure requirements
Black Swan disseminated TSF (BSD TSF)	Tailings Dewatering from Silver Swan underground mine	Lined with 500mm clay to achieve a permeability of at least $<10^{-8}$ m/s or equivalent
Silver Swan TSF	No longer used	
Settling pond	Dewater from underground mine	HDPE lined
Decant pond	Seepage from BSD TSF, the seepage trench, and bore 6	Lined with 1mm HDPE to achieve a permeability of at least $<10^{-9}$ m/s or equivalent
Process water dam	Water from settling pond and brine from reverse osmosis plant, used for processing of ore	
Underground Dam	Water from settling pond, used for dust suppression	

1.2.3 The Licensee shall manage TSF's such that:

- (a) a minimum top of embankment freeboard of 500mm is maintained;
- (b) a seepage collection and recovery system is provided and used to capture seepage from the TSF; and
- (c) seepage is returned to the TSF or the process.



1.2.4 The Licensee shall:

- (a) undertake inspections as detailed in Table 1.3.2;
- (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences;
- (c) maintain a record of all inspections undertaken; and
- (d) investigate and implement tools for deterring birds and wildlife should they be consistently observed at the ponds or Black Swan Disseminated TSF.

Table 1.3.2: Inspection of infrastructure		
Scope of inspection	Type of inspection	Frequency of inspection
Underdrainage pipeline outlet	Visual integrity	Daily when operational, three times per week during care and maintenance
Above ground dewatering pipeline, settling pond and process water pond	Visual integrity	Daily when operational, three times per week during care and maintenance
Black Swan Disseminated TSF (BSD TSF)	Visual to confirm absence of/ or minimal surface ponding (<15%)	Daily when operational, three times per week during care and maintenance
Ponds and TSF	Visual inspection to assess presence/absence of wildlife / birds	Daily when operational, three times per week during care and maintenance
Underground dewatering pipeline	Visual integrity	Daily when operational, three times per week during care and maintenance

1.2.5 The Licensee shall maintain a seepage interceptor drain immediately downstream of the tailings dam and return the seepage collected in the drain to the tailings dam, processing plant or the evaporation ponds.



2 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 groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
- (c) 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:

- (a) quarterly monitoring is undertaken at least 45 days apart;
- (b) six monthly monitoring is undertaken at least five months apart; and
- (c) annual monitoring is undertaken at least 9 months apart.

3.2 Process monitoring

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

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Black Swan Disseminated TSF	-	Volumes of tailings deposited into the TSF	m ³	Monthly	None specified
Black Swan Disseminated TSF	-	Volumes of mine dewater discharged into the TSF	m ³	Monthly	None specified
Black Swan Disseminated TSF	-	Volumes of water recovered from the TSF	m ³	Monthly	None specified



3.3 Ambient environmental quality monitoring

3.3.1 The Licensee shall undertake the monitoring in Table 3.8.1 according to the specifications in that table and record and investigate results that do not meet any limit specified.

Table 3.8.1: Monitoring of ambient groundwater quality					
Monitoring point reference	Parameter	Limit	Units	Averaging period	Frequency
Silver Swan and Cygnet TSF TD1, TD2, TD3, TD4, TD5, TD6, TD7, TD8, TD9, TD10, TD11, TD12 (Schedule 1 – Map)	Standing Water Level (SWL)	4	mbgl	Spot sample	Six monthly while in care and maintenance Quarterly when in operation
	pH	-	pH units		
	Total Dissolved Solids (TDS); Weak Acid dissociable cyanide (WAD CN); Cobalt; Total CN; Sulfate; Chloride; Sulfate / Chloride ratio, Selenium, Zinc, Nickel, Copper, Aluminium, and Manganese	-	mg/L		
Black Swan Disseminated TSF MB1, MB1a, MB2, MB3, MB6 & MB7 ((Schedule 1 – Map)	Standing Water Level (SWL)	4	mbgl	Spot sample	Six monthly while in care and maintenance Quarterly when in operation
	pH	-	pH units		
	Total Dissolved Solids (TDS); Weak Acid dissociable cyanide (WAD CN); Cobalt; Total CN; Sulfate; Chloride; Sulfate / Chloride ratio, Selenium, . Zinc, Nickel, Copper, Aluminium, and Manganese	-	mg/L		

3.3.2 The Licensee shall, upon becoming aware that a standing water level in a monitoring bore listed in Table 3.8.1, is less than 4m below ground level, within six months design and implement a groundwater recovery plan.



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 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.
- 5.1.3 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.

5.2 Reporting

- 5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by 1 March in each year. 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 or any incidents that have occurred during the year and any action taken	None specified
5.1.3	Compliance	AACR
5.1.4	Complaints summary	None specified
Table 3.7.1	Monthly volumes in m ³	None specified
Table 3.8.1	Monitoring of ambient groundwater quality results	None specified
Table 3.8.1	Limit exceedances	None specified

Note 1: Forms are in Schedule 2

- 5.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data; and
 - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets.



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

Table 5.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form¹
-	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

Note 1: Forms are in Schedule 2

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 requirement¹	Format or form²
2.2.3	Limit exceedance where management action taken	No later than 5pm of the next usual working day.	
2.1.1	Breach of any limit specified in the Licence	No later than 5pm of the next usual working day.	N1
-	Intention for the site to recommence normal operations from care and maintenance status	At least 30 calendar days prior to site recommencing operations	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 maps below. The yellow line depicts the Premises boundary.





Map of monitoring locations

The locations of the monitoring points defined in Table 3.8.1 are shown below.





Schedule 2: Reporting & notification forms

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

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name: 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 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:



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: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Licence: L6933/1996/14
 Form: N1

Licensee: Poseidon Nickel Limited
 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	



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 Poseidon Nickel Limited	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Poseidon Nickel Limited

Licence: L6933/1996/14

Registered office: Unit 8 Churchill Court
331-335 Hay Street
SUBIACO WA 6008

ACN: 060 525 206

Premises address: Mining tenements M27/39 and M27/200
KALGOORLIE WA 6430

Issue date: Thursday, 25 April 2013

Commencement date: Saturday, 27 April 2013

Expiry date: Thursday, 26 April 2018

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 and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Fiona Sharpe
Licensing Officer

Decision Document authorised by: Tim Gentle
Delegated Officer



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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.

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
	5	3 000 000 tonnes per annual period
	6	450 000 tonnes per annual period
Application verified	Date: 25/11/2015	
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 checked="" type="checkbox"/> No <input 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

Black Swan Nickel mine (BSN) consists of the Silver Swan Massive Sulphide Nickel Project underground mine, the Black Swan Disseminated Sulphide open pit mine and the Black Swan Processing Facility.

The BSN operation produces nickel sulfide concentrate and has been in care and maintenance since 16 February 2009. The Silver Swan underground mine is currently being dewatered via a series of lift pumps with holding tanks. The water is then discharged into the Black Swan Disseminated tailings storage facility (BSD TSF). During operation of BSN, all of the water produced from dewatering is used in processing, at the paste fill plant, in underground operations and for dust suppression. Dewater from underground first goes into a settling pond, then used in the different mine processes. This is outlined in the flow chart in Schedule 1 of the BSN Licence.

The DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No significant changes have occurred and therefore, the DER has not amended conditions relating to emissions and discharges.

This partial decision document has been developed to justify the amended conditions associated with the reduction of ambient groundwater monitoring frequency during care and maintenance. The licence has also been updated into the most recent template version.



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.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1	General conditions have been removed as these are not considered enforceable conditions. Definitions are included in the Licence.	General provisions of the <i>Environmental Protection Act 1986</i>
Premises operation	L1.3.1 L1.3.3	The term 'environmentally hazardous materials' has been removed and replaced with a specific set of materials. The term 'minimised as far as possible' is not worded in a clear and certain matter. This has been removed. It is considered the remaining conditions for the management of the TSF are sufficient.	General provisions of the <i>Environmental Protection Act 1986</i>
Fugitive emissions	No conditions	Fugitive conditions have been removed in this amendment as they are not risk-based. The substantive offenses of the <i>Environmental Protection Act 1986</i> provide enforceable prohibitions for dust emissions that result in pollution or environmental harm.	General provisions of the <i>Environmental Protection Act 1986</i>
Monitoring general	L3.1.2	Part (b) has been added to ensure six monthly monitoring is undertaken at least five months apart.	N/A
Ambient quality monitoring	L3.8.1	This condition requires ambient groundwater monitoring for the Silver Swan TSF and the BSD TSF. The monitoring frequency for this condition has been re-assessed and reduced during this amendment to allow for six monthly monitoring during care and maintenance. Based on the information and data provided by the proponent, indicating	Application supporting documentation



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>no negative trending both in standing water level and quality of water, and given there are no nearby sensitive receptors, it is deemed adequate for the monitoring frequency to be reduced from quarterly to six monthly during care and maintenance.</p> <p>The standing water level target of 6 mbgl has also been removed during this amendment. Targets are deemed not enforceable and have been removed in accordance with DER's Guidance Statement <i>Setting Conditions October 2015</i>.</p>	DER's Guidance Statement – Setting Conditions October 2015
Information	L5	Condition 5.1.2 has been removed as this is not an enforceable condition and is considered redundant. Target exceedance reporting requirements have also been removed in this section as there are no longer any targets in the Licence.	N/A
Licence Duration	N/A	The current expiry of date of 26 April 2018 remains.	DER's Guidance Statement on Licence Duration



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
11/12/2015	Proponent sent a copy of draft instrument	No comments received	N/A



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