



Licence

Environmental Protection Act 1986, Part V

Licensee: Cliffs Asia Pacific Iron Ore Pty Ltd

Licence: L8667/2012/1

Registered office: Level 11, The Quadrant
1 William Street
PERTH, WA 6000

ACN: 001 892 995

Premises address: Windarling Range Mine Operations
Part Mining Lease M77/1001, M77/999, M77/1038, M77/1039 and M77/1000
MOUNT JACKSON, 6426 as depicted in Schedule 1.

Issue date: Thursday, 29 November 2012

Commencement date: Monday, 3 December 2012

Expiry date: Saturday, 2 December 2017

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
6	Mine dewatering	50,000 tonnes or more per year	3 420 000 tonnes per year
54	Sewage facility premises	100 cubic metres or more per day	210 cubic metres per day
64	Class I or II putrescible landfill site	20 tonnes or more per year	500 tonnes per year

Conditions of Licence

Subject to the conditions of licence set out in the attached pages.

Date signed: 28 January 2016

.....
Tim Gentle

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 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

This Licence allows for the operation of dewatering infrastructure, an upgraded wastewater treatment facility (WWTF) and landfilling into disused mine voids at Cliffs Asia Pacific Iron Ore Pty Ltd.'s (Cliffs) Windarling Range Mine Operations (Windarling). Mined ore is taken to the Koolyanobbing Range Mine Operations for processing with no ore being processed at Windarling.

The original WWTF was constructed in 2004 and has been operating in accordance with Registration 1750 under Category 85 of the *Environmental Protection Regulations 1987* being for a treatment capacity of less than 100 cubic metres per day (m³/day). The upgrade to the WWTF has resulted in an increased throughput capacity of 210m³/day.

Treated wastewater from the WWTF will be discharged via a pipeline to a lined turkey's nest dam where it will mix with saline groundwater abstracted from the mining operation, with overflow from this turkeys nest discharging to a larger unlined storage dam. The water will then be used for dust suppression throughout the area of mine operations. As a contingency measure an existing 1.1ha irrigation field will be used as a discharge location to dispose of treated wastewater in the event that discharge to the water storage dam is not available (e.g. maintenance, capacity reached).

Cliffs were issued a licence amendment in January 2015 to allow the dewatering of open pits W1 and W3 with a final discharge to W2 Pit. The maximum dewatering rate from Windarling following the latest amendment was conservatively predicted to be 2.72 giga litres (GL) per annum. This Licence amendment allows Cliffs to develop the Windarling Range W7 Deposit, with the additional groundwater dewatering commencing Q1 2016 estimated at 0.7 GL/year over a 3-year period to W2 Pit.

Along with increases to dewatering volumes this amendment allows for an increase in landfilling throughput from 250 to 500 tonnes per annual period. Further amendments have been made to the Licence to convert conditions that align with the new template. No further assessment of emissions and discharges has been made as a part of this Licence amendment

The licences and works approvals issued for the Premises:

Instrument log

Instrument	Issued	Description
R1750/2005/1	11/04/2005	Registration for the operation of category 85 sewage facility
W5141/2012/1	03/05/2012	Works approval to construct/upgrade plant
L8667/2012/1	29/11/2012	New application



L8667/2012/1	03/01/2013	Licence amendment for operation of new crushing and screening plant
L8667/2012/1	15/01/2015	Licence amendment to allow dewatering operations
L8667/2012/1	21/05/2015	Licence amendment to allow burial of tyres
L8667/2012/1	28/1/2016	Licence amendment to expand dewatering and landfilling operations

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 In the Licence, unless the contrary intention appears:

‘the Act’ means the *Environmental Protection Act 1986*;

‘annual’ means the inclusive period from 1 January to 31 December;

‘AS/NZS 5667.1’ means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

‘AS/NZS 5667.10’ means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

‘averaging period’ means the time over which a limit is measured or a monitoring result is obtained

‘CEO’ means Chief Executive Officer of the Department of Environment Regulation;

‘CEO’ for the purpose of correspondence means;

Manager - Licensing (Resource Industries)

At the following address:

Department Administering the *Environmental Protection Act 1986*

Locked Bag 33

CLOISTERS SQUARE WA 6850

Email: info@der.wa.gov.au;



'clean fill' has the meaning defined in Landfill Definitions;

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

'Inert Waste Type 1' has the meaning defined in Landfill Definitions;

'Inert Waste Type 2' has the meaning defined in Landfill Definitions;

'Landfill Definitions' means the document titled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer of the Department of Environment as amended from time to time.

'Licence' means this Licence numbered L8667/2012/1 and issued under the *Environmental Protection Act 1986*;

'Licensee' means the person or organisation named as Licensee on page i 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;

'putrescible waste' has the meaning defined in Landfill Definitions;

'quarantined storage area or container' means a hardstand storage area or sealed-bottom container that is separate and isolated from authorised waste disposal areas and is capable of containing all non-conforming waste and its constituents, these areas must be clearly marked and their access restricted to authorised personnel;

'rehabilitation' means the completion of the engineering of a landfill cell and includes capping and/or final cover;

'Schedule 1' means Schedule 1 of this licence unless otherwise stated;

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

'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 current version of that standard.

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



1.2 Premises operation

- 1.2.1 The Licensee shall only allow waste to be accepted on to the Premises if:
- (a) it is of a type listed in Table 1.2.1;
 - (b) the quantity accepted is below any limit listed in Table 1.2.1; and
 - (c) it meets any specification listed in Table 1.2.1

Table 1.2.1: Waste acceptance		
Waste	Quantity Limit	Specification ¹
Sewage and wastewater	210 m ³ per day	Accepted from the Licensee's Windarling mine operations only
Inert Waste Type 2 - Tyres	1,000 tyres per year	Accepted from Cliffs' operations only
Inert Waste Type 1	500 tonnes per annual period	Waste containing visible asbestos or ACM shall not be accepted.
Inert Waste Type 2 - Plastics		
Putrescible Waste		
Clean fill	N/A	None specified

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

- 1.2.2 The Licensee shall ensure that where waste does not meet the waste acceptance criteria set out in condition 1.2.1 it is stored in a quarantined storage area or container and removed from the Premises to an appropriately authorised facility as soon as practicable.
- 1.2.3 The Licensee shall ensure that the wastes accepted onto the Premises or landfill are only subjected to the process(es) set out in Table 1.2.2 and in accordance with any process limits described in that table.

Table 1.2.2: Waste processing		
Waste type	Process	Process limits ^{1,2}
Sewage	Primary and Secondary treatment and disinfection	210 m ³ /day
Inert Waste Type 1	Receipt, handling, associated storage and disposal of waste by landfilling	<u>All waste types</u> Disposal of waste by landfilling shall only take place within the landfill area shown on the Landfill Area Map in Schedule 1. The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m. <u>Inert Waste Type 2 (tyres)</u> The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m. Tyres shall only be landfilled: (a) in batches separated from each other by at least 100 mm of soil
Putrescible Waste		
Inert Waste Type 2 - Tyres		



		and each consisting of not more than 40 cubic metres of tyres reduced to pieces; or (b) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 1,000 whole tyres.
Clean fill	Receipt, handling, associated storage and disposal of waste by landfilling	None specified

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

1.2.4 The Licensee shall ensure that cover is applied to waste in accordance with Table 1.2.3 and that sufficient stockpiles of cover are maintained on site at all times.

Table 1.2.3: Cover requirements

Waste Type	Material	Depth	Timescales
Inert Waste Type 2 (tyres)	Inert Waste Type 1 or soil	100 mm	Monthly or as soon as practicable after deposit and prior to compaction

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

1.2.5 The Licensee shall ensure that sewage sludge is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.2.4.

Table 1.2.4: Containment infrastructure

Storage vessel or compound	Material	Infrastructure requirements
Sludge drying bed	Sewage sludge	A bunded hardstand area capable of preventing surface run-off of leachate and sludge and which allows for its removal for disposal or return to the start of the treatment process.
Water storage dams	Saline mine dewater and treated wastewater	The Licensee shall manage water storage dams such that: (a) a minimum top of embankment freeboard of 300mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained; and, (b) methods of operation minimise the likelihood of erosion of the embankments by wave action.

1.2.6 The Licensee shall ensure that the irrigation of treated wastewater meets the following:

- (a) no irrigation generated run-off, spray drift or discharge occurs beyond the boundary of the Premises;
- (b) wastewater is evenly distributed over the irrigation area;
- (c) wastewater is applied at a rate which avoids soil erosion and surface ponding; and
- (d) a healthy vegetation cover is maintained over the wastewater irrigation areas.

1.2.7 The Licensee shall ensure that all pipelines containing environmentally hazardous materials are either:

- (a) equipped with telemetry systems and pressure sensors along pipelines to allow for the detection of leaks and failures; or
- (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.

1.2.8 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) discharged to previously mined pits.

1.2.9 The Licensee shall:

- (a) undertake inspections as detailed in Table 1.2.5;
- (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 1.2.5: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Dewatering pipelines	Visual integrity	Daily

1.2.10 The Licensee shall undertake works in accordance with the documentation detailed in Table 1.2.6.

Table 1.2.6: Construction requirements¹

Document	Parts	Date of document
Letter “ <i>Environmental Protection Act 1986</i> (WA): Licence 8667 (Windarling) Amendment to Category 6 (Mine Dewatering) and Category 64 (Class II or III Putrescible Landfill Site)”, Neil Smith, Cliffs Asia Pacific Iron Ore Pty Ltd.	Attachment 1	5 August 2015

Note 1: Where the details and commitments of the documents listed in condition 1.2.10 are inconsistent with any other conditions of this Licence, the conditions of the Licence shall prevail.

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 Point source emissions to groundwater

2.2.1 The Licensee is permitted, subject to conditions in the Licence, to emit waste to groundwater through the emissions points listed in Table 2.2.1.

Table 2.2.1: Emission points to groundwater

Emission point reference	Description	Source
W2	Mine dewater	W1, W3 and W7 Pits
W4	Mine dewater	W1 and W3



2.3 Emissions to land

2.3.1 The Licensee is permitted, subject to conditions in the Licence, to emit waste to land through the emissions points listed in Table 2.3.1

Table 2.3.1: Emission points to land		
Emission point reference	Description	Source
L1	Discharge to lined turkeys nest dam for use in dust suppression, with overflow to an unlined storage dam	Treated wastewater and mine dewater
L2	Discharge to irrigation area (as depicted in Schedule 1)	Treated wastewater

2.3.1 The Licensee shall not cause or allow emissions to land greater than the limits listed in Table 2.3.2.

Table 2.3.2: Emission limits to land			
Emission point reference	Parameter ¹	Limit	Averaging period
L2	Total Nitrogen loading	420 kg/ha	Annual
	Total Phosphorous loading	120 kg/ha	

Note 1: Effluent is to be sampled from the single monitoring point M2



3 Monitoring

3.1 General monitoring

3.1.1 The licensee shall ensure that:

- (a) all water samples are collected in accordance with AS/NZS 5667.1;
- (b) all wastewater samples are collected in accordance with AS/NZS 5667.10;
- (c) all 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; and
- (b) quarterly monitoring is undertaken at least 45 days apart.

3.2 Monitoring of point source emissions to groundwater

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

Table 3.2.1: Monitoring of emissions to groundwater				
Monitoring point reference	Parameter	Limit	Units	Frequency
W2 and W4	Freeboard	4	m below crest level	Monthly
	Volumetric flow	N/A	kL	Quarterly
	pH ¹	N/A	N/A	
	Total Dissolved Solids ¹	N/A	mg/L	

Note 1: pH and TDS is permitted to be measured in the field in accordance with Australian Standard 5667.

3.2.2 The Licensee shall, upon becoming aware that groundwater levels in W2 or W4 pits are shallower than 10 m below crest level, design and implement a Groundwater Recovery Plan.

3.2.3 The Groundwater Recovery Plan required by condition 3.2.2 shall include, but is not limited to:

- (a) Notification to the CEO of when the freeboard exceeded 10 m below crest level;
- (b) Any significant environmental impacts observed;
- (c) Strategies to lower groundwater levels to below 10 m below crest level, including:
 - i) increasing the frequency of groundwater level monitoring;
 - ii) alternative dewater discharge options; and
 - iii) reducing the rate of dewater discharge to W2 Pit;
- (d) Predicted timeframes to lower groundwater levels to below 10 m below crest level; and
- (e) Strategies to ensure standing water levels remain below 10 m below crest level in the future.



3.3 Monitoring of emissions to land

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 emissions to land			
Monitoring point reference	Parameter	Units	Frequency
M1 and M2 ¹	Volume discharged to L1 and L2	m ³	Continuous
	Total Suspended Solids	mg/L	Quarterly
	Total Nitrogen	mg/L	
	Total Phosphorus	mg/L	
	pH ²	N/A	
	<i>E. coli</i>	cfu/100ml	

Note 1: M2 is located at the final effluent storage tank at the wastewater treatment plant

Note 2: pH is permitted to be measured in the field in accordance with Australian Standard 5667.

3.4 Monitoring of inputs and outputs

3.4.1 The Licensee shall undertake the monitoring in Table 3.4.1 according to the specifications in that table.

Table 3.4.1: Monitoring of inputs and outputs				
Input/Output	Parameter	Units	Averaging period	Frequency
Sewage - Inlet Flow	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Waste Inputs	Inert Waste Type 2 (tyres)	Number of tyres	Annual	Each load arriving at the Premises
	Inert Waste Type 1 Inert Waste Type 2 (plastics) Putrescible Waste	m ³ (where no weighbridge is present)		
Waste Outputs	Waste type as defined in the Landfill Definitions			Each load leaving or rejected from the Premises

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 groundwater.



- 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 year.
- 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

- 4.4.1 The Licensee shall submit to the Director at the Contact Address an annual environmental report no later than 30 April. 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 form ¹
4.1.3	Compliance	AACR
Tables 2.3.2 and 3.2.1	Limit exceedances	None specified
3.2.2	Standing water level exceedances	
Table 3.3.1	Monitoring of discharges to land	
Table 3.4.1	Monitoring of inputs and outputs	

Note 1: Forms are in Schedule 2

- 4.4.2 The annual environmental report shall also contain:
- (a) an assessment of the information contained within the report against previous monitoring results and Licence limits;
 - (b) any annual nutrient load calculations; and
 - (c) any original monitoring reports submitted to the Licensee from third parties.
- 4.4.3 The Licensee shall submit a compliance document to the CEO, following completion of the works under condition 1.2.10 and prior to commissioning of the same.
- 4.4.4 The compliance document shall:
- (a) certify that the works were constructed in accordance with the conditions of the Licence; and
 - (b) be signed by a person authorised to represent the Licensee and contain the printed name and position of that person within the company.



4.5 Notification

4.5.1 Parameters listed in Table 4.5.2 shall be notified to the CEO at the Contact Address and in accordance with the notification requirements of the table.

Table 4.5.2: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
2.1.1 & 2.6.2	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
1.2.2	Any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution		
3.2.2	Standing water levels rising higher than 10 m below the pit crest	Within 7 calendar days of becoming aware of the exceedance	None specified

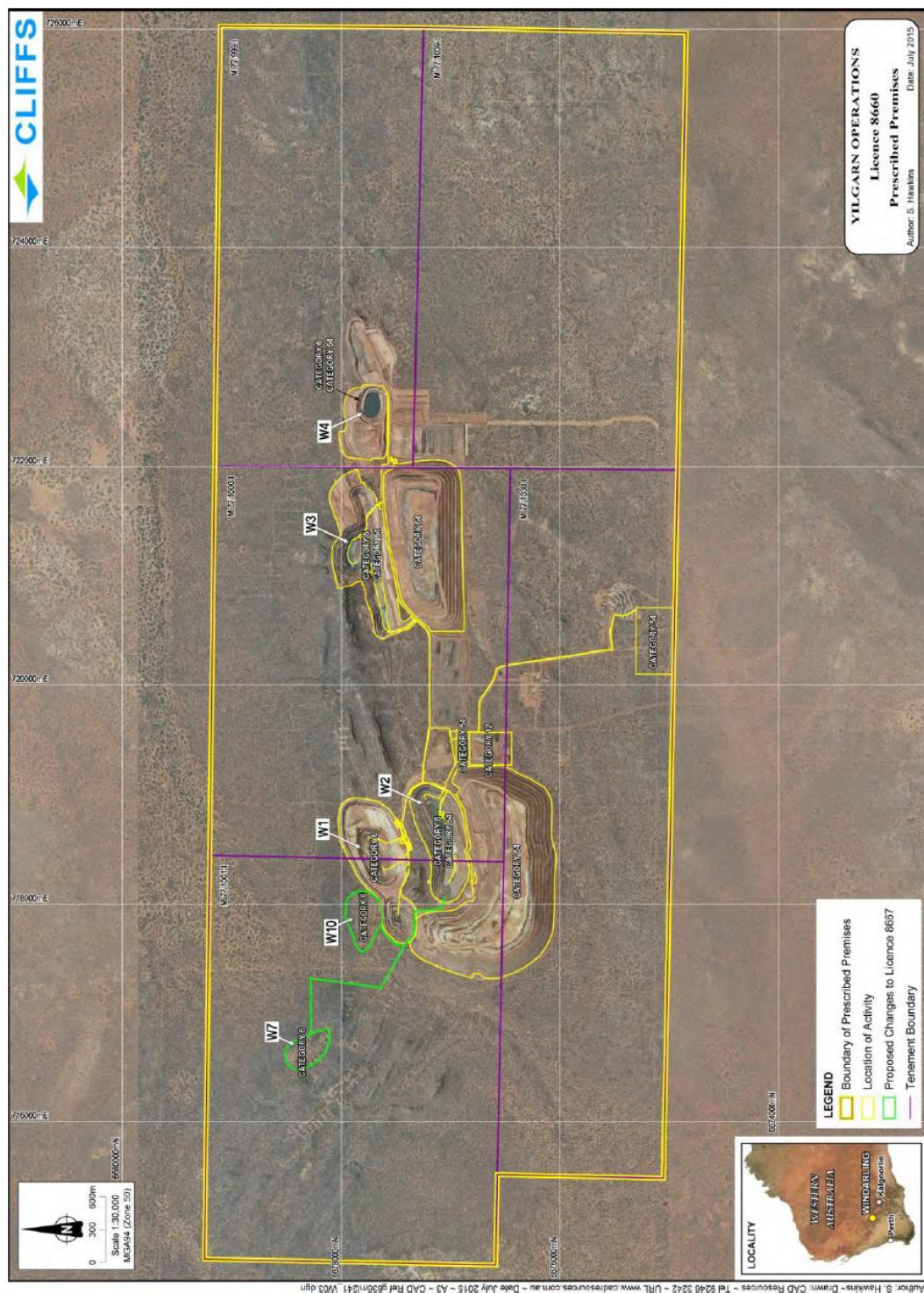
Note 1: No notification requirement in the Licence shall negate the requirement to comply with s72 of the Act.

Note 2: Forms are in Schedule 2

Schedule 1: Maps

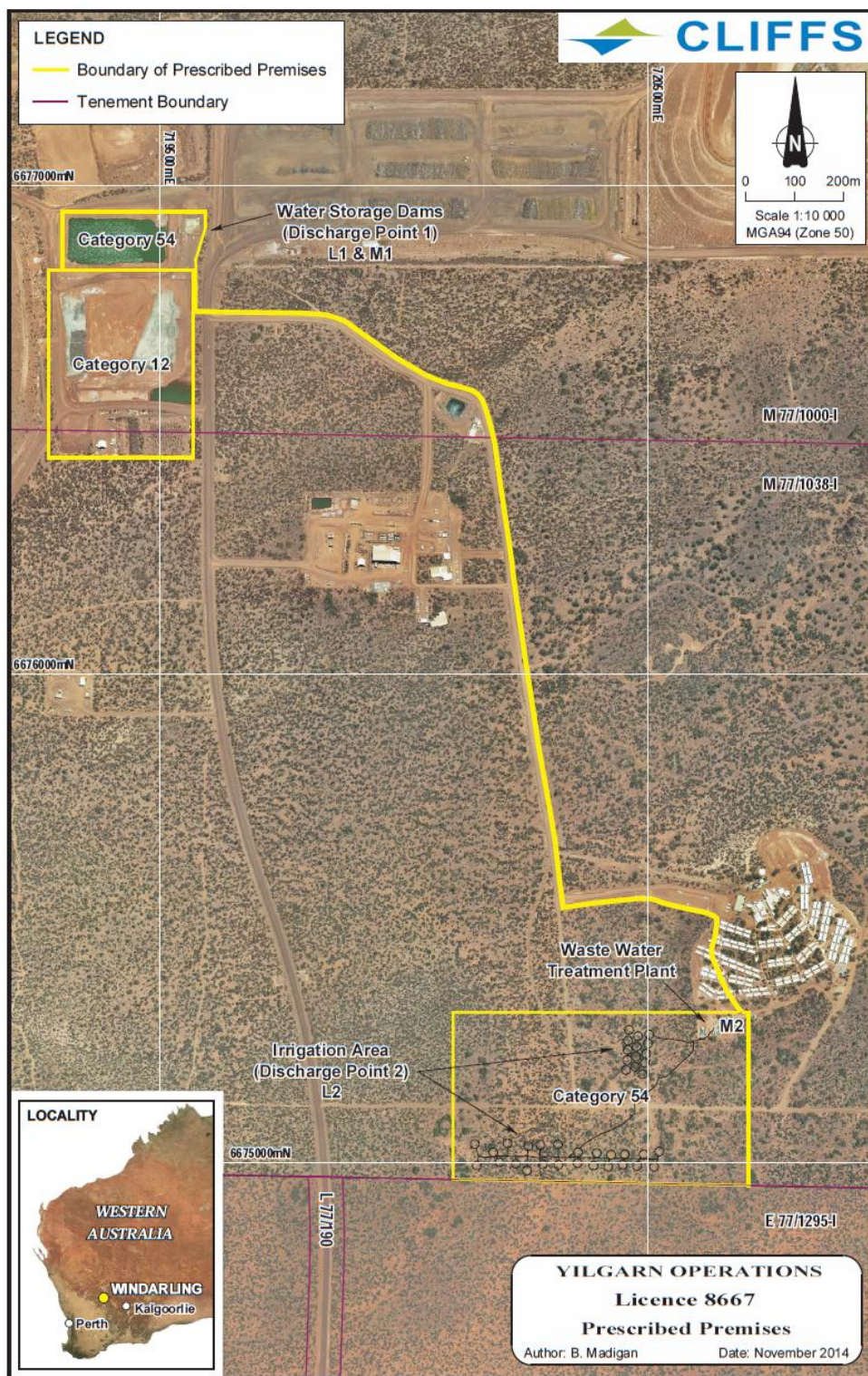
Premises map

The Premises is shown in the map below. The yellow and purple line depicts the Premises boundary. The locations of the emission points defined in Tables 2.2.1 and 3.2.1 are also shown below.



Map of emission points

The locations of the emission points defined in Tables 2.3.1, 2.3.2 and 3.3.1 are shown below.



The locations of the landfill areas are outlined in yellow.





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: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____

SEAL (if signing under seal)

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____



Licence:
Form: LR1
Name: Monitoring of emissions to land

Licensee:
Period :

Form LR1: Monitoring of emissions to land

Monitoring point	Parameter	Result ¹	Averaging Period	Method	Sample date & times

Note 1: All units are referenced to STP dry

Signed on behalf of : Date:



Licence: L8667/2012/1
Form: N1

Licensee: Cliffs Asia Pacific Iron Ore Pty Ltd
Date of breach:

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

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
To be notified as soon as practicable and no later than 5PM of the next working day	
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 - to be submitted as soon as practicable

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 unauthorised emissions from the installation in the preceding 24 months.	

Name*	
Post	
Signature on behalf of Cliffs Asia Pacific Iron Ore Pty Ltd	
Date	



Partial Decision Document

Environmental Protection Act 1986, Part V

Proponent: Cliffs Asia Pacific Iron Ore Pty Ltd

Licence: L8667/2012/1

Registered office: Level 11, The Quadrant
1 William Street
PERTH, WA 6000

ACN: 001 892 995

Premises address: Windarling Range Mine Operations
Part Mining Lease M77/1038 and M77/1000
MOUNT JACKSON, 6426 as depicted in Schedule 1.

Issue date: Thursday, 29 November 2012

Commencement date: Monday, 3 December 2012

Expiry date: Saturday, 2 December 2017

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:

Clarrie Green
Licensing Officer

Decision Document authorised by:

Tim Gentle
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
	12	500,000 tonnes per year
	6	3,420,000 tonnes per year
	54	210 cubic metres per day
	64	500 tonnes
Application verified	Date: N/A	
Application fee paid	Date:	
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 checked="" type="checkbox"/> No <input type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input checked="" type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: MS982



		EPA Report No: 1521
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

Cliffs Asia Pacific Iron Ore Pty Ltd.'s (Cliffs) currently operate dewatering infrastructure, a wastewater treatment Plant (WWTP) and a mobile crushing and screening plant at Windarling Range Mine Operations (Windarling). Waste rock is crushed on site for use in explosive stemming and road base construction. Mined ore is taken to the Koolyanobbing Range Mine Operations for processing with no ore being processed at Windarling. Current dewatering operations have not been licenced under the *Environmental Protection Act 1986* (the Act).

Cliffs were issued a licence amendment in January 2015 to allow the dewatering of open pits W1 and W3 with a final discharge to W2 Pit. The maximum dewatering rate from Windarling following the latest amendment was conservatively predicted to be 2.72 gegalitres (GL) per annum. Cliffs now propose to develop the Windarling Range W7 Deposit, with the additional groundwater dewatering commencing Q1 2016 estimated at 0.7 GL/year over a 3-year period to W2 Pit.

During the dewatering program W2 Pit will be backfilled simultaneously. The remaining capacity of W2 Pit to 10 metres below the crest level is 19.8 GL so that there will be ample capacity within the pit to store the additional dewatering volumes proposed. Contingency dewatering pipelines have also been installed to allow a discharge to dewater to W4 West Pit in the unlikely event of limited capacity at W2 Pit. The existing pipeline network from W1, W2 and W3 Pits to turkey's nests will be expanded as part of this amendment to incorporate dewatering from W7 Pit. On 27 November 2015 the Environmental Protection Authority gave approval under Part IV of the Act for mining of the W7 pit. The approval includes mining below the groundwater table.

Tyres are disposed at W2, W3 and W4 waste dumps along with W2 and W3 Pits, which also accept putrescible wastes. Along with increases to dewatering volumes this amendment allows for an increase in throughput from 250 to 500 tonnes per annual period. Further amendments have been made to the Licence to convert conditions that align with the new template. No further assessment of emissions and discharges has been made as a part of this Licence amendment.



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
Premises operation	N/A	Former conditions 1.1.5 and 1.2.1 – 1.2.5 have been removed as they are not considered enforceable nor clear in their intent.	General provisions of the <i>Environmental Protection Act 1986</i> .
	L1.2.1 (formerly 1.3.1)	Table 1.2.1 has been amended to allow an increase in throughput at the landfill areas from 250 to 500 tonnes per annual period. Any waste that does not meet the specification requirements under that condition will need to be disposed at an appropriate landfill facility offsite.	<i>Environmental Protection (Rural Landfill) Regulations 2002</i>
	L1.2.7 and 1.2.10	Condition L1.2.10 has been placed on the Licence to allow Cliffs to construct additional dewatering infrastructure. Cliffs will also be required to construct pipelines in accordance with L1.2.7, which is designed to ensure environmentally hazardous materials are contained in the event of a pipeline breach.	Landfill Waste Classification and Waste Definitions 1996 (as amended December 2009).
Point source emissions to groundwater including monitoring	L2.2.1 L3.2.2 and 3.2.3	DER's assessment and decision making is detailed in Appendix A.	General provisions of the <i>Environmental Protection Act 1986</i> .



Emissions to land including monitoring	L2.3.1 L3.3.1	<p><u>Emission Description</u> <i>Emission:</i> Discharge of nutrient-rich wastewater to land via irrigation.</p> <p><i>Impact:</i> Excessive nutrient application to land may promote the growth of invasive species. These impacts are likely to be localised to the irrigation field and are assessed as minor.</p> <p>Nutrients that are not taken up by vegetation within the irrigation field are likely to seep past the root zone toward groundwater. Regional depth to groundwater is approximately 40 metres below ground level and is saline. Therefore impacts to groundwater are assessed as insignificant.</p> <p><i>Controls:</i> Cliffs' 2014 Annual Environmental Report indicates that the WWTP is currently being operated in accordance with the <i>Australian Guidelines for Sewerage Systems</i> for a secondary treatment plant. Nitrogen loading at the irrigation field has been managed by limiting the amount of treated effluent being discharged to the irrigation area with a proportion discharged to a lined water storage dam. In the 2014 period however, repairs and servicing to the WWTP resulted in more effluent being discharged to the irrigation field and nutrient loading limits for nitrogen (420 kg/ha/year) were exceeded by 30 kg/ha/year. However, the WWTP now is operating effectively and further limit exceedances are unlikely.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Emission to land targets relating to the operation of the WWTP have been removed from the Licence as they are not considered enforceable. Existing monitoring requirements (L4.2.1) will allow DER to continue to monitor the performance of the WWTP while limits for nutrient loading at the irrigation field under condition 2.3.2 will protect soils from contamination with excessive nutrients. The residual risk does not change with the removal of targets and monitoring is still required to verify compliance with nutrient loading limits.</p>	<p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i></p> <p>National Water Quality Management Strategy (1997) Australian Guidelines for Sewerage Systems – Effluent Management.</p>
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Fugitive emissions	N/A	<p>Generic fugitive emission conditions have been removed from the Licence as they are not considered enforceable. Cliffs have requested that category 12 (Screening etc. of material) be removed from the Licence as crushing of rock for road base and blast stemming is no longer required at prescribed throughput volumes under the <i>Environmental Protection Regulations 1987</i>.</p> <p>Dust generation from the WWTP is not expected to be significant whereas there will be some dust generation from the burial of landfill waste in disused pits with overburden. However, there are no nearby sensitive receptors as adjacent vegetation is expected to be relatively tolerant to dust. Therefore the consequence of dust is expected to be insignificant and generic conditions have not been replaced.</p>	
Information	L4.5.2	L4.5.2 has been adjusted to require the notification of standing water levels within W2 Pit rising above 10 m below the crest level. This will assist DER in ensuring that the root zone of native vegetation is not intercepted by saline groundwater.	N/A
Licence Duration	N/A	There has been no extension to the Licence expiry as part of this amendment.	N/A

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
22/12/2016	Proponent sent a copy of draft instrument	Minor comments received.	Minor comments accepted.



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



Appendix A

Dewatering discharges to W2 and W4 Pit have previously been assessed as discharges to land. As groundwater is present at the base of each receiving pit, this discharge is more accurately assessed as a point source discharge to groundwater. To allow for the discharge of dewater into W2 and W7, Table 2.2.1 has been amended.

The capacity of W2 to accept mine dewater and landfill wastes as at October 2015, was estimated at 19.8 GL to a level 10 metres below the lowest point of the pit crest. This is significantly greater than the approximate 17.9 GL (equivalent) of mine dewater proposed for discharge to W2 Pit. Discharge volumes have been conservatively estimated while waste compaction, water evaporation and infiltration have not been used in calculations.

Operation

Emission Description

Emission: Brackish dewatering effluent discharged from W1 and W3 Pits into W2 Pit and (potentially) W4 West Pit.

Impact: The salinity of groundwater at the Windarling Range is estimated at ranging between 20,000 and 30,000 mg/L Total Dissolved Solids (TDS) with higher salinities recorded at depth. Mine dewater is expected to raise the standing water level which may reach the root zone of the undisturbed natural vegetation to the west of W2 resulting in reduced plant growth or death. Groundwater beneath W2 is brackish (29,000 mg/L TDS) and displays similar characteristics to W7 Pit. Current depth to groundwater has been recorded at 40 metres below ground level.

Controls: Cliffs propose to maintain a 10 metre freeboard from the lowest point of the pit crest. This is expected to provide adequate protection to nearby natural vegetation as mounding of groundwater will decrease to lower than 10 m below ground level beyond the pits. As there will be an additional 2.1 GL discharged to W2 Pit over a period of 3 years the likelihood of an overtopping increases although it remains "Unlikely".

Risk Assessment

Consequence: Moderate

Likelihood: Unlikely

Risk Rating: Moderate

Regulatory Controls

Freeboard limits will be retained under condition 3.2.1 whereas targets have been replaced by condition 3.2.2. Cliffs will still be required to report exceedances of standing water levels rising above 10 m from the Pit crest level (L4.5.1).

To ensure that Cliffs respond to standing water level rises that present a risk to native vegetation, condition 3.2.3 has been added to the Licence requiring the development and implementation of a groundwater recovery plan in the event of standing water levels rising above 10 m below the Pit crest. This is expected to significantly reduce the likelihood of groundwater intercepting the root zone of native vegetation.

Residual Risk

Consequence: Moderate

Likelihood: Rare

Risk Rating: Moderate