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

Your ref L8173/2007/2
Our ref 2012/006885
Enquiries Jarod Dashwood
Phone (08) 9080 5513
Fax (08) 9021 7831
Email jarod.dashwood@der.wa.gov.au

Robert Dennis
Poseidon Nickel Limited
PO Box 190
WEST PERTH WA 6872

Dear Mr Dennis,

***ENVIRONMENTAL PROTECTION ACT 1986*: LICENCE GRANTED**
Premises: Windarra Nickel Project
Special Agreement Act lease (ML261SA)
LAVERTON WA 6440

Licence Number: L8173/2007/2

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* newspaper.

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

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

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

If you have any queries regarding the above information, please contact Jarod Dashwood on (08) 9080 5513.

Yours sincerely

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

17 October 2013

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

Licence

Environmental Protection Act 1986, Part V

Licensee: Poseidon Nickel Limited

Licence: L8173/2007/2

Registered office: Level 1
8 Churchill Court
331-335 Hay St
SUBIACO WA 6008

ACN: 060 525 206

Premises address: Mt Windarra Nickel Project
Special Agreement Act lease (ML261SA)
Laverton Downs
LAVERTON WA 6440

Issue date: 17 October 2013

Commencement date: 22 October 2013

Expiry date: 21 October 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
6	Mine Dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore	50,000 tonnes or more per year	1.3GL per annual period

Conditions
Subject to this licence and the conditions set out in the attached pages.

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

Contents

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.

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. Operating without a licence is an offence under the Act.

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 Windarra Nickel Project (WNP) is located 28km north-west of Laverton in Western Australia. Nickel was first discovered at Mt Windarra in 1969, with development of the WNP commencing in 1971.

Mt Windarra underground mine is currently being dewatered and refurbished. The recommencement of mining is planned for 2014.

Dewatering is the main emission for the project. Water is extracted from the Mt Windarra underground mine and discharged into the nearby Lake Irwin salina channel.

This licence (L8173/2007/2) is the successor to licence L8173/2007/1.

Below is a list of assessments undertaken as per Part V of the Act.

Instrument log		
Instrument	**Issued**	**Description**
W4356/2007/1	10 September 2007	Category 6: Works approval. Mine dewatering
L8173/2007/1	22 October 2007	Category 6: Licence. Mine dewatering
W5118/2012/1	26 March 2012	Categories 5 and 85. Works approval. Construction of a nickel concentrator plant and new village wastewater treatment plant.
W5180/2012/1	2 July 2012	Categories 5 and 6: Works approval. Construction of a gold processing plant, in-pit TSF and dewatering of Cerberus underground mine.
L8173/2007/2	17 October 2013	Category 6: Licence reissue and conversion to REFIRE format.

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

END OF INTRODUCTION

Licence conditions

1 General

1.1 Interpretation

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

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

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

"annual period" means the inclusive period from 1 November until 31 October in the following 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 5667.4" means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made;*

"AS/NZS 5667.6" means the Australian Standard AS/NZS 5667.6 *Water Quality – Sampling – Guidance on sampling of rivers and streams;*

"AS/NZS 5667.9" means the Australian Standard AS/NZS 5667.9 *Water Quality – Sampling – Guidance on sampling from marine waters;*

"AS/NZS 5667.12" means the Australian Standard AS/NZS 5667.12 *Water Quality – Sampling – Guidance on sampling of bottom sediments;*

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

"code of practice for the storage and handling of dangerous goods" means Department of Mines and Petroleum, 2010, Storage and handling of dangerous goods — code of practice (2nd edition): Resources Safety, Department of Mines and Petroleum, Western Australia;

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

"Director" means Director, Environmental Regulation Division of the Department of Environment Regulation for and on behalf of the Chief Executive Officer as delegated under section 20 of the *Environmental Protection Act 1986;*

"Director" for the purpose of correspondence means:

Regional Leader – Industry Regulation (Goldfields)
Department of Environment Regulation
PO Box 10173
KALGOORLIE WA 6430
Telephone: (08) 9080 5506
Facsimile: (08) 9021 7831
Email: Kalgoorlie@der.wa.gov.au;

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

"fugitive emissions" means all emissions not arising from point sources identified in sections 2.2, 2.3, 2.4 and 2.5;

"licence" means this licence numbered L8173/2007/2 and issued under the *Environmental Protection Act 1986;*

"licensee" means the person or organisation named as licensee on page 1 of the licence;

"mg/L" means milligrams per litre;

"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 period" means the four 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; and

"µS/cm" means microsiemens per centimetre.

1.1.3 Any reference to an Australian or other standard in the licence means the relevant parts of the current version of that standard.

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.

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:
(a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the premises; and
(b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the premises.[1]

Note1: The Environmental Protection (Unauthorised Discharges) Regulations 2004 make it an offence to discharge certain materials into the environment.

1.3 Premises operation

1.3.1 The licensee shall ensure that all pipelines containing mine dewater are equipped with automatic cut-outs in the event of a pipe failure.

1.3.2 The licensee shall:
(a) undertake daily inspections of dewatering pipelines to determine visual integrity;
(b) take corrective action to mitigate adverse environmental consequences as soon as practicable where any inspection identifies that an appropriate level of environmental protection is not being maintained; and
(c) maintain a record of all inspections undertaken.

2 Emissions

2.1 General

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

2.2 Point source emissions to air

There are no specified conditions relating to point source emissions to air in this section.

2.3 Point source emissions to surface water

2.3.1 The licensee shall ensure that where waste is emitted to surface water from the emission points in Table 2.3.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this licence.

Table 2.3.1: Emission points to surface water

Emission point reference and location on map of emission points	Emission point reference on map of emission points	Description	Source including abatement
Discharge Point (LI- DP)	Lake Irwin discharge point	Discharge pipe to Lake Irwin	Underground mine dewatering

2.3.2 The licensee shall not cause or allow point source emissions to surface water greater than the limits listed in Table 2.3.2.

Table 2.3.2: Point source emission limits to surface water

Emission point reference	Parameter	Limit (including units)	Averaging period
Discharge Point (LI - DP)	Discharge rate	275L/sec	Spot sample

2.4 Point source emissions to groundwater

There are no specified conditions relating to point source emissions to 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

2.6.1 The licensee shall use all reasonable and practical measures to prevent and where that is not practicable to minimise dust emissions from the premises.

2.7 Odour

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

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 surface water sampling is conducted in accordance with AS/NZS 5667.4, AS/NZS 5667.6 or AS/NZS 5667.9 as relevant;
(c) all sediment sampling is conducted in accordance with AS/NZS 5667.12; and
(d) all laboratory samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured.

3.1.2 The licensee shall ensure that :
(a) monthly monitoring is undertaken at least 15 days apart;
(b) quarterly monitoring is undertaken at least 45 days apart;
(c) six monthly monitoring is undertaken at least five months apart; and
(d) annual monitoring is undertaken at least nine months apart.

3.1.3 The licensee shall ensure that all monitoring equipment used on the premises to comply with the conditions of this licence is calibrated in accordance with the manufacturer's specifications and any relevant Australian standard.

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

3.2 Monitoring of point source emissions to air

There are no specified conditions relating to monitoring of point source emissions to air in this section.

3.3 Monitoring of point source emissions to surface water

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 point source emissions to surface water

Emission point reference	Parameter	Units	Frequency
Salina surface water			
Discharge Point (LI - DP)	volumetric flow rate	L/s and m^3/day	Quarterly
Discharge Point (LI - DP)	pH (field measurement)	pH units	Monthly
Discharge Point (LI - DP)	electrical conductivity (field measurement)	µS/cm	Monthly
Discharge Point (LI - DP)	total dissolved solids, total suspended solids, hydrocarbons, cadmium, selenium, iron, cobalt, lead, copper, nickel, zinc, arsenic, chromium, sodium, potassium, calcium, manganese, chloride, bicarbonate, sulphate. (Note: no sample required if no standing water).	mg/L and g/day	Quarterly
LI – US (200 m upstream of LI – DP)	Lake depth	m	Quarterly
Discharge point LI - DP	Lake depth	m	Quarterly
LI – DS1 (50m downstream of LI – DP)	Lake depth	m	Quarterly
LI – DS2 (1500m downstream of LI – DP)	Lake depth	m	Quarterly
Salina sediment			
Discharge point LI - DP	pH (field measurement), cadmium, selenium, iron, cobalt, lead, copper, nickel, zinc, arsenic and chromium	mg/kg (except pH)	Annually
LI – DS1 (50m downstream of LI – DP)			

3.4 Monitoring of point source emissions to groundwater

There are no specified conditions relating to monitoring of point source emissions to 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	Frequency
Discharge point (LI - DP)	Mine dewater	Total discharge volumes	m^3	Monthly
Discharge point (LI - DP)	Mine dewater	Discharge rate	L/sec	Quarterly (ending February, May, August and November)

3.8 Ambient environmental quality monitoring

There are no specified conditions relating to ambient environmental quality monitoring in this section.

3.9 Meteorological monitoring

There are no specified conditions relating to 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 six 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 (AACR) 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 Director an Annual Environmental Report (AER) within 60 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 form[1]
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the annual period and any action taken	None specified
5.1.3	Compliance	AACR
5.1.4	Complaints summary	None specified
Table 3.3.1	See table 3.3.1	None specified
Table 3.7.1	Total discharge volumes, discharge rate	None specified

Note 1: Forms are in Schedule 2

5.2.2 The licensee shall ensure that the AER also contains:
- (a) an assessment of the information contained within the report against previous monitoring results and licence limits and/or targets; and
- (b) a list of any original monitoring reports submitted to the licensee from third parties for the annual period and make these reports available on request.

5.3 Notification

5.3.1 The licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the Director 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]
2.3.2	Limit exceedance where management action taken	As soon as practicable but no later than 5pm of the next usual working day.	EL1
3.1.4	Calibration report	As soon as practicable.	None specified
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	

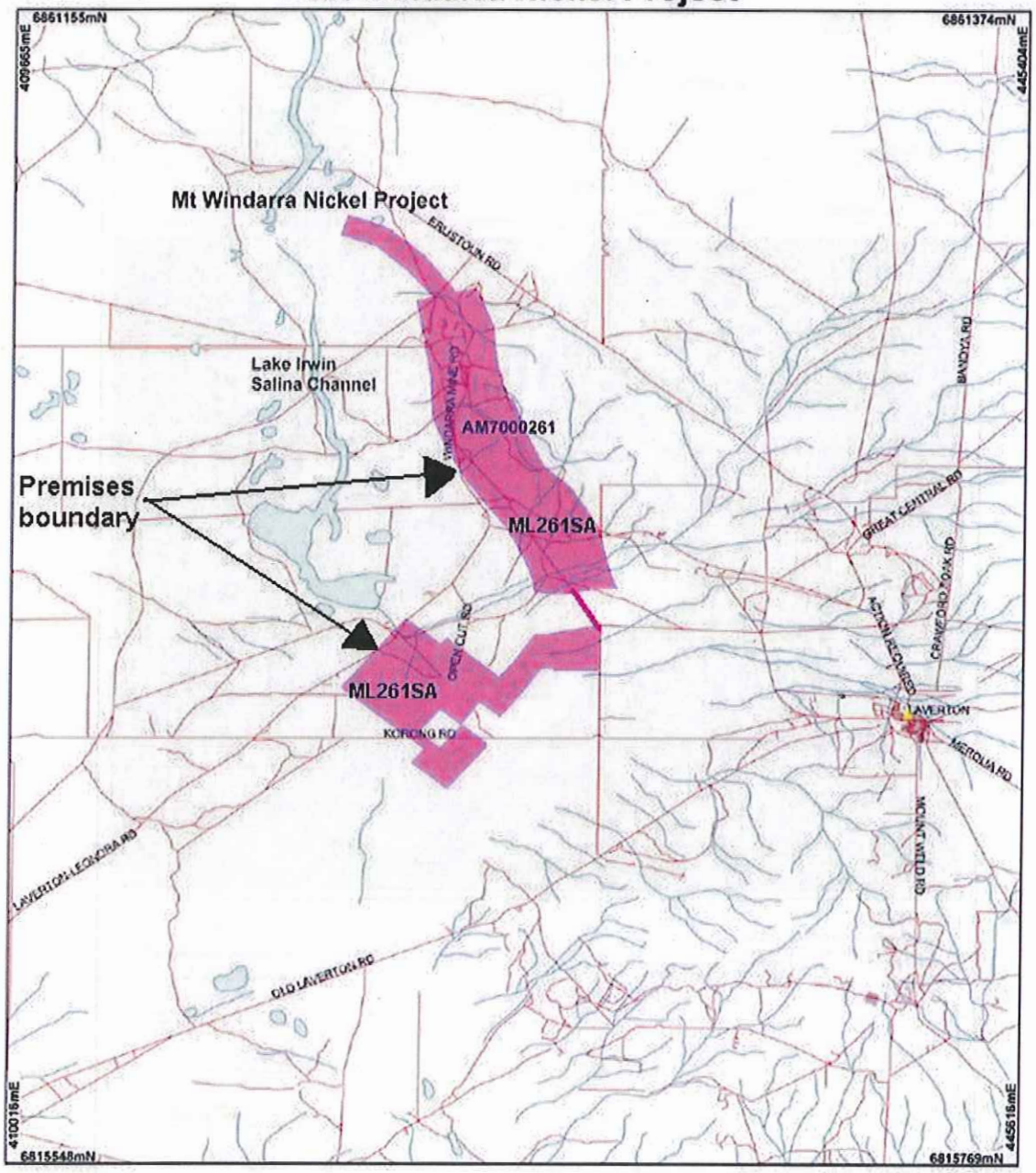
Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act
Note 2: Forms are in Schedule 2

Schedule 1: Maps

Premises map

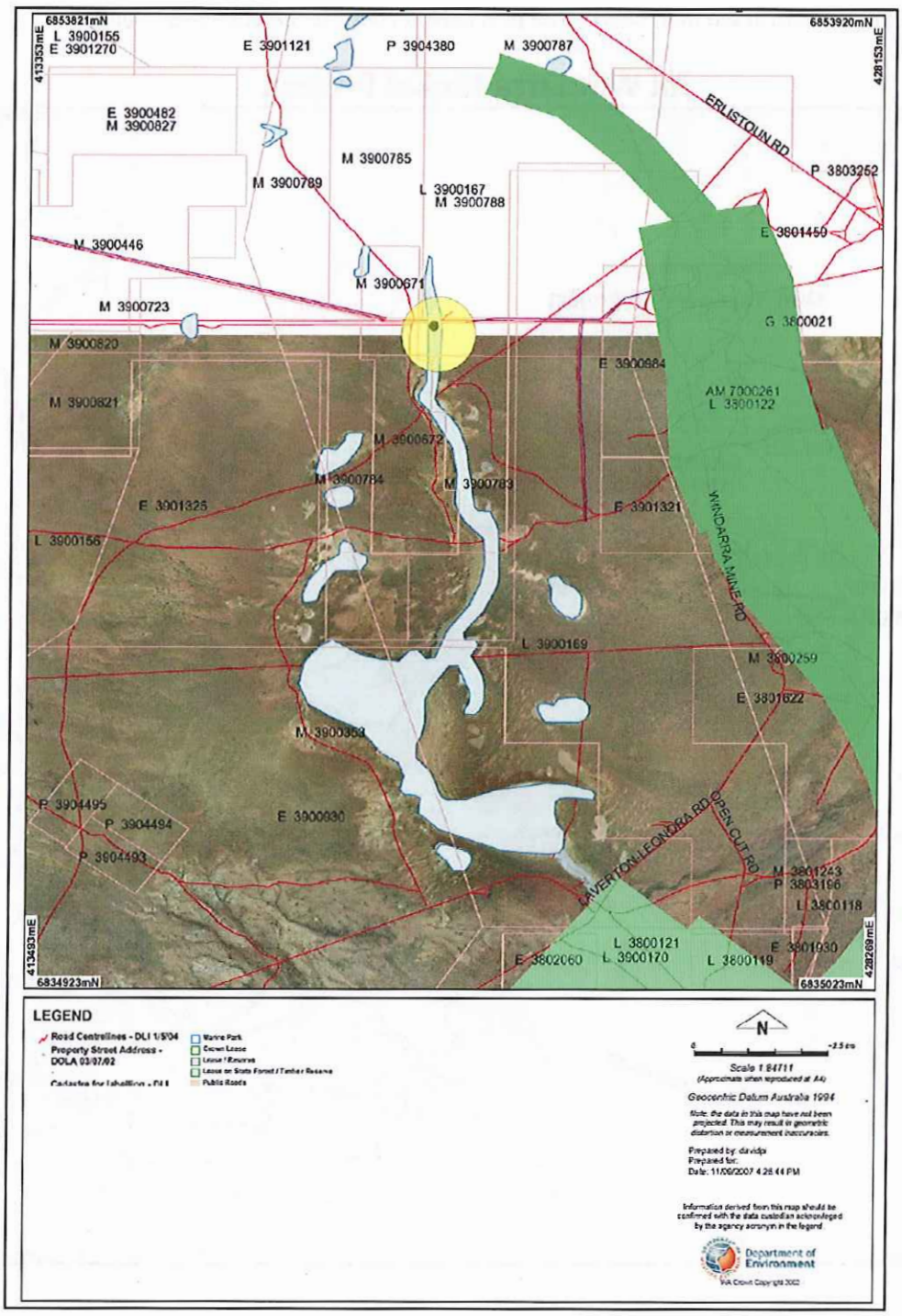
The premises is shown in the map below. The pink polygon depicts the premises boundary.

Mt Windarra Nickel Project



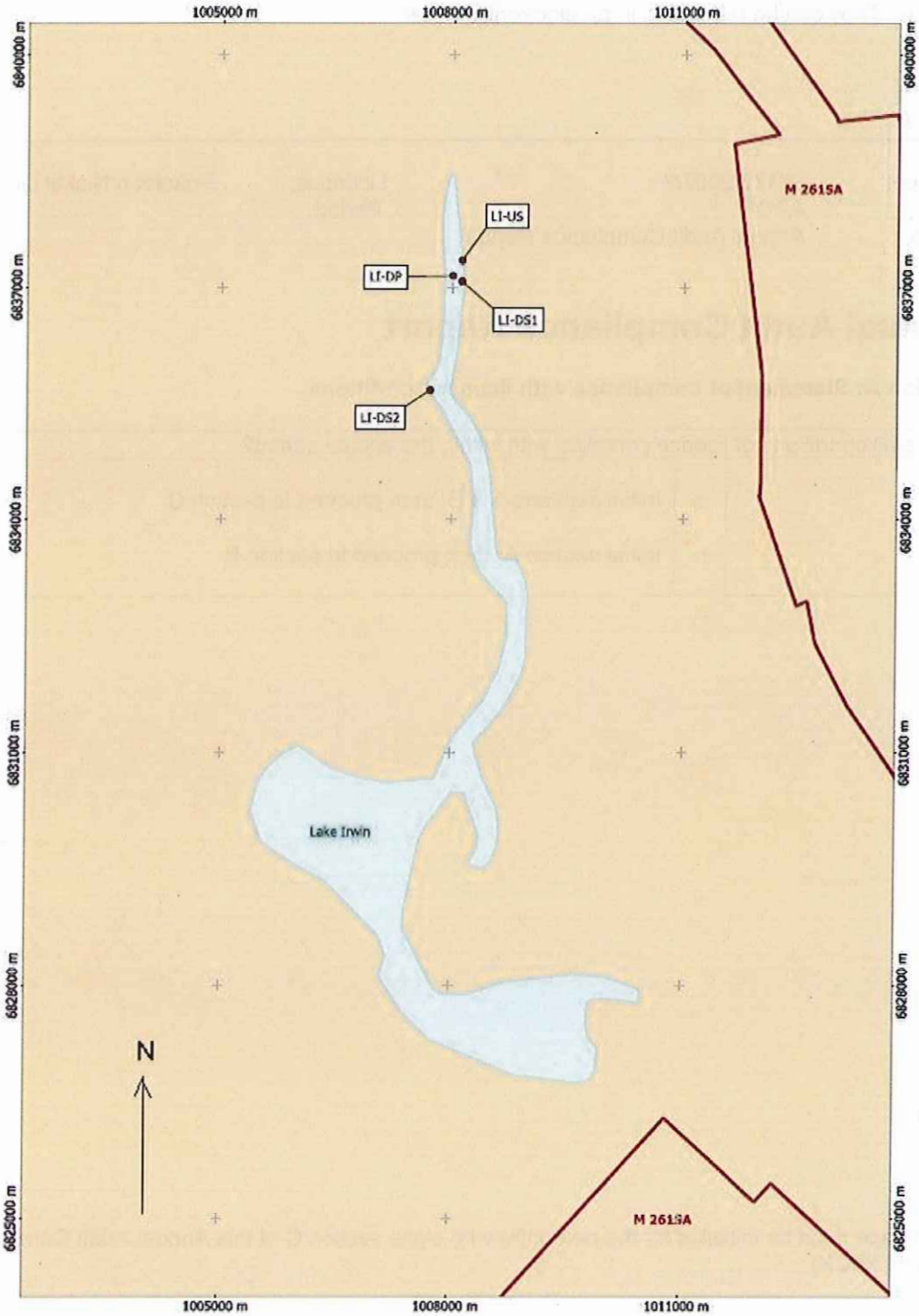
Map of emission point

The yellow circle depicts the location of the dewatering emission point as defined in Table 2.3.1.



Map of monitoring points

The monitoring points as described in Table 3.3.1.



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:	L8173/2007/2	Licensee:	Poseidon Nickel Limited
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	□	Initial sections A & B, then proceed to section C
No	□	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) and time(s) the non-compliance occurred, if applicable?	
c) Was this non-compliance reported to DER?	
☐ Yes, and ☐ Reported to DER verbally Date: ☐ Reported to DER in writing Date:	☐ 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	□	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	□	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)	□	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	□	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: _____

Name: (printed) _____

Position: _____

Date: _____/_____/_____

Signature: _____

Name: (printed) _____

Position: _____

Date: _____/_____/_____

Seal (if signing under seal)

easures taken (including relevant management actions) or planned to be taken, including those taken to prevent
nce; and

ay have been caused by this exceedance.

TP dry

kel Limited: ..... Date: .....

Licence:	L8173/2007/2	Licensee:	Poseidon Nickel Limited
Form:	N1	Date of breach:	

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

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

Part A

Licence number	
Name of operator	
Location of premises	
Time and date of the detection	

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

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

Part B

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

Name	
Post	
Signature on behalf of Poseidon Nickel Limited	
Date	

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

Decision Document

Environmental Protection Act 1986, Part V

Proponent: Poseidon Nickel Limited

Licence: L8173/2007/2

Registered office:	Level 1 8 Churchill Court 331-335 Hay St SUBIACO WA 6008
ACN:	060 525 206
Premises address:	Mt Windarra Nickel Project Special Agreement Act lease (ML261SA) Laverton Downs LAVERTON WA 6440
Issue date:	17 October 2013
Commencement date:	22 October 2013
Expiry date:	21 October 2018

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 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:	Bradley Cox Regional Environmental Officer
Decision Document authorised by:	James Milne Regional Leader (Goldfields)

Contents

1 Purpose of this document

The Decision Document explains how DER has assessed and determined the application for 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 licences. They are as follows:

Standard conditions

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

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

Non standard conditions
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 ☐ New licence ☒ Licence amendment ☐ Works approval amendment ☐	
Activities that cause the premises to become prescribed premises	**Category number(s)**	**Design capacity**
	6	1.3GL
Application verified Application fee paid	Date: 27/08/2013 Date: 02/09/2013	
Works approval has been complied with Compliance certificate received	Yes ☐ No ☐ N/A ☒ Yes ☐ No ☐ N/A ☒	
Commercial-in-confidence claim	Yes ☐ No ☒	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes ☒ No ☐	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986*?	Yes ☐ No ☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐
Is the proposal subject to Ministerial Conditions?	Yes ☐ No ☒	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 *Environmental Protection Act 1986*)?	Yes ☐ No ☒ Department of Water consulted Yes ☐ No ☒	
Is the premises within an Environmental Protection Policy (EPP) Area Yes ☐ No ☒ If Yes include details of which EPP(s) here.		
Is the premises subject to any EPP requirements? Yes ☐ No ☒ If Yes, include details here, eg Site is subject to SO_2 requirements of Kwinana EPP.		

3 Executive summary of proposal

Poseidon Nickel Limited (Poseidon) holds licence L8173/2007/2 (category 6 – dewatering) for the Windarra Nickel Project, located on Special Agreement Act lease ML261SA.

The Windarra Nickel Project is located 28 kilometres (km) northwest of Laverton in the Murchison Region of Western Australia. It is situated in the Lake Carey sub-area, adjacent to the Lake Irwin – Lake Carey salina channel. Mine dewater is discharged into the 65km long salina which varies in width from 100 to 500 metres (m). At the discharge point the salina measures 150m in width.

A hydrological assessment of the area shows that groundwater ranges from five to 20m below ground level across the premises. The quality of the water on the premises ranges from 3,800 to 13,000 milligrams per litre (mg/L) total dissolved solids, has an average pH of 6.8 and total suspended solids load of <5mg/L. There are trace amounts of the majority of heavy metals and the water is dominated by sodium and chloride ions. The project is outside the proposed realignment of the Laverton Public Drinking Water Source Area.

Operating licence L8173/2007/2 will allow for a continued annual dewatering discharge of up to 1.3GL into the Lake Irwin salina.

Works approvals W5118/2012/1 and W5180/2012/1 have been granted to Poseidon for the establishment of a nickel concentrator plant, gold processing plant, in-pit tailings storage facility and waste water treatment plant. These facilities have not yet been commissioned and do not appear on the operating licence.

al	NSC		
	OSC	Potential contamination of stormwater may occur. OSC 1.2.5 has been included in the licence to ensure the licensee maintains sufficient infrastructure to direct stormwater from any possible contamination sites.	Environmental Protection (Unauthorised Discharges) Regulations 2004. Application supporting documentation.
	NSC	NSCs have been included in the licence to ensure that infrastructure maintenance and operational monitoring is adequately managed for mine dewatering. This includes automatic cut-outs for pipe failure and daily inspections of dewatering pipelines.	Application supporting documentation.
	OSC	Descriptive limits will be set through condition 2.3.2 of the licence and therefore an OSC regarding recording and investigation of exceedences of limits or targets has been included.	N/A

	source emissions to air or the monitoring of these emissions are required to be added to the licence.	2004. Application supporting documentation.
OSC	**Operation** *Emission significance* – 3 *Sociopolitical context* – Low concern or interest *Risk assessment* - C – licence conditions Mine dewatering occurs into Lake Irwin salina channel via one discharge point. OSCs have been included in the licence to ensure adequate management of the discharge of hypersaline water. This includes a limit on the discharge rate into the channel. Extensive monitoring of the impact of the discharge into the channel has been included in Table 3.3.1, including assessment of the water quality at the discharge point, lake levels and lake sediment.	General provisions of the *Environmental Protection Act 1986.* Environmental Protection (Unauthorised Discharges) Regulations 2004. Application supporting documentation.

DECISION TABLE				
Works approval / licence section	**Condition number** **W = works approval** **L= licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Emissions to land including monitoring	L2.5 and L3.5	N/A	**Operation** *Emission significance* – 1 *Socio-political context* – Low concern or interest *Risk assessment* - E – no regulation, other management mechanisms No significant point source land emissions are expected from the operations at Mt Windarra. No specific conditions relating to point source emissions to land or the monitoring of these emissions are required to be added to the licence.	General provisions of the *Environmental Protection Act 1986.* Environmental Protection (Unauthorised Discharges) Regulations 2004. Application supporting documentation.
Point source emissions to groundwater including monitoring	L2.4 and L3.4	N/A	**Operation** *Emission significance* – 1 *Socio-political context* – Low concern or interest *Risk assessment* - E – no regulation, other management mechanisms There will be no point source emissions to groundwater during the operation of the dewatering infrastructure. No specific conditions relating to point source emissions to groundwater or the monitoring of such emissions are required to be added to the licence.	General provisions of the *Environmental Protection Act 1986.* Environmental Protection (Unauthorised Discharges) Regulations 2004. Application supporting documentation.

		management of dust emissions.	
	N/A	**Operation** *Emission significance* – 1 *Socio-political context* – Low concern or interest *Risk assessment* - E – no regulation, other management mechanisms No odour emissions are expected to occur during the operation of the dewatering infrastructure. No specific conditions relating to odour emissions have been included in the licence.	General provisions of the *Environmental Protection Act 1986.*
	N/A	**Operation** *Emission significance* – 1 *Socio-political context* – Low concern or interest *Risk assessment* - E – no regulation, other management mechanisms Noise emissions will be generated by the dewatering pumps. However it is not expected to have a significant impact off-site. No specific conditions relating to noise are required to be added to the licence.	General provisions of the *Environmental Protection Act 1986.*

			handling of samples.
	N/A	Monitoring of inputs or outputs is not required to ensure efficient operation of the infrastructure and therefore no specific conditions relating to monitoring of inputs or outputs are required to be included in the licence.	General provisions of the *Environmental Protection Act 1986.*
	OSC	OSCs relating to monitoring of total discharge volumes and discharge rates have been included in the licence. Table 3.7.1 shows monitoring requirements.	General provisions of the *Environmental Protection Act 1986.*
	N/A	Environmental groundwater quality monitoring is not required to be added to the licence. Additionally, ambient monitoring of surface water is not required – conditions relating to monitoring at or near the discharge point are sufficient to determine environmental impacts.	General provisions of the *Environmental Protection Act 1986.* Application supporting documentation.
	N/A	Monitoring of meteorological conditions is not required to ensure adequate management of dewatering infrastructure.	General provisions of the *Environmental Protection Act 1986.*
	N/A	No improvement conditions have been deemed necessary to ensure environmental impacts are minimised.	General provisions of the *Environmental Protection Act 1986.*

6 Emissions and discharges risk assessment matrix

Note: These matrix are taken from the DER Officer's Guide to Emissions and Discharges Risk Assessment *(2006).*

Table 3: Measures of significance of emissions

Emissions as a percentage of the relevant emission or ambient standard		Worst case operating conditions (95th percentile)			
		>100%	50 – 100%	20 – 50%	<20%*
Normal operating conditions (50th percentile)	>100%	5	N/A	N/A	N/A
	50 – 100%	4	3	N/A	N/A
	20 – 50%	4	3	2	N/A
	<20%*	3	3	2	1

*For reliable technology, this figure could increase to 30%

Table 4: Socio-political context of each regulated emission

		Relative proximity of the interested party with regards to the emission				
		Immediately Adjacent	Adjacent	Nearby	Distant	Isolated
Level of community interest or concern*	5	High	High	Medium High	Medium	Low
	4	High	High	Medium High	Medium	Low
	3	Medium High	Medium High	Medium	Low	No
	2	Low	Low	Low	Low	No
	1	No	No	No	No	No

Note: These examples are not exclusive and professional judgement is needed to evaluate each specific case

*This is determined by DER using the *Officer's Guide to Emissions and Discharges Risk Assessment* (2006).

Table 5: Emissions risk reduction matrix

		Significance of emissions				
		5	4	3	2	1
Socio-political context	High	A	A	B	C	D
	Medium High	A	A	B	C	D
	Medium	A	B	B	D	E
	Low	A	B	C	D	E
	No	B	C	D	E	E

PRIORITY MATRIX ACTION DESCRIPTORS

A = Do not allow (fix)

B = licence condition (setting limits + EMPs - short timeframes)(setting targets optional)

C = licence condition (setting targets + EMPs - longer timeframes)

D= EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools

E = No regulation, other management mechanisms