



Licence

Environmental Protection Act 1986, Part V

Licensee: Talisman Nickel Pty Ltd

Licence: L8193/2007/3

Registered office: Talisman Nickel Pty Ltd
Ground Floor
6 Centro Avenue
SUBIACO WA 6008

ACN: 601 140 185

Premises address: Sinclair Nickel Project
Mining Lease M37/1275 & Miscellaneous Lease L37/175
Old Agnew Road
LEONORA WA 6438
As depicted in Schedule 1.

Issue date: Thursday, 25 September 2014

Commencement date: Monday, 20 October 2014

Expiry date: Saturday, 19 October 2019

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
5	Processing or beneficiation of metallic or non-metallic ore	50 000 tonnes or more per year	300,000 tonnes per year
6	Mine dewatering	50 000 tonnes or more per year	255,000 tonnes per year

Conditions

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

Date signed: 29 October 2015

.....
Alana Kidd
Manager Licensing - Resource 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 regulates 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 Sinclair Nickel Project (Sinclair) is owned and operated by Talisman Nickel Pty Ltd (Talisman). Sinclair is located approximately 60km northwest of Leonora in the Northern Goldfields region of Western Australia and has been in care and maintenance since 12 September 2013.

The project consists of a completed open cut, completed underground mine, processing plant, tailings storage facility (TSF), administration offices, workshops and village. Active mining operations at Sinclair ceased in May 2013 and the project remains in care and maintenance.

This amendment is the result of a transfer of ownership from Xstrata Nickel Australasia Operation Pty Ltd to Talisman. In transferring the Licence DER noted that emission points were not captured in the previous Licence. Therefore a conversion into the new licence format was required. No reassessment of emissions and discharges has been made as part of this amendment.

The licences and works approvals issued for the Premises since 7 September 2007 are:

Instrument log		
Instrument	Issued	Description
W4359/2007/1	07/09/2007	Works approval for construction of sewage ponds and dewatering infrastructure. The sewage ponds now operate under R1967/2008/1
W4385/2007/1	31/01/2008	Works approval for construction of TSF and Processing Plant
L8193/2007/1	17/10/2008	New application
L8193/2007/2	13/10/2011	Licence re-issue
W5346/2013/1	21/02/2013	Works approval for TSF embankment lift
L8193/2007/3	25/09/2014	Licence re-issue
L8193/2007/3	29/10/2015	Licence transfer

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 September until 31 August 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 5667.11' 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;

'bioremediation' means the above-ground remediation of soils to reduce the concentrations of hydrocarbons through biodegradation. The process involves the stimulation of bacteria in the soil, which consume hydrocarbons as an energy source, releasing water and carbon dioxide as the ultimate breakdown products. This may include bioaugmentation of microbes to target specific contaminants;

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

'CEO' for the purpose of correspondence means:

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au;

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

'HDPE' means high density polyethylene;

'Licence' means this Licence numbered L8193/2007/3 and issued under the Act;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;

'mgbf' means metres below ground level;

'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 September to 30 November, 1 December to 28 February in the following year, 1 March to 31 May, and 1 June to 31 August;

'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;

'µS/cm' means microsiemens per centimetre; and

'waste' has the meaning defined in the *Environmental Protection Act 1986*.

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 General conditions

1.2.1 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.

1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.3 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 environmentally hazardous substances are either:

- (a) equipped with automatic cut-outs in the event of a pipe failure; or
- (b) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.

1.3.2 The Licensee shall ensure that any saline dewatering effluent shall only be managed in the following manner:

- (a) used for dust suppression in a manner that minimises damage to surrounding vegetation; or
- (b) stored in accordance with condition 1.3.3.



1.3.3 The Licensee shall ensure that tailings, return water, mine dewater and/or other contaminated waste are only discharged into the vessels or compounds 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
TSF1	Tailings	Phase 1 lined with 1.5mm HDPE
		Maintain a minimum freeboard of 500mm from the operational pond surface to lowest elevation of perimeter embankment
		Minimise the likelihood of erosion of the embankments by wave action
Mine Water Ponds	Mine dewater	Maintain a minimum freeboard of 300mm
Process Water Ponds	Mine dewater, tailings supernatant liquid and abstracted groundwater from Marshall Creek or Sinclair borefields	Lined with HDPE liner. Maintain a minimum freeboard of 300mm
Bioremediation pad	Hydrocarbon contaminated soil	All leachate runoff is directed to, and contained within, an impermeable leachate collection sump with capacity to contain a 1 in 100 year, 72 hour duration rainfall event.

1.3.4 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 as soon as practicable; and
- (c) maintain a record of all inspections undertaken.

Table 1.3.2: Inspection of infrastructure		
Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	Daily whilst operational
Return water lines	Visual integrity	Daily whilst operational
Embankment freeboard	Visual to confirm required freeboard capacity is available	Daily whilst operational, weekly while in care and maintenance
Dewatering pipelines	Visual integrity	Daily whilst operational



2 Emissions

2.1 General

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

2.2 Emissions to land

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

Table 2.2.1: Emissions to land

Emission point reference and location on Map of emission points	Description	Source including abatement
L1	Discharge into infiltration facility	Mine dewater

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 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) monthly monitoring is undertaken at least 15 days apart; and
- (b) quarterly monitoring is undertaken at least 45 days 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 the requirements of the Licence.

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 CEO accompanied with a report comprising details of any modifications to the methods.

3.2 Monitoring of emissions to land

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

Table 3.2.1: Monitoring of point source emissions to land

Emission point reference	Parameter	Units	Frequency
Infiltration Facility	Total Dissolved Solids	mg/L	Monthly when discharge into infiltration facility occurs
	Conductivity	µS/cm	
	Cumulative monthly volume of dewater discharged	kL	



3.3 Process monitoring

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

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Inpit sump	Cumulative monthly volumes of dewatering water	Volume of dewatering water	kL	Monthly when discharging	None specified
TSF	-	Volumes of tailings deposited into the TSF	tonnes	Continuous when discharging	None specified

3.4 Ambient environmental quality monitoring

3.4.1 The Licensee shall undertake the monitoring in Table 3.4.1 according to the specifications in that table and record and investigate results that do not meet any limit specified.

Monitoring point reference and location	Parameter	Units	Limit	Averaging period	Frequency
TSFMB01	Standing water level ¹	mbgl	4	Spot sample	Quarterly
TSFMB02	pH ²	N/A	N/A		
TSFMB03	Total dissolved solids (TDS)	mg/L			
TSFMB04					
TSFMB05	Electrical conductivity	µS/cm			

Note 1: Standing water level shall be determined prior to collection of other water samples

Note 2: In-field non-NATA accredited analysis permitted.

3.4.2 The Licensee shall, upon becoming aware that groundwater levels in monitoring bores around the TSF are shallower than 10 mbgl, design and implement a Groundwater Recovery Plan.

3.4.3 The Groundwater Recovery Plan required by condition 3.4.2 shall include, but is not limited to:

- (a) Notification to the CEO of when and in how many bores the level could not be met;
- (b) Any significant environmental impacts observed;
- (c) Strategies to lower groundwater levels to below 10 mbgl, including:
 - i) Any additional recovery bores or trenches required;
 - ii) Maximising performance of existing recovery bores;
 - iii) Frequency of groundwater level monitoring;
 - iv) Scope of groundwater level monitoring;
 - v) Minimising the normal operating supernatant pool area on the TSF;
 - vi) Frequency and scope groundwater quality monitoring; and
 - vii) Predicted increases in groundwater recovery;
- (d) Predicted timeframes to lower groundwater levels to below 10 mbgl;
- (e) Strategies to ensure standing water levels remain below 10 mbgl in the future; and
- (f) Establishing and implementing appropriate vegetation monitoring



4 Information

4.1 Records

4.1.1 All information and records required by the Licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.

4.1.2 The Licensee shall 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.

4.1.3 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.

4.1.4 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.

4.2 Reporting

4.2.1 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 4.2.1 in the format or form specified in that table.

Table 4.2.1: 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 environmental incidents that have occurred during the annual period and any action taken	None specified
Table 3.2.1	Monitoring of point source emissions to land	Table and graph
Table 3.3.1	Process monitoring	Table
Table 3.4.1	Ambient groundwater quality monitoring	Table and graph
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2

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

- (a) any relevant process, production or operational data recorded; and
- (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.



4.3 Notification

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

Table 4.3.1: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
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. Part B: As soon as practicable	N1
-	Intention to resume normal operations	At least three months prior to the commencement of operations	None specified
3.1.4	Calibration report	As soon as practicable.	

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

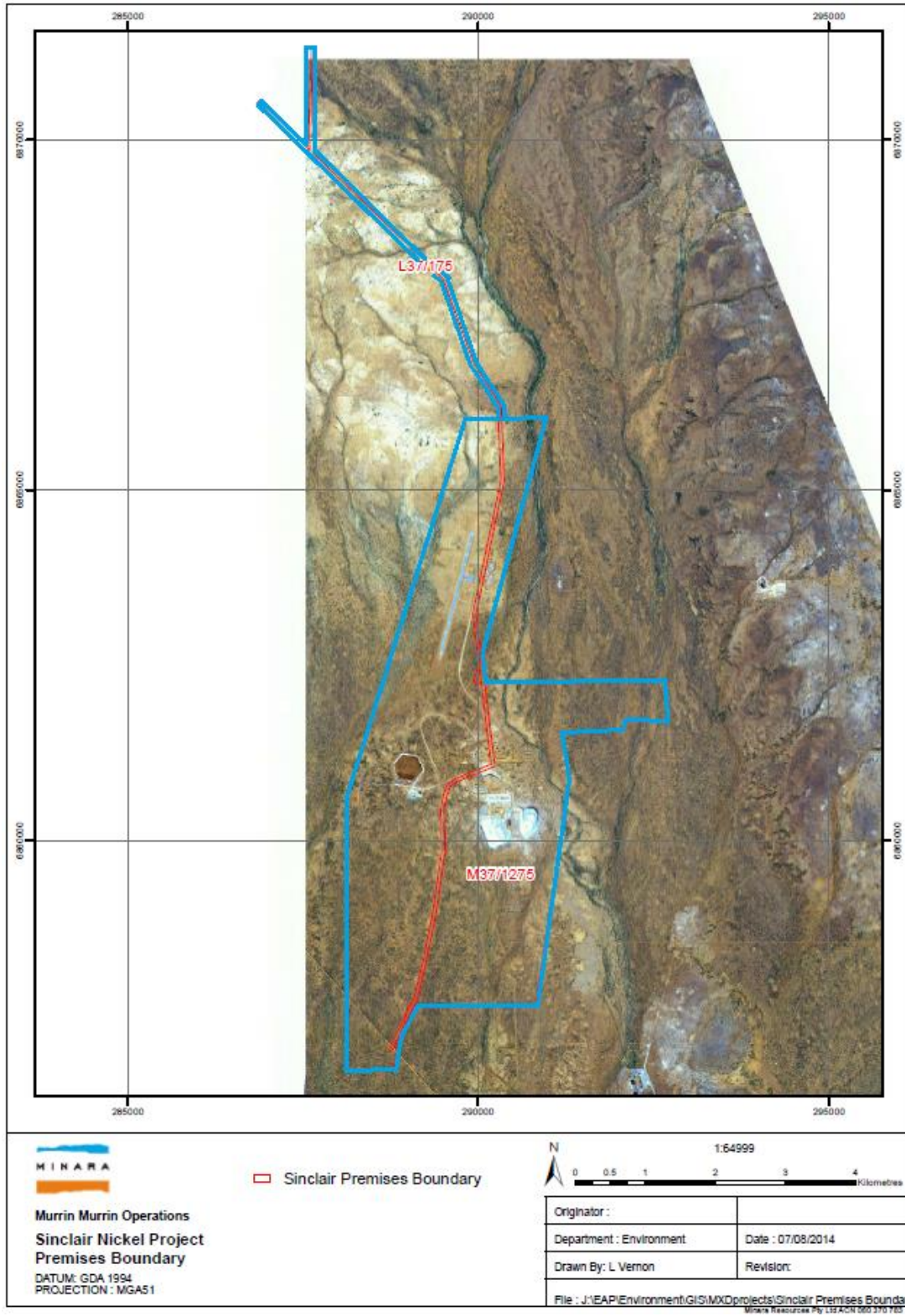
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

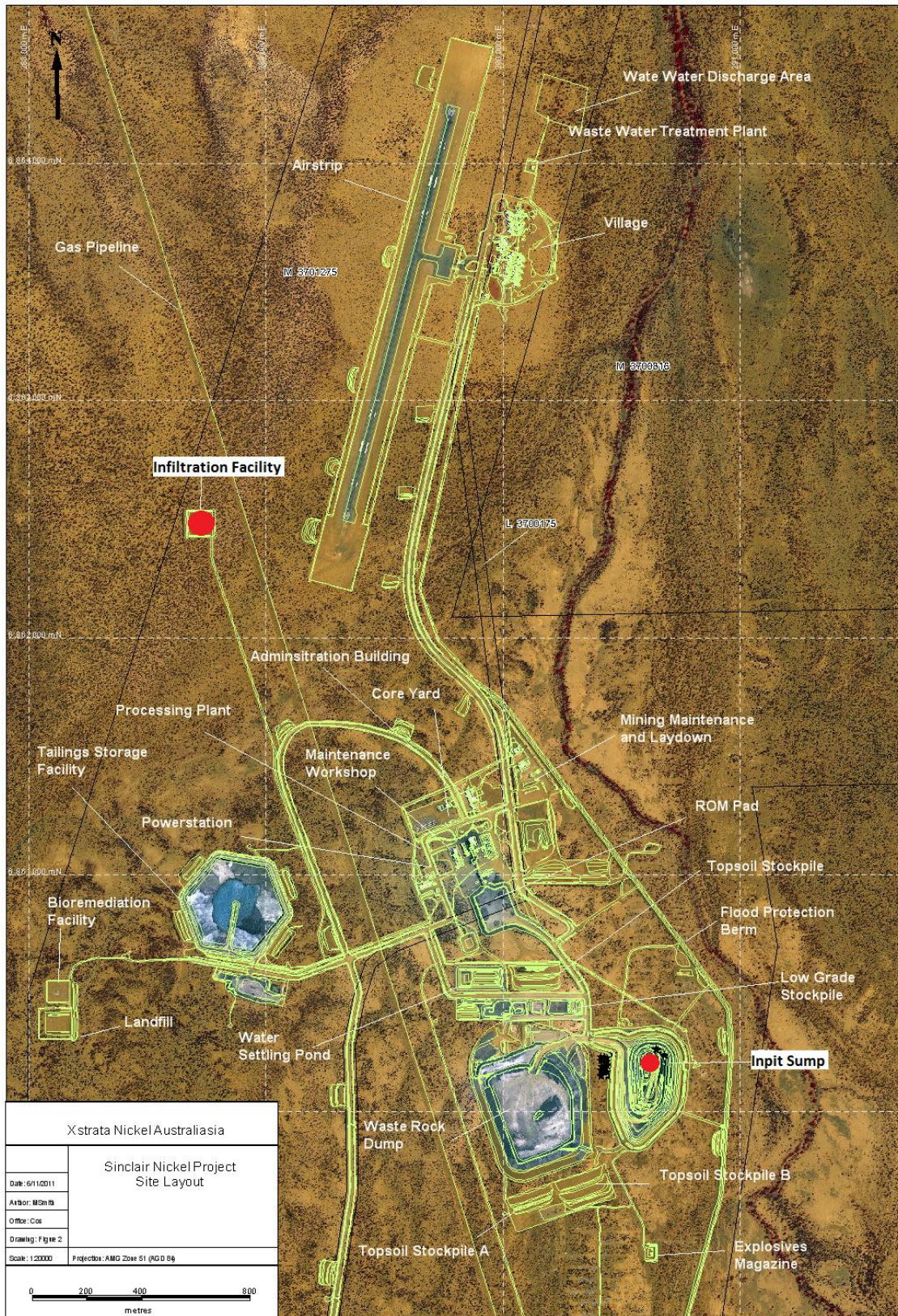
The Premises is shown in the maps below. The blue line depicts the Premises boundary.





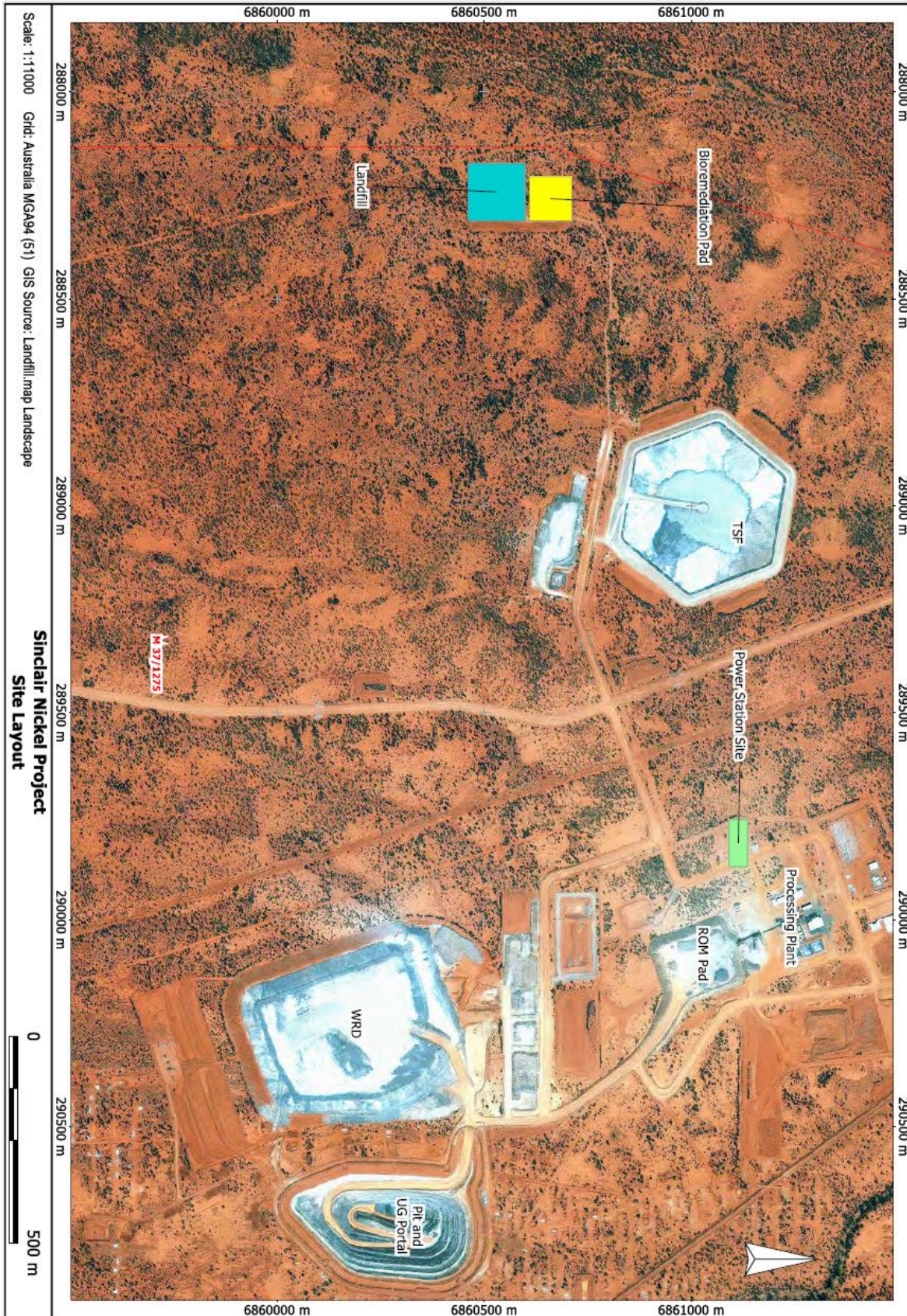
Map of emission points

The locations of the emission points defined in Table 2.5.1 are shown in the maps below.





The locations of the emission points defined in Table 2.2.1 are shown in the maps 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:	ABN:
Trading as:	
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes Please proceed to Section C

No Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:



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) must 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: L8193/2007/3
 Form: N1

Licensee: Talisman Nickel 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	

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 Talisman Nickel Pty Ltd	
Date	



Partial Decision Document

Environmental Protection Act 1986, Part V

Licensee: Talisman Nickel Pty Ltd

Licence: L8193/2007/3

Registered office: Talisman Nickel Pty Ltd
Ground Floor
6 Centro Avenue
SUBIACO WA 6008

ACN: 601 140 185

Premises address: Sinclair Nickel Project
Mining Lease M37/1275 & Miscellaneous Lease L37/175
Old Agnew Road
LEONORA WA 6438

Issue date: Thursday, 25 September 2014

Commencement date: Monday, 20 October 2014

Expiry date: Saturday, 19 October 2019

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

Decision Document prepared by: Clarrie Green
Licensing Officer

Decision Document authorised by: Alana Kidd
Manager Licensing



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

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	300,000 tonnes per year
	6	255,000 tonnes per year
Application verified	Date: N/A	
Application fee paid	Date: N/A	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input 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 type="checkbox"/>
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.	
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.	

3 Executive summary of proposal and assessment

The Sinclair Nickel Project (Sinclair) is owned and operated by Talisman Nickel Pty Ltd (Talisman). Sinclair is located approximately 60km northwest of Leonora in the Northern Goldfields region of Western Australia and has been in care and maintenance since 12 September 2013.

The project consists of a completed open cut, completed underground mine, processing plant, tailings storage facility (TSF), administration offices, workshops and village. Active mining operations at Sinclair ceased in May 2013 and the project remains in care and maintenance.

During operation supernatant water in the TSF is directed to the decant tower where it is returned via pipeline to return water ponds located adjacent to the processing plant. The return water dams have a design capacity of 1,000 m³ and are operated with a freeboard of approximately 0.5 m. The dams are lined with a geotextile fabric and high density polyethylene (HDPE) liner. All tailings delivery and return water pipelines are either banded or located within a trench, such that a spill will be contained in the event of a pipe break or leak.

Mine dewater is discharged to an infiltration gallery, which comprises of a length of perforated HDPE pipe laid in a clean rock-filled one to two metre deep trench across the base of the drainage line. It is estimated that the maximum flow rate during operation will be approximately 3L/s or 259 kL per day. Existing dewatering quality is considered slightly brackish at 2,000mg/L Total Dissolved Solids (TDS).

Talisman also hold Registration R1967/2008/1 for the operation of a putrescible landfill and wastewater treatment plant at Sinclair.

This amendment is the result of a transfer of ownership from Xstrata Nickel Australasia Operation Pty Ltd to Talisman. In transferring the Licence DER noted that emission points were not captured in the previous Licence. Therefore a conversion into the new licence format was required..



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	L1.3.3	Condition 1.3.3 has been amended to protect ground and surface waters and ensure the appropriate management of an existing bioremediation pad. Bunding on this pad is existing and the addition of this condition to the Licence is not anticipated to reduce the risk of contaminants escaping the facility.	N/A
	L1.3.5 – 1.3.7	Conditions 1.3.5 to 1.3.7 have been relocated to section 3.4. Standing water level limits remain on the Licence under Table 3.4.1 while the implementation of a Groundwater Recovery Plan will still be necessary in the event that standing water levels reach 10 metres below ground level. Therefore this amendment is not expected to increase the environmental risk of seepage.	
	L1.3.8	Condition 1.3.9 relating to the prevention of Part 2 and Part 3 Waste discharges has been removed from the Licence. Onsite power generation from diesel generators is likely to discharge very low quantities of Part 3 Wastes making Talisman immediately non-compliant with their Licence should this condition remain.	
Emissions to land including monitoring	2.3.1	Licence condition 2.3.1 has been added to the Licence to permit the discharge of mine dewater to an infiltration pit. The discharge of mine dewater to the infiltration pit has been occurring prior to this amendment and has previously been assessed by DER as acceptable.	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>



<p>Ambient environmental quality monitoring</p>	<p>L3.4.1</p>	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Seepage from the Sinclair TSF to groundwater. <i>Impact:</i> Rising groundwater levels and contamination of groundwater could occur as a result of seepage. Although there are no users of the groundwater nearby the TSF, the low salinity of groundwater (less than 1,000 mg/L Total Dissolved Solids) means that it could be used for future land uses assuming it remains uncontaminated. Historical monitoring data submitted in the Sinclair 2013/14 Annual Environmental Report indicates insignificant fluctuations in groundwater quality for the parameters measured.</p> <p>Rising standing water levels may intercept the root zone of native vegetation resulting in death or stunted growth. Standing water levels have remained below 15 mbgl and are not expected to intercept the root zone of native vegetation while the site remains in care and maintenance. With no other groundwater users and no Priority Flora or Threatened Ecological Communities in the vicinity of the TSF or infiltration facility the risk of rising standing water levels has been assessed as “Minor”.</p> <p><i>Controls:</i> The TSF was originally constructed under Works Approval W4385/2007/1 as a partially (HDPE) lined facility. The anticipated seepage rate during operation is 7 L/day, significantly less than an unlined facility of a similar size, which could be expected to seep at a rate of 27,000 L/day. As Sinclair has remained in care and maintenance since 2013 the likelihood of additional seepage significantly impacting groundwater quality and standing water level is “Rare”.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> Existing Licence conditions require Talisman to notify DER at least three months prior to the commencement of normal operations. During this period DER will review the groundwater monitoring parameters listed in Table 3.4.1 and possibly amend the Licence. There is no change to the risk assessment as no changes have been made.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i></p>
<p>Licence Duration</p>	<p>N/A</p>	<p>The Licence expiry has not been extended as part of this amendment.</p>	<p>N/A</p>



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
02/10/2015	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