Licence

Licence Number	L5278/1973/13
Licence Holder	Pilbara Iron Pty Ltd (ACN 107 216 535)
Registered business address	Pilbara Iron Pty Ltd Level 22, Central Park 152-158 St Georges Terrace PERTH WA 6000
Duration	25 June 2015 to 25 June 2035
Amended	7 December 2016
Prescribed Premises	Category 5 - Processing or beneficiation of metallic or non-metallic ore; Category 12 - Screening etc of material; Category 58 - Bulk material loading or unloading; and Category 73 - Bulk storage of chemicals, etc.

Premises Cape Lambert Operations

Lot 64 on Plan 57724 (Crown Land Title LR3153/692) Cape Lambert Rd Wickham 6720

Lot 65 on Plan 241547 (Crown Land Title LR3062/529) De Witt Location 65 Point Samson 6720

Lot 66 on Plan 241547 (Crown Land Title LR3062/531) De Witt Location 66 Point Samson 6720

Lot 106 on Plan 54397 (Crown Land Title LR3062/581) De Witt Location 106 Point Samson 6720

Lot 280 on Plan 217843 (Crown Land Title LR3122/588) De Witt Location 280 Antonymyre 6714

Lot 404 on Plan 194355 (Crown Land Title LR3114/871) De Witt Location 404 Point Samson 6720

Lot 574 on Plan 67839 (Crown Land Title LR3164/506) Mount Anketell 6714

Lot 1002 on Plan 402557 (Crown Land Title LR3164/424) Point Samson 6720

Part Lot 63 on Plan 54397 (Crown Land Title LR3119/871) De Witt Location 63 Point Samson 6720

and Mount Anketell 6714

Part Lot 265 on Plan 220920 De Witt Part Location 265 (Crown Land Title LR3119/863)

Mount Anketell 6714

CITY OF KARRATHA

This Licence is granted to the Licence Holder, subject to the following conditions, on 07-12- 2016, by:

Date signed: 7 December 2016
Agnes Tay
Director Strategy and Reform
an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

Explanatory Notes

These Explanatory Notes do not form part of this Licence.

Defined terms

Definition of terms used in this Licence can be found at the end of this Licence. Terms in the Licence which are capitalised are defined terms.

Department of Environment Regulation

The Department is the agency responsible for administering Part V of the *Environmental Protection Act 1986* (WA) (EP Act) for the regulation of Prescribed Premises. The Department also monitors and audits compliance with licences, takes enforcement action and develops and implements licensing and industry regulation policy.

Licence

Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered or permitted to be altered from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987* (WA).

This Licence does not authorise any activity which may be a breach of another approval by another authority. For example, if the Premises have been assessed under Part IV of the EP Act, the Licence Holder is still required to comply with any conditions imposed by the Minister for Environment under Part IV.

It is the responsibility of the Licence Holder to ensure that any action or activity referred to in this Licence is permitted by, and is carried out in compliance with, statutory requirements.

The Licence Holder must comply with the Licence. Contravening a Licence Condition is an offence under section 58 of the EP Act.

Responsibilities of Licence Holder

Separate to the requirements of this Licence, general obligations of Licence Holders are set out in the EP Act and the regulations made under the EP Act.

For example, the Licence Holder must comply with the following provisions of the EP Act:

- the duties of an occupier under section 61; and
- 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 (section 53).

Strict penalties apply for offences under the EP Act.

Reporting of incidents

The Licence Holder has a duty to report to the Department all Discharges of Waste that has caused or is likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with section 72 of the EP Act.

Offences and Defences

The EP Act and its regulations set out a number of offences including:

- Offence of emitting an Unreasonable Emission from any Premises under section 49;
- Offence of causing Pollution under section 49;

- Offence of dumping Waste under section 49A;
- Offence of discharging Waste in circumstances likely to cause pollution under section 50;
- Offence of causing Serious Environmental Harm (section 50A) or Material Environmental Harm (section 50B);
- Offence of causing Emissions which do not comply with prescribed standards (section 51);
- Offences relating to emissions or discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA);*
- Offences relating to noise under the *Environmental Protection (Noise) Regulations 1997 (WA).*

Defences to certain offences may be available to a Licence Holder and these are set out in the EP Act.

Section 74A(b)(iv) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Licence Holder can prove that the Emission or Discharged occurred in accordance with a Licence.

This Licence specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of Specific Emissions and Discharges, in order for the defence to offence provision to be available.

Authorised Emissions and Discharges

Section 56 of the EP Act provides that the occupier of any prescribed premises who –

(a) causes or increases, or permits to be caused or increased, and emission; or

(b) alters or permits to be altered the nature of the waste, noise, odour or electromagnetic radiation emitted,

from the prescribed premises commits an offence unless he is the holder of a Licence issued in respect of the prescribed premises and so causes increases or permits or alters in accordance with any condition to which that Licence is subject.

The Specified and General Emissions and Discharges from Primary Activities conducted on the Prescribed Premises are authorised to be conducted in accordance the Conditions of this Licence.

Emissions and Discharges caused from other activities not related to the Primary Activities at the Premises have not been Conditioned in this Licence. Emissions and Discharges from other activities at the Premises are subject to the general provisions of the EP Act.

Amendment of Licence

Section 53 of the EP Act provides that a Licence Holder commits an offence if Emissions are caused, or altered from the Prescribed Premises unless done in accordance with a Licence.

The Licence Holder can apply to amend the Conditions of this Licence under section 59 of the EP Act.

The CEO may also amend the conditions of this Licence at any time on the initiative of the CEO without an application being made.

Duration of Licence

The Licence will remain in force for the duration set out on the first page of this Licence or until it is surrendered, suspended or revoked in accordance with section 59A of the EP Act.

Suspension or Revocation

The CEO may suspend or revoke this Licence in accordance with section 59A of the EP Act.

Fees

The Licence Holder must pay an annual licence fee. Late payment of annual Licence fees will result in the Licence ceasing to have effect.

Conditions

Emissions

1. The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for Specified Emissions and General Emissions described in column 1, subject to the exclusions, limitations or requirements specified in Column 2, of Table 1.

If the Licence Holder proves that it has acted in accordance with this Condition, it may be a defence under s 74A of the EP Act to proceedings for offences under the EP Act.

Table 1: Authorised Emissions Table

Column 1	**Column 2**
Emission Type	**Exclusions/Limitations/Requirements**
Specified Emissions	
Discharge wash water and stormwater related to the Primary Activities	Subject to compliance with: • Conditions 2 and 3; and • Conditions 4 and 5.
Minor Spillage of hydrocarbons from storage vessels related to the Primary Activity	Subject to compliance with Conditions 2 and 3.
Minor Spillage of iron ore from the bulk material loading of vessels	Subject to compliance with Conditions 2 and 3.
General Emissions (excluding Specified Emissions)	
Emissions which arise from the Primary Activities set out in the General Description in Schedule 2.	Emissions excluded from General Emissions are: • Unreasonable Emissions; or • Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or • Discharges of Waste in circumstances likely to cause Pollution; or • Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or • Emissions or Discharges which do not comply with an Approved Policy; or • Emissions or Discharges which do not comply with prescribed standard; or • Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or • Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials

Column 1	Column 2
Emission Type	**Exclusions/Limitations/Requirements**
	Discharged under the *Environmental Protection (Unauthorised Discharges) Regulations 2004.*

Infrastructure and Equipment

2. The Licence Holder must ensure that the infrastructure and equipment specified in Column 1 and Column 2 of Table 4 in Schedule 3, is maintained and operated in accordance with the requirements specified in Column 3 of Table 4 in Schedule 3.

3. The Licence Holder must ensure that the equipment and infrastructure in Table 4 in Schedule 3 are maintained in good working order.

Wash water and Stormwater Monitoring

4. The Licence Holder must undertake wash water and stormwater monitoring:

(a) for the parameters specified in Column 1,

(b) from the locations specified in Column 2,

(c) at the frequency specified in Column 3, and

(d) using the method specified in Columns 5 and 6

in Table 2.

Table 2: Wash water and Stormwater Monitoring

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Parameter	**Location**	**Period**	**Limit**	**Sample**	**Method**
Total recoverable hydrocarbons (TRH)	Discharge points: CLD3, CLD2, CLD7, CLD4 shown on Stormwater Discharge Map in Schedule 1	Quarterly when flowing	15mg/L	Grab sample	AS5667.10: 1998

Limit

5. The Licence Holder must ensure that the parameter specified in Column 1 of Table 2 of Condition 4 for discharge wash water stormwater, do not exceed the limit specified in Column 4 of Table 2 in Condition 4.

Information

6. The Licence Holder must maintain accurate and auditable records in relation to:

(a) the calculation of fees payable in respect of this Licence;

(b) monitoring undertaken in accordance with Condition 4, validating compliance with Condition 5;

(c) the requirements specified in row 6, of Table 4 in Schedule 3, including:

(i) inspections undertaken at the wharf;

(ii) frequency and use of street sweeper at the wharf, and

(iii) frequency of iron ore and sediment clean ups undertaken at the wharfs.

(d) complaints received under Condition 7 of this Licence.

7. The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to activities on the Premises and the Licence Holder's obligations under this Licence and Part V of the EP Act for the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:

(a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;

(b) the name and contact details of the complainant, if provided by the complainant;

(c) the date of the complaint; and

(d) the details and dates of the actions taken by the Licence Holder in response to the complaints.

8. The Licence Holder must submit to the CEO within 90 days after the Anniversary Date, a Compliance Report indicating the extent to which the Licence Holder has complied with the Conditions in this Licence.

9. The Licence Holder must comply with a CEO Request, within 7 days from the date of the CEO Request or such other period specified in the CEO Request.

Definitions and Interpretation

Definitions

In this ***Licence***, the following terms have the following meanings:

Anniversary Date means 31 January of each year.

Annual Period means a 12 month period commencing from 1 January until 31 December of each year.

Approved Policy has the same meaning given to that term under the ***EP Act.***

AS5667.10:1998 means the Australian Standard AS5667.10:1998 *Water quality - Sampling - Guidance on sampling of waste waters.*

Compliance Report means a report in a format approved by the ***CEO*** as presented by the ***Licence Holder*** or as specified by the ***CEO*** from time to time and published on the ***Department's*** website.

CEO for the purposes of notification means:

Director General
Department Div.3 Pt. V EP Act
Locked Bag 33 Cloisters Square
Perth WA 6850
info@der.wa.gov.au

CEO Request means a request made by the ***CEO*** to the ***Licence Holder*** in writing, sent to the ***Licence Holder's*** address for notifications, as described at the front of this ***Licence***, in relation to:

(a) information, records or reports in relation to specific matters in connection with this ***Licence*** including in relation to compliance with any ***Conditions*** and the calculation of fees (whether or not a breach of ***Condition*** or the ***EP Act*** is suspected); or

(b) reporting, records or administrative matters:

(i) which apply to all ***Licences*** granted under the ***EP Act***; or

(ii) which apply to specified categories of ***Licences*** within which this ***Licence*** falls.

Condition means a condition to which this ***Licence*** is subject under s 62 of the ***EP Act***.

Department means the department established under s.35 of the Public Sector Management Act and designated as responsible for the administration of Division 3 Part V of the ***EP Act***.

Discharge has the same meaning given to that term under the ***EP Act***.

Emission has the same meaning given to that term under the ***EP Act***.

EP Act means the *Environmental Protection Act 1986* (WA).

General Description means the description of activities and operations carried out on the ***Premises*** as set out in Schedule 2 of this ***Licence***.

General Emission has the meaning set out in ***Condition*** 1 of this ***Licence***.

Grab sample has the same meaning given in ***AS5667.10:1998***.

Implementation Agreement or Decision has the same meaning given to that term under the ***EP Act***.

Licence refers to this document, which evidences the grant of ***Licence*** by the ***CEO*** under s 57 of the ***EP Act***, subject to the ***Conditions***.

Licence Holder refers to the occupier of the ***Premises*** being the person to whom this ***Licence*** has been granted, as specified at the front of this ***Licence***.

Material Environmental Harm has the same meaning given to that term under the ***EP Act***.

Minor Spillage means spillage of material or substance that is trivial or negligible in nature and does not result in an ***Unreasonable Emission***, ***Pollution***, ***Material Environmental Harm*** or ***Serious Environmental Harm***.

Pollution has the same meaning given to that term under the ***EP Act***.

Premises refers to the Premises to which this ***Licence*** applies, as specified at the front of this ***Licence*** and as shown on the map in Schedule 1 to this ***Licence***.

Primary Activities refer to the activities on the front of this ***Licence*** and the description provided in Schedule 2 of this ***Licence***.

Serious Environmental Harm has the same meaning given to that term under the ***EP Act***.

Specified Emission has the meaning set out in ***Condition*** 1 of this ***Licence***.

Unreasonable Emission has the same meaning given to that term under the ***EP Act***.

Waste has the same meaning given to that term under the ***EP Act***.

Interpretation

In this Licence:

(a) the words ‘including’, ‘includes’ and ‘include’ will be read as if followed by the words ‘without limitation’;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

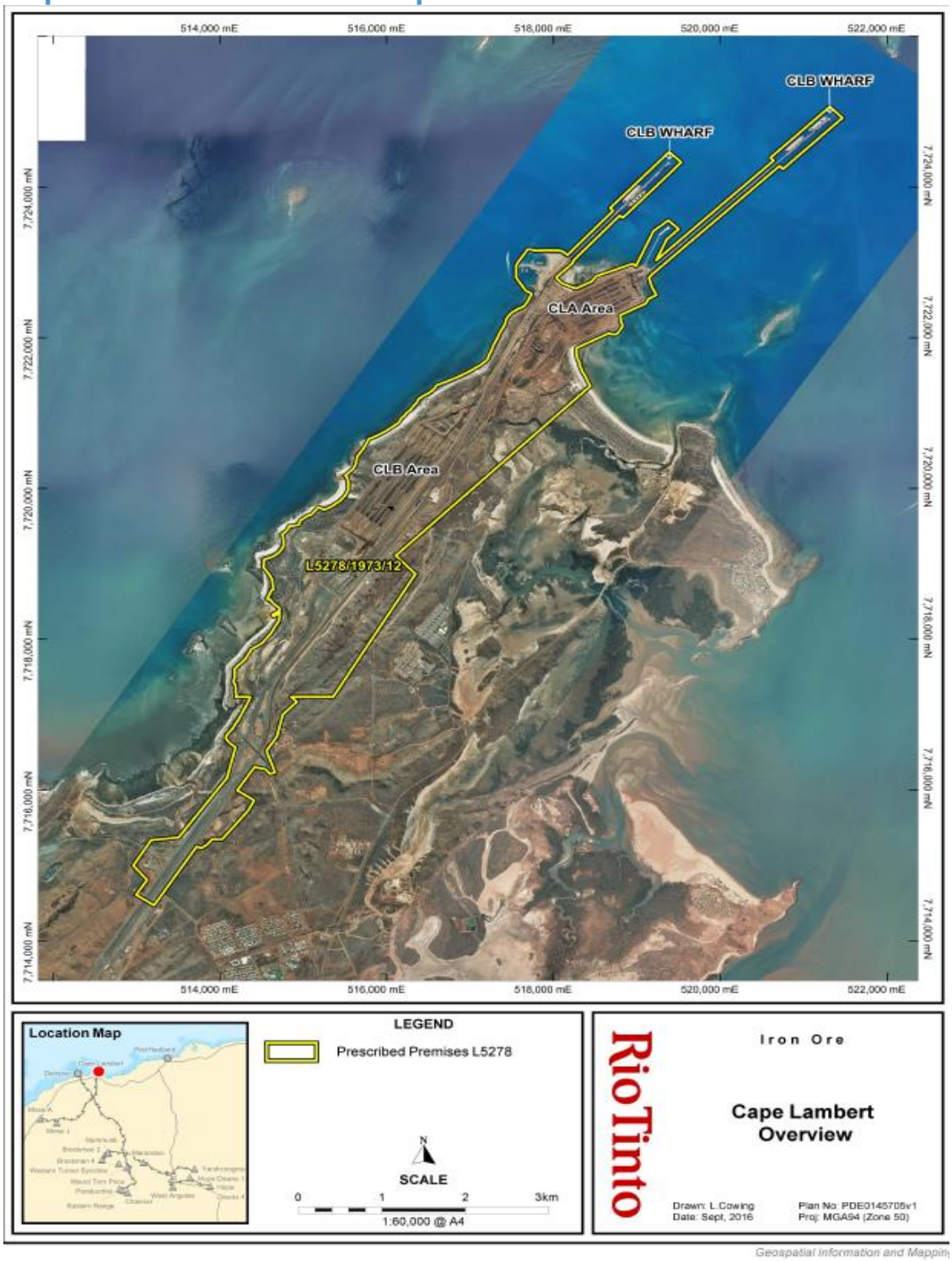
(c) where tables are used in a Condition, each row in a table constitutes a separate Condition; and

(d) any reference to an Australian or other standard, guideline or code of practice in this Licence means the version of the standard, guideline or code of practice in force at the time of granting of this Licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Licence.

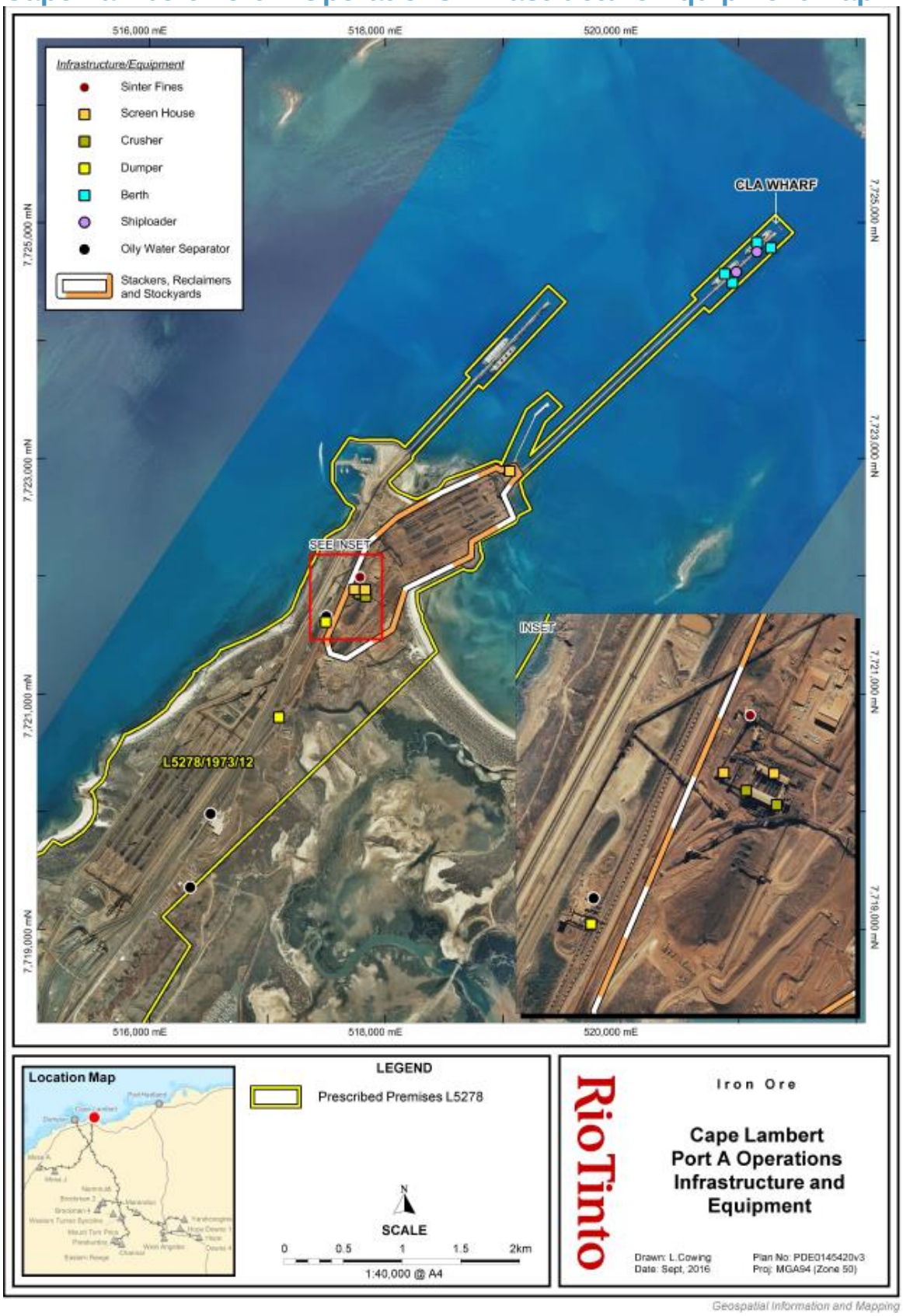
Schedule 1: maps

The Premises are shown in the Overview Map below. The yellow line depicts the boundary to the Premises. Infrastructure and equipment situated on the Premises and referred to in Schedule 2 are shown on the Premises Overview Map, Cape Lambert A Infrastructure and Equipment Map, Cape Lambert B Infrastructure and Equipment Map, Category 73 Infrastructure Map and Cape Lambert Discharge Points Map.

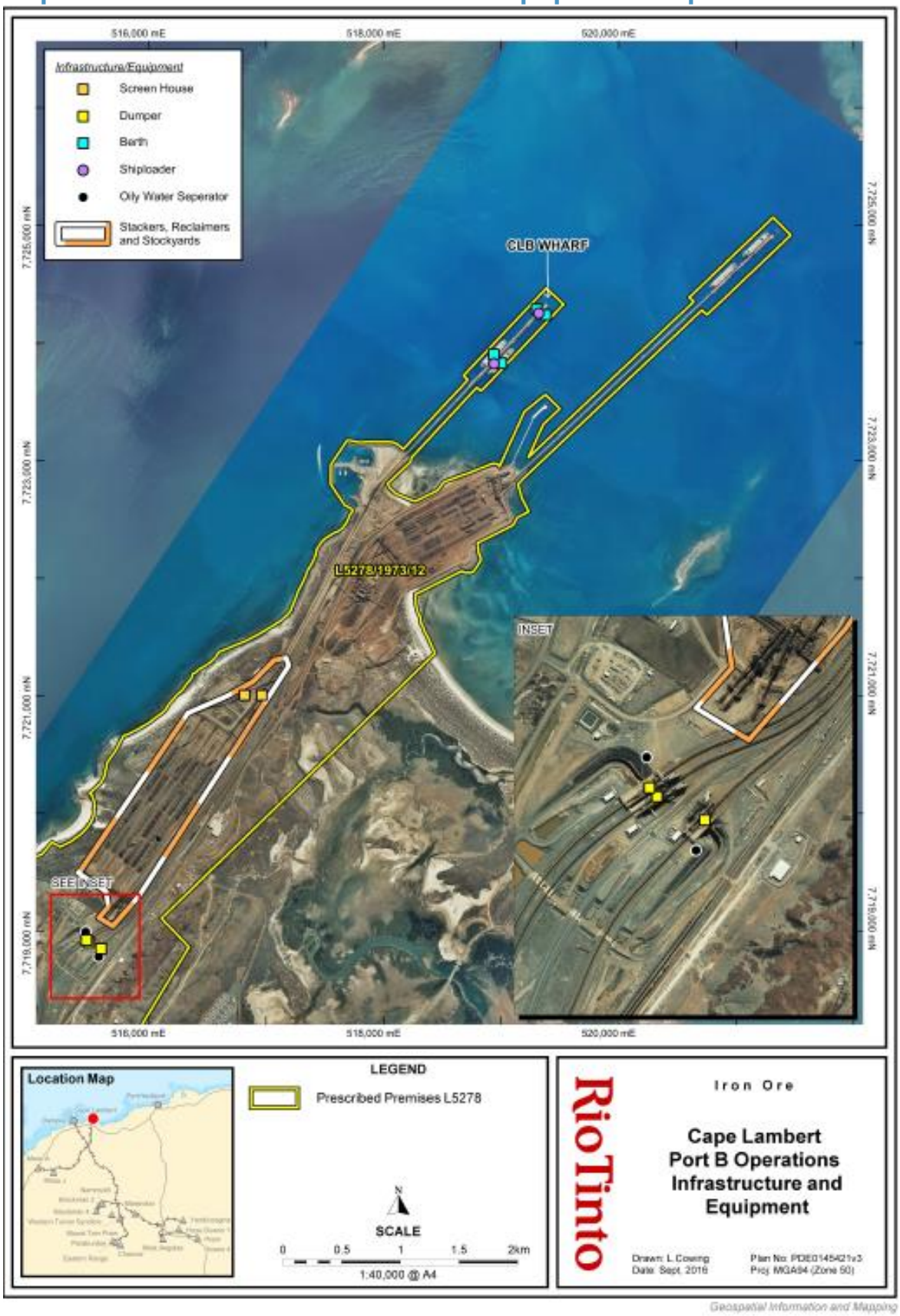
Cape Lambert Overview Map



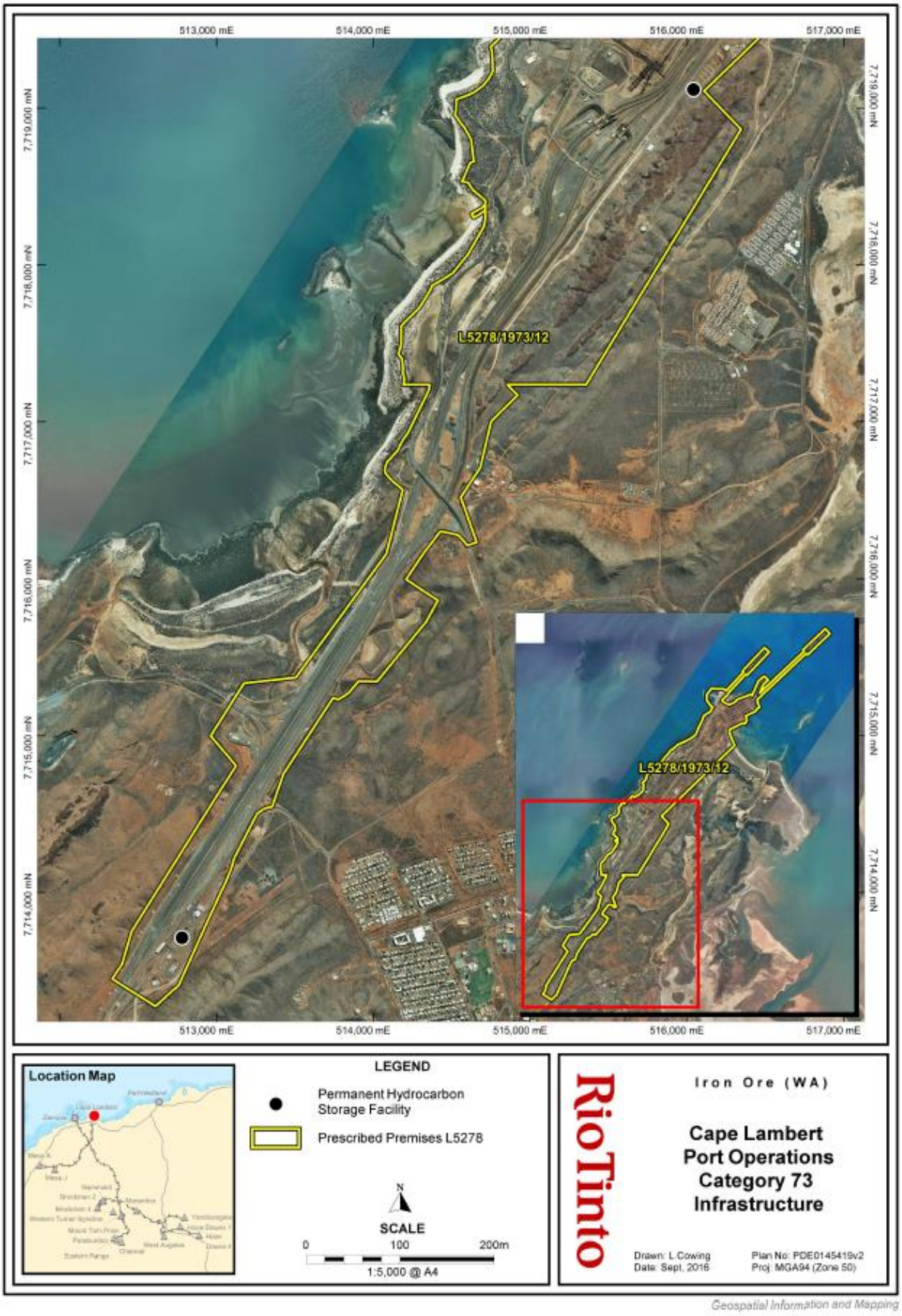
Cape Lambert Port A Operations Infrastructure Equipment Map



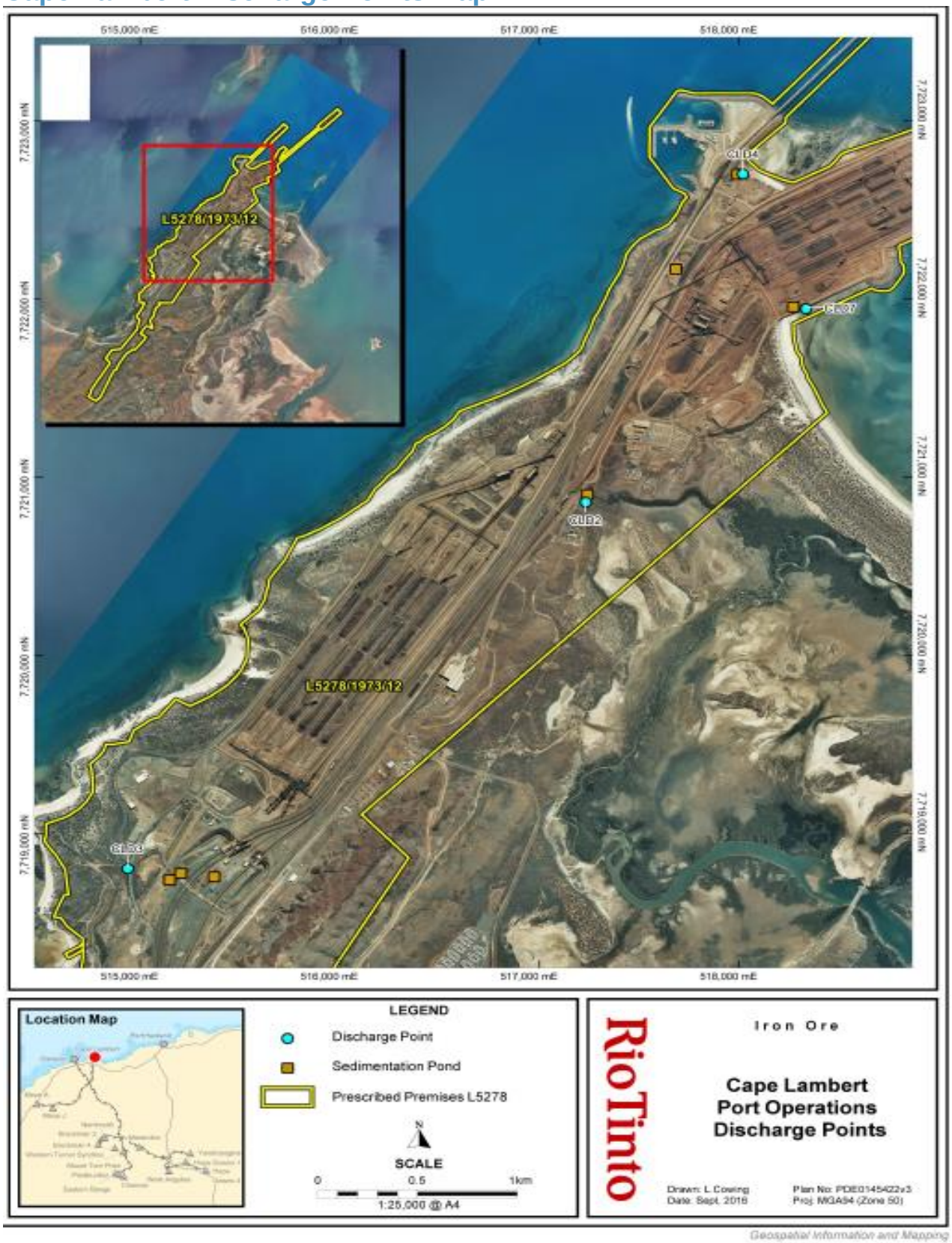
Cape Lambert Port B Infrastructure Equipment Map



Category 73 Infrastructure Map



Cape Lambert Discharge Points Map



Schedule 2: General Description

At the time of assessment, the following Emissions and Discharges from Primary Activities were considered in the determination of the risk and related Conditions for the Premises.

The Primary Activities constitute:

Primary Activity	Premises Production or Design Capacity
Category 5 – Processing or beneficiation of metallic or non-metallic ore: Premises on which – metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or tailings from metallic or non-metallic ore are reprocessed; or tailings or residue from metallic or non-metallic ore are discharged into containment cell or dam	235 Million tonnes per annum (Mtpa)
Category 12 – Screening etc. of material: Premises (other than Premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated	10 Mtpa
Category 58 – Bulk material loading or unloading: Premises on which clinker, coal, or, ore concentrate or any other bulk granular material (other than salt) is loaded onto or unloaded from vessels by an open materials loading system	235 Mtpa
Category 73 – Bulk storage of chemicals etc.: Premises on which acids, alkalis or chemicals that – contain at least one carbon to carbon bond; and are liquid at STP (standard temperature and pressure), are stored.	1,650 m^3 in aggregate

Infrastructure and equipment

The following Primary Activity infrastructure and equipment specified in Table 3 are situated on the Premises.

Table 3: Primary Activity Infrastructure and Equipment

CAPE LAMBERT A AND B OPERATIONS		
	Category 73 Infrastructure	**Plan reference**
1	Permanent hydrocarbon storage facility	Cape Lambert Port operations Category 73 Infrastructure
	Category 12 Infrastructure	**Plan reference**
2	Mobile Equipment plant	Cape Lambert Overview
CAPE LAMBERT A OPERATIONS		
	Category 5 and 58 Infrastructure	**Plan reference**
3	Sinter Fines building and crushing and screening plants	Cape Lambert Port A Operations Infrastructure and Equipment: Sinter

4	Screen houses	Cape Lambert Port A Operations Infrastructure and Equipment: Screen House
5	Crushers	Cape Lambert Port A Operations Infrastructure and Equipment: Crusher
6	Unsealed roads at Stockyard	N/A
7	Car dumpers	Cape Lambert Port A Operations Infrastructure and Equipment: Dumper
8	Stockpiles	Cape Lambert Port A Operations Infrastructure and Equipment: Stockyards
9	Wharf	Cape Lambert Port A Operations Infrastructure and Equipment: CLA Wharf
10	Shiploaders	Cape Lambert Port A Operations Infrastructure and Equipment: CLA Wharf
11	Stackers	Cape Lambert Port A Operations Infrastructure and Equipment: Stackers
12	Reclaimers	Cape Lambert Port A Operations Infrastructure and Equipment: Reclaimers
13	Conveyor system	N/A
14	Transfer stations	N/A
	Directly related to Primary Activities (Category 5 and 58)	
15	Sedimentation basins and discharge points	Cape Lambert Discharge Points Map: Discharge Point, Sedimentation Pond
16	Oily water separators	Cape Lambert Port A Operations Infrastructure and Equipment: Oily water separator
CAPE LAMBERT B OPERATIONS		
	Category 5 and 58 Infrastructure	**Plan reference**
17	Two screen houses	Cape Lambert Port B Operations Infrastructure and Equipment: Screen House
18	Surge bins	N/A
19	Car dumpers	Cape Lambert Port B Operations Infrastructure and Equipment: Dumper
20	Stockpiles	Cape Lambert Port B Operations Infrastructure and Equipment: Stockyards
21	Wharf	Cape Lambert Port B Operations Infrastructure and Equipment: CLB Wharf
22	Shiploaders	Cape Lambert Port B Operations Infrastructure and Equipment: Shiploader
23	Stackers	Cape Lambert Port B Operations Infrastructure and

		Equipment: Stackers
24	Reclaimers	Cape Lambert Port B Operations Infrastructure and Equipment: Reclaimers
25	Conveyor system	N/A
26	Transfer stations	N/A
	Directly related to Primary Activities (Category 5 and 58)	
27	Various sedimentation basins and discharge points	Cape Lambert Discharge Points Map: Discharge Point, Sedimentation Pond
28	Various oily water separators	Cape Lambert Port B Operations Infrastructure and Equipment: Oily water separator

Site layout

The infrastructure and equipment are set out on the Premises in accordance with the site layout specified on the Premises Maps in Schedule 1.

Schedule 3: Infrastructure and Equipment

Table 4: Infrastructure and Equipment Controls Table

	Column 1	Column 2	Column 3	Column 4
	Site Infrastructure	**Description**	**Operational requirements**	**Reference to maps (Schedule 1)**
	Controls for stormwater, waste water and spill management			
1.	Car dumpers	Oily water separator	Treated prior to disposal. Must have the following characteristics: • a sump to allow sediment to settle prior to oil removal treatment; • a sampling point to collect a representative sample of the treated water; • screens to prevent general waste from entering the oily water treatment system; and • above ground piping, wherever practicable.	Cape Lambert A and B Infrastructure Maps
2.	Stockyard and local plant stormwater infrastructure	Stockyard drainage Local plant drainage	Must be designed to provide flood protection to infrastructure.	Cape Lambert A and B Infrastructure Map: Stockyards
3.	Stormwater discharge points (and associated sediment basins)	• CLB southern discharge point (CLD3) • Sams creek (CLD2) • CLA stockyard (CLD7) • Cooling water beach discharge (CLD4)	Stormwater discharge points must be maintained in good repair.	Cape Lambert Discharge Points Map: CLD2, CLD3, CLD4, CLD7
4.	Surface water and contaminated water infrastructure	• Infrastructure to manage surface water and contaminated water • Separate systems for contaminated water and general stormwater	Must capture water from plant areas where there is the potential for hydrocarbon contamination. Surface water and contaminated water (e.g. hydrocarbons, sediment, detergent) must be collected, contained, treated and reused wherever possible.	Cape Lambert Overview Map
5.	Liquid and Chemical Storage	Infrastructure to store chemicals including, but not limited to fuel, oil or other hydrocarbons (where the total volume of each	Chemicals must be located within low permeability (10^{-9} metres per second or less) compounds(s) designed to contain not less than 110% of	Category 73 Infrastructure Map

	Column 1	Column 2	Column 3	Column 4
	Site Infrastructure	**Description**	**Operational requirements**	**Reference to maps (Schedule 1)**
		substance stored exceeds 250 litres)	the volume of the largest storage vessel or interconnected system, and at least 25% of the total volume of substances stored in the compound	
6.	Premises Iron ore spill cleanup (Wharf)	Premises Wharf – cleaned by operators and street sweepers.	To prevent iron ore and sediment entering the marine environment: • clean up of the wharf must be undertaken at regular intervals using a street sweeper; and • removal of spilt iron ore under conveyors and ship loaders must be undertaken when material has built-up. To initiate and verify the above actions, an inspection of the wharf must be undertaken on a weekly basis, or additionally if required. Excess material and sediment must be stored in a contained area on the wharf and collected by a truck and transported back to the Cape Lambert stockyards.	Cape Lambert Overview Map

Review of Existing Premises

Part V, Division 3 *Environmental Protection Act 1986*

Applicant:	**Pilbara Iron Pty Ltd**
ACN:	**107 216 535**
Licence Number:	**L5278/1973/13**
File Number:	**DER2013/001112**
Premises:	**Cape Lambert Operations** Lot 64 on Plan 57724 (Crown Land Title LR3153/692) Cape Lambert Rd Wickham 6720 Lot 65 on Plan 241547 (Crown Land Title LR3062/529) De Witt Location 65 Point Samson 6720 Lot 66 on Plan 241547 (Crown Land Title LR3062/531) De Witt Location 66 Point Samson 6720 Lot 106 on Plan 54397 (Crown Land Title LR3062/581) De Witt Location 106 Point Samson 6720 Lot 280 on Plan 217843 (Crown Land Title LR3122/588) De Witt Location 280 Antonymyre 6714 Lot 404 on Plan 194355 (Crown Land Title LR3114/871) De Witt Location 404 Point Samson 6720 Lot 574 on Plan 67839 (Crown Land Title LR3164/506) Mount Anketell 6714 Lot 1002 on Plan 402557 (Crown Land Title LR3164/424) Point Samson 6720 Part Lot 63 on Plan 54397 (Crown Land Title LR3119/871) De Witt Location 63 Point Samson 6720 and Mount Anketell 6714 Part Lot 265 on Plan 220920 De Witt Part Location 265 (Crown Land Title LR3119/863) Mount Anketell 6714 CITY OF KARRATHA
Date of report:	**Wednesday, 7 December 2016**
Status of Report:	**Final**

Table of Contents

Definitions of terms

Term	Definition
AACR	Annual Audit Compliance Report
ARI	Average Reoccurrence Interval
Category	as set out in Schedule 1 of the *EP Regulations*
CLA	Cape Lambert Port A
CLB	Cape Lambert Port B
CS Act	*Contaminated Site Act 2003*.
Decision Report	this document
DER	the Department of Environment Regulation
EPA	Environmental Protection Authority
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
Existing Licence	The licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of, and during this review
ICMS	DER's Incident and Complaints Management System
Licence Holder	Pilbara Iron Pty Ltd
m^3	cubic metres
Mtpa	million tonnes per annum
MS	Ministerial Statement
Noise Regulations	*Environmental Protection (Noise) Regulations 1997* (WA)
NTU	Nephelometric Turbidity Units
PM	Particulate Matter
PM_{10}	Used to describe particulate matter that is smaller than 10 microns (µm) in diameter.
Premises	Cape Lambert Operations

Prescribed Premises	Premises prescribed under Schedule 1 to the EP Regulations.
Primary Activities	Refers to the activities on the front of the Licence and the description provided in Schedule 2 of the Licence.
PDWSA	Public Drinking Water Source Areas proclaimed under the *Metropolitan Water Supply, Sewerage and Drainage Act 1909* and the *Country Areas Water Supply Act 1947*.
PSCA	Point Samson Community Association
Review	This Licence review
Revised Licence	The amended licence issued under Part V, Division 3 of the EP Act following the finalisation of this review
Rio Tinto	Rio Tinto Limited
TRH	Total Recoverable Hydrocarbon
UDR	*Environmental Protection (Unauthorised Discharge) Regulations 2004*
$\mu g/m^3$	micrograms per cubic metre
µg/L	micrograms per litre

1. Purpose and Scope of Review

This licence review (Review) of Licence L5278/1973/13 (Existing Licence) was initiated by the Department of Environment Regulation (DER), with the agreement of Pilbara Iron Pty Ltd (Licence Holder), as part of implementing DER's regulatory framework program. The Review applies a risk-based assessment approach in accordance with DER's Guidance Statement: Regulatory principles (July 2015) to the regulation of the Cape Lambert Operations (Premises) as well as taking into consideration other relevant matters.

This Review also takes into consideration the Licence Holder's closure of the Category 63 inert landfill licensed on the Existing Licence.

As a result of this Review, the Existing Licence is proposed to be replaced by the Revised Licence (Attachment 1).

2. Background

The Licence Holder is a subsidiary of Rio Tinto Limited (parent company) and operates the Premises, which comprises Cape Lambert Port A (CLA) and Cape Lambert Port B (CLB). The Existing Licence was last amended by DER on 25 June 2015. The Existing Licence regulates the Prescribed Premises categories under Schedule 1 of the Environmental Protection Regulations 1987 (EP Regulations) set out in Table 1 below.

Until the amendment process in 2015, when CLB was added to the Existing Licence, only CLA was authorised for operation under licence L5278/1973/12. CLB was constructed under works approval W4800/2010/1.

Table 1: Categories on L5278/1973/13 issued 25 June 2015

Classification of Premises	Description	Approved premises production or design capacity
Category 5	Processing or beneficiation of metallic or non-metallic ore: premises on which — (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	235 Mtpa
Category 12	Screening etc. of material: premises (other than presmises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	10 Mtpa
Category 58	Bulk material loading or unloading: premises on which clinker, coal, ore, ore concentrate or any other bulk granular material (other than salt) is loaded onto or unloaded from vessels by an open materials loading system.	235 Mtpa
Category 63	Class I inert landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	50,000m³ per annual period
Category 73	Bulk storage of chemicals etc.: premises on which acids, alkalis or chemicals that — (a) contain at least one carbon to carbon bond; and (b) are liquid at STP (standard temperature and pressure), are stored.	1,650m³ in aggregate

3. Overview of Premises

The Premises includes iron ore receiving, processing, stockpiling and exporting facilities located at Cape Lambert in the City of Karratha. The Premises have a total capacity of 235 ***Mtpa***.

3.1 Infrastructure and equipment

The Premises infrastructure as it relates to Primary Activities situated within the Prescribed Premises, is detailed in Table 2 as Cape Lambert A and Cape Lambert B with reference to the Premises Map (attached in the Revised Licence).

Table 2: Premises Category infrastructure and equipment

CAPE LAMBERT A AND B OPERATIONS		
	Category 73 Infrastructure	**Plan reference**
1	Permanent hydrocarbon storage facility	Cape Lambert Port operations Category 73 Infrastructure
	Category 12 Infrastructure	**Plan reference**
2	Mobile Equipment plant	Cape Lambert Overview
CAPE LAMBERT A OPERATIONS		
	Categories 5 and 58 Infrastructure	**Plan reference**
3	Sinter Fines building and crushing and screening plants	Cape Lambert Port A Operations Infrastructure and Equipment: Sinter
4	Screen houses	Cape Lambert Port A Operations Infrastructure and Equipment: Screen House
5	Crushers	Cape Lambert Port A Operations Infrastructure and Equipment: Crusher
6	Unsealed roads at Stockyard	N/A
7	Car dumpers	Cape Lambert Port A Operations Infrastructure and Equipment: Dumper
8	Stockpiles	Cape Lambert Port A Operations Infrastructure and Equipment: Stockyards
9	Wharf	Cape Lambert Port A Operations Infrastructure and Equipment: CLA Wharf
10	Shiploaders	Cape Lambert Port A Operations Infrastructure and Equipment: CLA Wharf
11	Stackers	Cape Lambert Port A Operations Infrastructure and Equipment: Stackers
12	Reclaimers	Cape Lambert Port A Operations Infrastructure and Equipment: Reclaimers
13	Conveyor system	N/A

14	Transfer stations	N/A
	Directly related to Primary Activities (Categories 5 and 58)	
15	Sedimentation basins and discharge points	Cape Lambert Discharge Points Map: Discharge Point, Sedimentation Pond
16	Oily water separators	Cape Lambert Port A Operations Infrastructure and Equipment: Oily water separator
CAPE LAMBERT B OPERATIONS		
	Categories 5 and 58 Infrastructure	**Plan reference**
17	Two screen houses	Cape Lambert Port B Operations Infrastructure and Equipment: Screen House
18	Surge bins	N/A
19	Car dumpers	Cape Lambert Port B Operations Infrastructure and Equipment: Dumper
20	Stockpiles	Cape Lambert Port B Operations Infrastructure and Equipment: Stockyards
21	Wharf	Cape Lambert Port B Operations Infrastructure and Equipment: CLB Wharf
22	Shiploaders	Cape Lambert Port B Operations Infrastructure and Equipment: Shiploader
23	Stackers	Cape Lambert Port B Operations Infrastructure and Equipment: Stackers
24	Reclaimers	Cape Lambert Port B Operations Infrastructure and Equipment: Reclaimers
25	Conveyor system	N/A
26	Transfer stations	N/A
	Directly related to Primary Activities (Categories 5 and 58)	
27	Various sedimentation basins and discharge points	Cape Lambert Discharge Points Map: Discharge Point, Sedimentation Pond
28	Various oily water separators	Cape Lambert Port B Operations Infrastructure and Equipment: Oily water separator

3.2 Operational Aspects

Continuous loading and stockpile operations operate 24 hours per day, 7 days a week on the Premises.

CLA has an approved port capacity of 105 Mtpa and consists of a rail network, rail car dumping facilities, crushing and screening plants, stockpiles, conveyors, stackers, reclaimers and wharf and ship loading facilities. CLA receives ore from the Mesa A and Mesa J (Robe Valley) and Yandicoogina mines (Rio Tinto, 2012).

Robe Valley ore is railed from Mesa A and Mesa J mines to Cape Lambert in rail cars. At Cape Lambert, the Robe Valley ore is unloaded through Car Dumper 1 and crushed prior to being conveyed to the coarse ore stockpile. From the coarse ore stockpile, the ore is fed to the crushing and screening plant and then stacked into the CLA stockyard ready for shipment (Rio Tinto, 2012). Non-Robe Valley ore is unloaded through Car Dumper 2 and fed to the CLA stockyard and blended ready for shipment (Rio Tinto, 2012). CLA has its own designated jetty/wharf fitted with two shiploaders.

CLB has an approved port capacity of 130 Mtpa and receives a blend of product railed from various mines. The facility includes a rail network, ore stockyards, screening and delivery systems, an access jetty/wharf fitted with two shiploaders and various associated ancillaries.

The Premises also include a Category 63 licenced landfill which was required as part of the CLB construction project. The Licence Holder advised on 29 July 2016 that this inert landfill is no longer required as it has been rehabilitated and the tenure relinquished (Rio Tinto, 2016). Refer to Section 7.1 for further information on DER's risk assessment.

Key Finding: The Delegated Officer has determined that the Category 63 landfill can be removed from the Revised Licence as the risk to groundwater contamination from the landfill is unlikely following review of annual reporting provided by the Licence Holder. The Delegated Officer has considered that the risk of the closure of the landfill has been adequately addressed having regard to:

- **the landfill accepted inert waste only; and**
- **is subject to rehabilitation by City of Karratha planning approval conditions.**

The Delegated Officer considers that the rehabilitation requirements are appropriate.

4. Legislative Context

Relevant approvals and underlying tenure associated with the Premises which are held by Rio Tinto and subsidiaries and related companies are outlined in Table 3.

Table 3: Approvals and tenure

Legislation	Number	Subsidiary	Approval
Environment Protection and Biodiversity Conservation Act 1999 (Cth)	2008/4032	Robe River Mining Co. Pty. Ltd.	Cape Lambert Port B Development
Part IV of the EP Act (WA)	Statement Number 514	Robe River Mining Co. Pty. Ltd.	Cape Lambert Port expansion

Part IV of the EP Act (WA)	Statement Number 741	Robe River Iron Ore Associates	Increase throughput of iron ore to 85Mtpa
Part IV of the EP Act (WA)	Statement Number 743	Robe River Iron Ore Associates	Capital and maintenance dredging program for Cape Lambert port upgrade.
Part IV of the EP Act (WA)	Statement Number 840	Pilbara Iron Pty Ltd	Cape Lambert Port B Development – export 130Mtpa
Part IV of the EP Act (WA)	Statement Number 876	Pilbara Iron Pty Ltd	Amendment to Statement Number 840 to update conditions
Part V of the EP Act (WA)	CPS5272/3	Robe River Mining Co. Pty. Ltd.	Clearing of 150 hectares associated with the port facility.
Part V of the EP Act (WA)	W4800/2010/1	Robe River Mining Co. Pty. Ltd.	Cape Lambert Port B Development
Part V of the EP Act (WA)	W5435/2013	Robe River Mining Co. Pty. Ltd.	Cape Lambert Power Station
Part V of the EP Act (WA)	L5278/1973/13	Pilbara Iron Pty Ltd	Cape Lambert Port Operations
Land Administration Act 1997	Lot 1002 on Plan 402557; Lot 66 on Plan 241547; Lot 404 on Plan 194355; Lot 106 on Plan 54397; Part Lot 63 on Plan 54397	Robe River Mining Co. Pty. Ltd. And North Mining Limited	Crown Land Titles
Iron Ore (Robe River) Agreement Act 1964	January 2014	Robe River Mining Co. Pty. Ltd., North Mining Limited and Robe River Limited.	State Agreement

Approvals and tenure is held by a number of different subsidiaries, dependent upon on agreements, joint ventures and mergers.

It is noted that the Part V works approvals have been obtained by Robe River Mining Co Pty Ltd and the licence is now held by Pilbara Iron Pty Ltd.

4.1 Part IV of the EP Act

The Premises have been assessed by the Environmental Protection Authority (***EPA***) under Part IV of the EP Act. The key relevant Ministerial Statements (MS) to this Review are MS 741 (EPA Bulletins 924 and 1246) and MS 840 (EPA Bulletin 1357). The key features of those Ministerial Statements will be outlined further below.

An amendment to MS 541 under 45C of the EP Act was made on 16 January 2014 to remove reference to “Port” in relation to the Premises as it is now covered by MS 741.

MS 743 (EPA Bulletin 1254) relates to the dredging program for the Cape Lambert port upgrade. This activity does not meet the definition of a Prescribed Premises under the EP Regulations and so it is not included on the Part V licence, and is not relevant to this Review.

Similarly, MS 876 (EPA Bulletin 1412) is not relevant to this Review. MS 876 amended a condition on MS 840 relating to marine dredging and the amount of benthic primary producer habitat that can be directly impacted by the dredging. Marine impacts associated with the Licence Holder's works approval W4800 for CLB under Part V Division 2 of the EP Act did not extend to marine dredging.

4.1.1 Ministerial Statement 741 (EPA Bulletins 924 and 1246)

The West Angeles Iron Ore Project – East Pilbara was referred to the EPA on 9 June 1997 for the development of an iron ore mine and processing operation at West Angeles, the construction of a railway line from West Angeles to the Robe Pannawonica-Cape Lambert railway and, relevant to this Review, expansion of the port facilities at CLA. The EPA advised the Minister for the Environment (EPA Bulletin 924), that the environmental factors relevant to CLA were impacts to marine flora, marine and specially protected marine fauna, and dust generated from unloading, stockpiles and handling. In relation to dust, the EPA stated that there were likely to be dust impacts at Wickham and Point Samson, noting the nearest residence to Cape Lambert is located more than 2.5km away. Whilst the EPA advised that dust can be managed under Part V of the EP Act, MS 541 published on 28 June 1999 conditioned the dust impacts at the port operations through an Environmental Management Program.

A subsequent proposal to increase the throughput of iron ore from 55Mtpa to 85Mtpa at CLA was referred to the EPA in May 2006. The proposal involved the upgrading of existing infrastructure with the key environmental factors considered by the EPA being dust, noise and water resources. The EPA recommended to the Minister for the Environment ongoing conditions for noise and dust management which were conditioned in MS 741, published on 18 May 2007.

Condition 6 of MS 741 outlines the objectives and requirements of a Dust Monitoring Plan with monitoring actions outlined in Schedule 2. In particular, requirements for monitoring CLA's contribution of particulate matter less than 10 microns (µm) in diameter (PM_{10}) to the Town of Point Samson and a number of short term total suspended particulate (TSP) monitoring requirements are included.

Condition 7 required the development of a Dust Management Plan inclusive of management actions outlined in Schedule 3 of MS 741, with the provision of modelling validation as required under condition 8 to amend the Dust Management Plan if required.

Noise management was addressed under condition 9 through a noise management program and required an annual report on compliance with the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations).

4.1.2 Ministerial Statement 840 (EPA Bulletin 1357)

On 14 November 2007, the proposal to develop a second port (CLB) at Cape Lambert, located adjacent to the original port was referred to the EPA. The EPA advised the Minister for Environment (draft EPA Bulletin 1357 issued in May 2010) that the existing Dust Management Plan (required under MS 741), would require substantial revision to incorporate CLB, to manage the dust impacts. MS 840 published on 30 September 2010 reflects this recommendation.

Condition 10 of MS 840 required the then Department of Environment Conservation's advice in updating the existing Dust Management Plan. The condition states that the Construction Environmental Management Plan and Dust Management Plan shall describe the process and criteria used to ascertain when the Premises significantly contributes to Point Samson's ambient dust levels.

A turtle management condition was placed on MS 840 to ensure that there is no direct light in turtle nesting areas along Bells Beach from the Premises and to implement a wider marine turtle management plan for the CLB development.

4.1.3 Inquiry under section 46 of the EP Act

The 25 June 2015 DER licence amendment was appealed by the Licence Holder on 20 July 2015 relating to conditions not being warranted, taking into consideration the environmental risk posed by, or the environmental performance of, the premises; and duplication of Part IV of the EP Act requirements within MS 741 and MS 840.

After discussions with the Office of the Environmental Protection Authority (OEPA), Rio Tinto and DER regarding the regulation of dust and noise at the Premises, DER amended licence L5278/1973/13 on 17 June 2016 to remove dust and noise conditions that duplicated requirements of Ministerial Statements (MS) 741 and 840.

The Minister requested the EPA, in accordance with section 46 of the *Environmental Protection Act 1986* (***EP Act***), to inquire into and report on, the alignment between conditions under Part IV and Part V of the EP Act and whether changes were required to the conditions within MS 741 and 840.

To inform the inquiry under section 46 of the EP Act, DER has provided a risk assessment of the potential dust and noise impacts of the Premises to the OEPA.

Key Finding: As the potential impacts associated with dust and noise at the Premises and light impacts on nesting turtles on adjacent beaches, are managed through Part IV of the EP Act, the Delegated Officer has not considered these risks under this Review.

In the event that the inquiry under section 46 of the EP Act results in amendments to the Ministerial Statements to remove conditions for dust and noise, the licence will be subject to review and amendment to include controls for dust and noise.

4.2 Contaminated Site Matters

A review of DER's Contaminated Sites Database identified that on 23 January 2009 the Premises site was classified under the *Contaminated Sites Act 2003* (CS Act) as 'Contaminated – remediation required'. A contamination assessment was undertaken from 2002-2006. The nature and extent of the contamination was identified as hydrocarbons, metals and polychlorinated biphenyls in the soil. Due to the nature and extent of the groundwater contamination at the site, untreated groundwater is not permitted for use.

The site is being monitored under the CS Act.

4.3 Other Approvals

The CLB project was approved under the *Iron Ore (Robe River) Agreement Act 1964*, which is administered by the Department of State Development.

Other relevant approvals that are required and have been obtained for the operations are outlined in Table 4.

Table 4: Other approvals

Department	Approval No.	Location	Use	Design Capacity Throughput	Expiry
Department of Water	Groundwater licence GWL 173141(2)	CLB Car Dumper 5 excavation	Dewatering and dust suppression	200,000kL	21 June 2017
Department of Water	Groundwater licence GWL 174320(3)	CLB Car Dumper 6/7 excavation	Dewatering and dust suppression	480,000kL	20 May 2018
City of Karratha (formerly Shire of Roebourne)	Planning Approval PA 1983D	Lot 500 on Plan 63022, Wickham	Noxious industry – class 1 and 2 Landfill	N/A	N/A rehabilitation and closure plans to be complied with.
Department of Mines and Petroleum	Dangerous Goods Site licences under the *Dangerous Goods Safety Act 2004* 1- DGS006130 2 - DGS015722	Cape Lambert Port	Fuel storage facilities	1635 kL	1 - 30/6/2021 2 - 30/6/2021

4.4 Applicable DER Regulations, Standards and Guidelines

The overarching legislative framework of this Review is the EP Act and EP Regulations.

DER Guidance Statements which inform this Review in line with the legislation are as follows:

- *Guidance Statement: Regulatory Principles* (July 2015)
- *Guidance Statement: Setting Conditions* (October 2015)
- *Guidance Statement: Land Use Planning* (October 2015)
- *Guidance Statement: Licence duration* (November 2015)
- *Guidance Statement: Risk Assessments* (November 2016)
- *Guidance Statement: Decision Making* (November 2016)

Other documents used in this Review are documented in Appendix 1.

4.5 Part V of EP Act

4.5.1 Clearing Permits

Rio Tinto has a strategic clearing purpose permit CPS 5272/3 over the Premises granted by the Department for the clearing of 150 hectares of native vegetation for the purpose of construction and installation of utilities, mine and port support infrastructure and associated works. The permit expires on 16 November 2028 and contains conditions relating to weed control, flora and fauna management (including marine turtles) and revegetation of areas that no are longer required for the purpose for which they were cleared.

This strategic permit captures native vegetation clearing requirements for clearing associated with port and mining infrastructure which are not specifically approved under MS 741 and 840 for ongoing ancillary requirements.

Key Finding: The Delegated Officer considers that the impacts from the clearing of native vegetation at the Premises are managed through Part IV of the EP Act and clearing permit CPS 5272/3.

4.5.2 Works Approval History

CLA has been operational since 1973 and licensed under the EP Act since October 1994. There have been a number of EP Act works approvals related to the Premises. W4800/2010 (for the CLB project – now expired) and W5435/2013 for the Cape Lambert Power Station (active) are outlined below.

Works approval W4800/2010/1

CLB main infrastructure works approval W4800/2010/1 was granted by the then Department of Environment and Conservation on 02 June 2011. CLB was regulated under Category 58.

Construction of the works was undertaken in two phases, A and B. Construction and commissioning of Phase A was completed in 2014. The Phase B final commissioning report was submitted on 26 October 2015, and included an updated noise model certifying that Cape Lambert complies with the Noise Regulations pursuant to the requirements of Condition 3 of W4800. This approval expired on 5 June 2016.

Works approval W5435/2013/1

A Category 52 electric power generation premises located adjacent to the Premises boundary was issued on 12 December 2013 (expiring 15 June 2018) and was developed to support the expansion of the port. Following completion, the works approval was amended in January 2016 to reduce the design capacity of the power station from 130 megawatts as it was established that the power requirements of the port could be satisfied by two 45 megawatts gas turbine generators. Following completion of the works and requirements of the works approval the licence will be amended to include the Category 52.

4.5.3 Licence History

Licence Amendments L5278/1973

A summary of the last four amendments/reissues are outlined in Table 5.

Table 5: History of L5278/1973

Licence version	Date of issue	Amendment / Renewal	Categories	Major changes
5278/1973/12	24 November 2011	Amendment	12; 52; 58; 63; 73; and 81	Incorporated the Sinter Fines Building and crushing and screening plants. Previous version was not subject to any licence conditions. The Department undertook a full review of the

Licence version	Date of issue	Amendment / Renewal	Categories	Major changes
				licence.
5278/1973/12	18 July 2013	Amendment	5; 58; 63; 64; 73; and 85	Incorporated a waste water treatment plant at Cape Lambert. Removed categories 12, 52 and 81 and added categories 5, 64 and 85.
5278/1973/13	25 June 2015	Renewal	5; 58; 63 and 73	Incorporated CLB and port linkage projects to CLA licence. Increase size of categories 5 and 58. Removed categories 64 and 85.
5278/1973/13	17 June 2016	Amendment	5; 58; 63 and 73	Removed conditions that duplicated Part IV EP Act requirements.

4.5.4 Compliance

DER's Incident and Complaints Management System (ICMS) is a system used to record complaints received and non-compliances requiring investigation. A significant number of complaints from a small number of residents of Point Samson have been received in relation to air quality concerns through dust emissions and to a lesser extent, noise.

Rio Tinto holds a Coastal Community Environmental Forum (CCEF) for its Cape Lambert and Dampier port operations, in which it updates the community and government on port operations. The CCEF provides an opportunity for the communities to raise any concerns they may have. At the March 2015 CCEF meeting a member of the Point Samson community raised a concern relating to whether a noise monitor was going to be installed. (Rio Tinto, 2015).

4.5.5 Compliance Inspections

DER undertook compliance inspections of the Premises in 2014 and 2015 relating to previous licence version L5278/1973/12. The details of the inspections are outlined below.

The compliance inspection on 16 April 2014 (relating to approved categories 5, 58, 63, 64, 73, 85) identified the following non-compliances with the licence:

- Condition 7(f) – the written exceedance report provided to the Department, did not contain the number of exceedances in that reporting year. This was identified in the 30 May 2013 compliance inspection also.
- Condition 15 – Verbal advice from the site representative was that treated water had been used for dust suppression purposes that was in exceedance by 2mg/L of the 15mg/L hydrocarbon limit. Use of this water had ceased in February 2013.
- Condition 15 - The sump at the fuel depot oily water separator had overflowed onto bare earth, entering into a stormwater drain.
- Condition 19(a) – Tipping areas at landfill exceeded 30 metres in length.
- Condition 20(a) – Site representative confirmed that waste is not covered weekly.
- Condition 20 (c) – Exposed waste observed in areas previously landfilled.

A follow up inspection undertaken on 26 May 2015 did not identify any non-compliance with

the licence conditions.

4.5.6 Annual Audit Compliance Reports

A requirement of the Existing Licence is the submission of an Annual Audit Compliance Report (***AACR***) by 30 April each year. A review of the previous three AACRs has been undertaken and the non-compliances reported summarised below (note dust and noise issues have not been included in this assessment). The Licence Holder has provided its 2013, 2014 and 2015 reports to DER by the required annual dates.

2013 Report

The 2013 report covers the reporting period from 1 January to 31 December 2013.

The Licence Holder self-reported non-compliance in relation to TRH concentration exceeding 15mg/L and storage of water in the evaporation pond with a high concentration of hydrocarbon contamination. The Licence Holder advised that a new oily water separator system would be installed (see 2014 Report) and the Groundwater Remediation System total recoverable hydrocarbons meter was recalibrated to ensure a correct reading.

2014 Report

The 2014 report covers the reporting period from 1 January to 31 December 2014.

The Licence Holder reported a non-compliance with condition 11 of L5278/1973/12 in relation to water with a high level of hydrocarbon contamination being stored in the evaporation pond due to the inadequate performance of the old oily water separator system that discharged to the pond. To rectify this non-compliance the Licence Holder has installed a new oily water separator to improve the discharged water quality. The pond water would be recirculated through the new oily water separator to improve the existing pond water quality. The Licence Holder advised that there was no environmental impact associated with the non-compliance.

Other non-compliances relating to conditions 12 and 15 relate to spills, leaks and waste water discharged to land. These were self-reported by the Licence Holder. Hydrocarbon stained soil (approximately less than 100 litres spilled to unsealed ground at the Intermediate Bulk Container storage area) was taken off site by a licensed waste contractor. The Licence Holder advised that instructions were provided to relevant staff requiring immediate clean-up of spills and spills response awareness sessions provide to staff. TRH concentration exceeded 15mg/L on a number of occasions due to a pipeline rupture at the mobile equipment maintenance workshop, oily water separator malfunction at the truck wash bay and deterioration of concrete at the mobile equipment plant. The Licence Holder advised that the pipeline has been decommissioned, with the waste oil removed and recoverable oil decanted into the rail maintenance workshop waste oil pipeline. Further a float cut off switch was installed at the wash bay and the concrete schedule for repair at the mobile equipment plant by end of 2015.

2015 Report

The 2015 report covers the reporting period from 1 January to 31 December 2015. On 12 August 2016 DER wrote to the Licence Holder advising that they were compliant with the reporting conditions of the Licences in force during the reporting period (DER, 2016b).

In relation to storage and spills of hydrocarbons, the Licence Holder self-reported non-compliance with fuel tank leaks at the Car Dumper 1 (CD1C) locomotive and a split compressor fuel hose causing approximately 200 litres (L) of diesel fuel leaking into the rail ballast, which was unrecoverable. The Licence Holder advised that a detailed study will be

developed for CD1C facility which will include improvements to the secondary containment of environmentally hazardous materials. In letter dated 12 August 2016, DER requested the Licence Holder to provide its CD1C facility study scope of works and timeframe for implementation for improvements to the secondary containment of environmentally hazardous material (DER, 2016b).

Non-compliance with condition 15 was recorded by the Licence Holder with 4800L returning a 22mg/L total recoverable hydrocarbons (TRH) concentration, exceeding the licence requirements of less than 15mg/L, returning 22mg/L TRH. Further issues were identified with CD1C facility, with the CD1C oily water sump discharging to ground at 33mg/L following a rainfall event. Approximately 25L of potentially contaminated stormwater entered the unlined drain which reports to Sam's Creek retention basin. The Licence Holder advised that leaky hydraulic components were identified and replaced. The underground drain was blocked and sediment removed, and mesh was installed to prevent rubbish entering the sump. The Licence Holder further advised that water from the fuel dump would only be released when results show a TRH concentration of less than 15mg/L.

4.6 Consideration

This review of the Premises has had regard to the legislative requirements and operational history as discussed in sections 3 and 4. This review has also had regard to the Licence Holder compliance with Part V approvals as discussed in section 4.

5. Consultation

DER referred the draft licence and Decision Report on 9 September 2016 to the Licence Holder.

6. Location and Siting

6.1 Siting Context

The Premises are located in the City of Karratha on the Pilbara coastline in northern Western Australia. Figure 1 shows the siting of the operations in relation to Point Samson and Wickham.

The Licence Holder advised in its application to amend works approval W4800 that the Cape Lambert area is located between a large basalt ridge to the east and the coastline to the west (Rio Tinto, 2012). A series of small rounded hills form a northeast-southwest trending line along the eastern site boundary with several large isolated rocky hills located closer to the coast at a height of approximately 25m (Rio Tinto, 2012). Information obtained through a Geographic Information System (GIS) search records the topography of the site is 10-20m Australian Height Datum. GIS layers consulted are outlined at Appendix 2.

The Project is located entirely within the brownfields operational footprint and has previously been disturbed.

Figure 1 – Aerial image showing general area of the Premises within the red circle (Google Earth, 2016)

6.2 Sensitive Land Uses

The closest residential area to the Premises is the community of Point Samson, which had a population of approximately 300 people in 2011 (ABS, 2011a). In 2011 the town of Wickham had a population of approximately 1,650 people (ABS, 2011b). Point Samson and Wickham are located approximately 3.5km and 7km respectively from the Premises.

The Port Walcott Yacht Club is located on Wickham Back Beach adjacent (see Table 5 and Figure 2 below) and west of the Premises. The City of Karratha released in May 2016 its *'Wickham boat beach area – foreshore management plan'* (City of Karratha, 2016) in which Rio Tinto was listed as a key stakeholder. The plan notes that it is within an area zoned as Strategic Industry under the City of Karratha's (formerly Shire of Roebourne) Planning Scheme No. 8. The Scheme Text objectives relating to Strategic Industry for the Cape Lambert precinct (Condition 5.5) are as follows:

i. Facilitate the development of the Cape Lambert precinct as a strategic industry estate which:

- *allows the efficient and effective processing of primary resources;*
- *does not compromise the lifestyle and tourist assets of the Shire; and*
- *has due regard to the environmental and heritage values of the area.*

ii. Accommodate the development of additional port facilities, including public wharf facilities;

iii. *Retain access to key coastal recreational nodes within the precinct, in particular Boat Beach.* (City of Karratha, 2016).

The storage of hydrocarbons (Category 73) within the Premises are unlikely to impact sensitive receptors outside the Premises boundaries.

The distances to the Rio Tinto accommodation camp (which is not occupied and is in the process of being decommissioned) from the selected sites are outlined in Table 6 below. As the camp is operated by the Licence Holder it will not be considered as a sensitive land use or receptor. It is expected that dust, noise and odour issues will be appropriately managed by the Licence Holder for the comfort of their transient workforce and in compliance with obligations under occupational health and safety legislation.

The distances to residential and sensitive receptors are summarised in Table 6 as follows:

Table 6: Receptors and distance from prescribed activity

Residential and Sensitive Premises	Distance/direction from Prescribed Activity to sensitive premises
Closest residential zoned premises – Point Samson (zoned residential City of Karratha Planning Scheme No.8)	CLA stockpile: ~3,200m south-east CLA screening: ~3,500m south-east See Figure 2 CLB stockpile: ~3,800m east
Zoned strategic industry City of Karratha Planning Scheme No. 8 - Wickham back beach (Port Walcott Yacht Club)	CLA stockpile: ~3,400m south-west CLA screening: ~3,000m south-west CLB stockpile: ~350m west See

Residential and Sensitive Premises	Distance/direction from Prescribed Activity to sensitive premises
	Figure 2
Zoned tourism – retail/business City of Karratha Planning Scheme No.8)	CLA stockpile: ~3,450m south-east CLA screening: ~3,500m south-east See Figure 2 CLB stockpile: ~3,650m east
Zoned strategic industry City of Karratha Planning Scheme No. 8 – Rio Tinto Accommodation camp	CLA stockpile: ~3,450m south-east CLA screening: ~3,600m south-east CLB stockpile: ~1,200m east
Town of Wickham	~4,500m to the south-east of the premises.

Figure 2 below shows the distances from the CLA screening plant to the closet Point Samson residential and tourism receptor, and the CLB Stockpile to Port Walcott Yacht Club as outlined in Table 6.

Figure 2: Distance (in red) from Premises to sensitive receptors (Google Earth, 2016).

6.3 Specified Ecosystems

Appropriate environmental siting of premises in relation to the activities undertaken on site is necessary to mitigate impacts to sensitive and high value ecosystems. A risk assessment of sensitive and high value ecosystems using GIS layers is provided in Sections 6.3 to 6.5. A 30 kilometre (30km) GIS search radius was selected given the similarities of the terrain and environmental conditions within surrounding area. The GIS layers analysed are outlined in Appendix 2.

Table 7 provides the distance from the Premises to specified ecosystems.

Table 7: Specified ecosystems

Specified ecosystems	Distance from Prescribed Premises
Marine ecosystem	Directly adjacent to the premises boundary. Moderate to High level of ecosystem protection (DoE 2006).
Conservation area	No Parks and Wildlife Managed lands are located within a 30km radius of the operations.
Public drinking water source area (PDWSA).	The Premises are not located within a PDWSA.
Rare flora	There are no rare flora species recorded within a 30km radius of the operations.
Threatened ecological communities	There are no threatened ecological communities within a 30km radius of the operations. A priority 1 ecological community 'Stoney Chenopod association of the Roebourne Plains area' is located approximately 10km south-west of the operations.

6.4 Groundwater and water sources

Water is extracted from the Bungaroo bore field, approximately 50km south-east of the town of Pannawonica. This water is piped to Millstream where it joins the Water Corporation's pipeline to augment coastal water supplies, including the Premises (Rio Tinto, 2012).

The groundwater occurs in superficial deposits and fractured basalt and flows westward toward the Indian Ocean. Potable water for local communities is supplied by the Water Corporation which sources its water primarily from Harding Dam and Millstream aquifer (Rio Tinto, 2012).

Table 8 provides the distance from the Premises to groundwater and water sources.

Table 8: Groundwater and water sources

Groundwater and water sources	Distance from Premises	Environmental Value
Groundwater and groundwater salinity	The hydrogeography of the site is Rocks of Low Permeability, Fractured and Weathered Rocks – Local Aquifers. Depth to groundwater encountered at approximately 2 – 9m (based on information provided by Rio Tinto,	The groundwater is 1000-3000TDS mg/L which is considered brackish. There are no large supplies of freshwater in the area. Water is not used for potable or

Groundwater and water sources	Distance from Premises	Environmental Value
	2012). No bores located within 1km of premises (based on available GIS dataset – WIN Groundwater Sites). The nearest bore is 1.6km to the east of the operations.	industrial use.
Watercourses / wetlands (including Ramsar and Important wetlands – Western Australia).	The closet watercourse (coastal waterline) is mapped 450m to the west of the prescribed premises boundary. Aerial imagery shows that the watercourse 'Sam's Creek' extends into the western boundary of the premise on the western side of Cape Lambert Road.	Surface water system linked to marine ecosystem with Mangrove community located on the border of the premises boundary at Sam's Creek.
Rights in Water Irrigation Act 1914 Act (RIWI Act)	The Premises are located in a *Rights in Water Irrigation Act 1914* groundwater area.	Rio Tinto has two groundwater licences associated with the car dumpers. See section 4.3.
Country Areas Water Supply Act 1947 (CAWS Act)	Not within a CAWS Act Area	N/A

6.5 Other receptors

Table 9 provides detail of other site characteristics that are to be considered in this Review.

Table 9: Other landscape features, relevant factors or receptors

Characteristic	Location
Mangrove community (high value ecosystem)	Adjacent to the prescribed premises at two discharge points, Sam's Creek and the southern-most point in CLB.
Migratory whales and species of national environmental significance (high value ecosystem) – EPA Report 1357 and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval.	Adjacent to wharfs for CLA and CLB.
Turtles - impacts of intensity, wavelength and direction of light – EPA Report 1357	Adjacent to the north and west of the prescribed premises. Two turtle rookery beaches, Cooling Water Beach and Bell's Beach. Nesting October through to February.
Lerista nevinae (Fauna that is rare or is likely to become extinct as vulnerable fauna – Division 3 – Vulnerable reptiles) – clearing permit CPS5272/3	Habitat located within the Premises footprint.

6.6 Soil Type

Information obtained through GIS search of soil types within the local area states that the soil associated with the Premises are steep stony hills and ranges on metamorphosed basic and ultrabasic rocks, with some iron ore formations. There may also be small areas of granite. Limited areas of steep dissected pediments and valley plains are included. The soils are generally shallow and stony and there are extensive areas without soil cover and alluvial plains with occasional stony residuals of basic and ultrabasic rocks: chief soils are deep

cracking clays (Northcote, 1960-68).

The Licence Holder has advised in its application to amend Works Approval W4800 that the Cape Lambert area contains large rocky hills which are separated by flat coastal plain typically composed of light brown silty very fine sand (Rio Tinto, 2012).

6.7 Meteorology

6.7.1 Regional climatic aspects

The City of Karratha is located in a semi-arid environment characterised by hot humid summers.

6.7.2 Rainfall and temperature

The mean annual rainfall at the Premises site is 300-400mm as obtained through GIS records.

The Bureau of Meteorology (BoM, 2016) provides the mean rainfall and maximum temperature from 2001 to 2016 for the Town of Roebourne (the closest monitored town) as shown in Figure 3. The region is hot to warm all year round with rainfall predominantly over December to July.

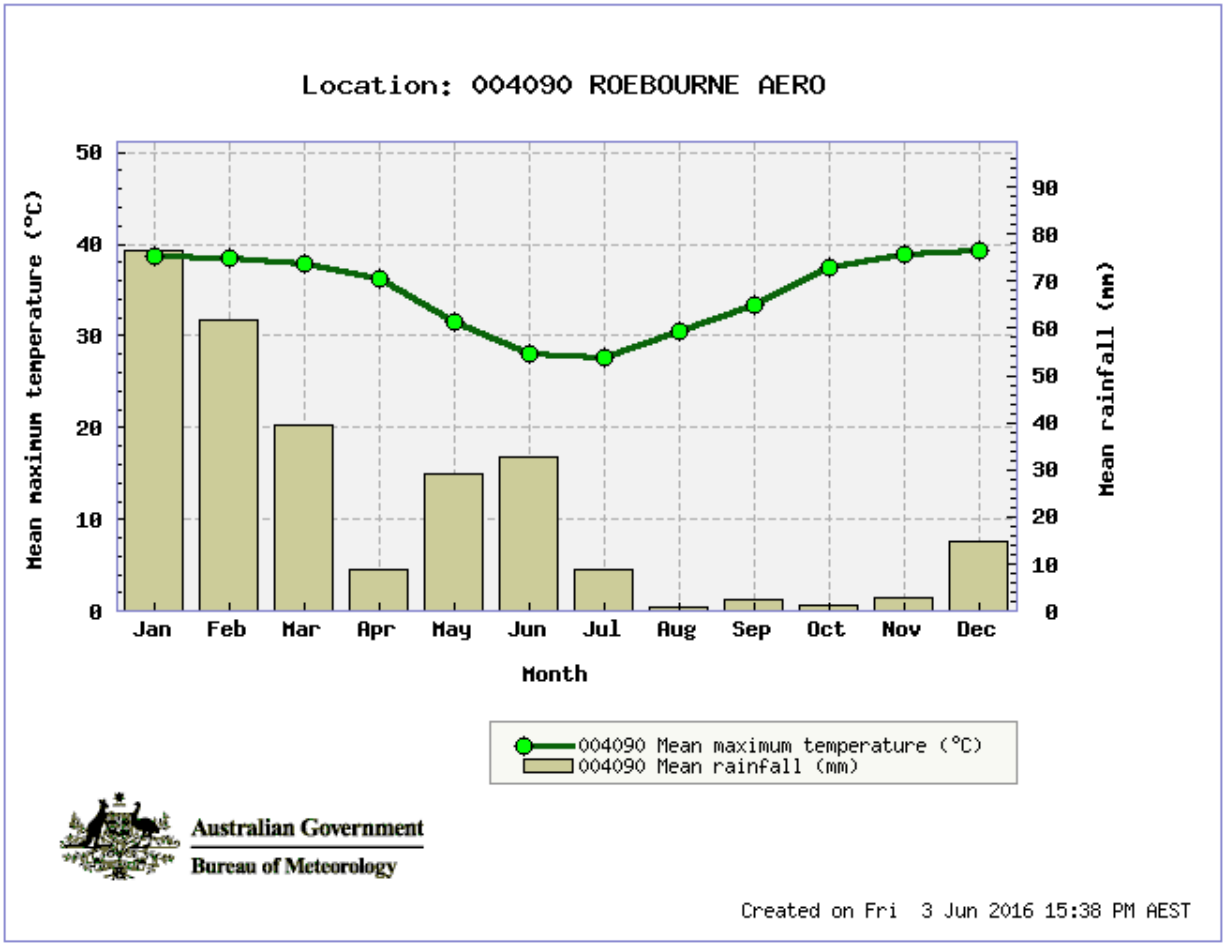


Figure 3: Mean temperature and rainfall for Roebourne

6.7.3 Wind direction and strength

The wind rose in Figure 4 shows the majority of winds come from the western sector across open space and unsealed roads between the Premises and the Air Quality Monitoring Station at Point Samson.

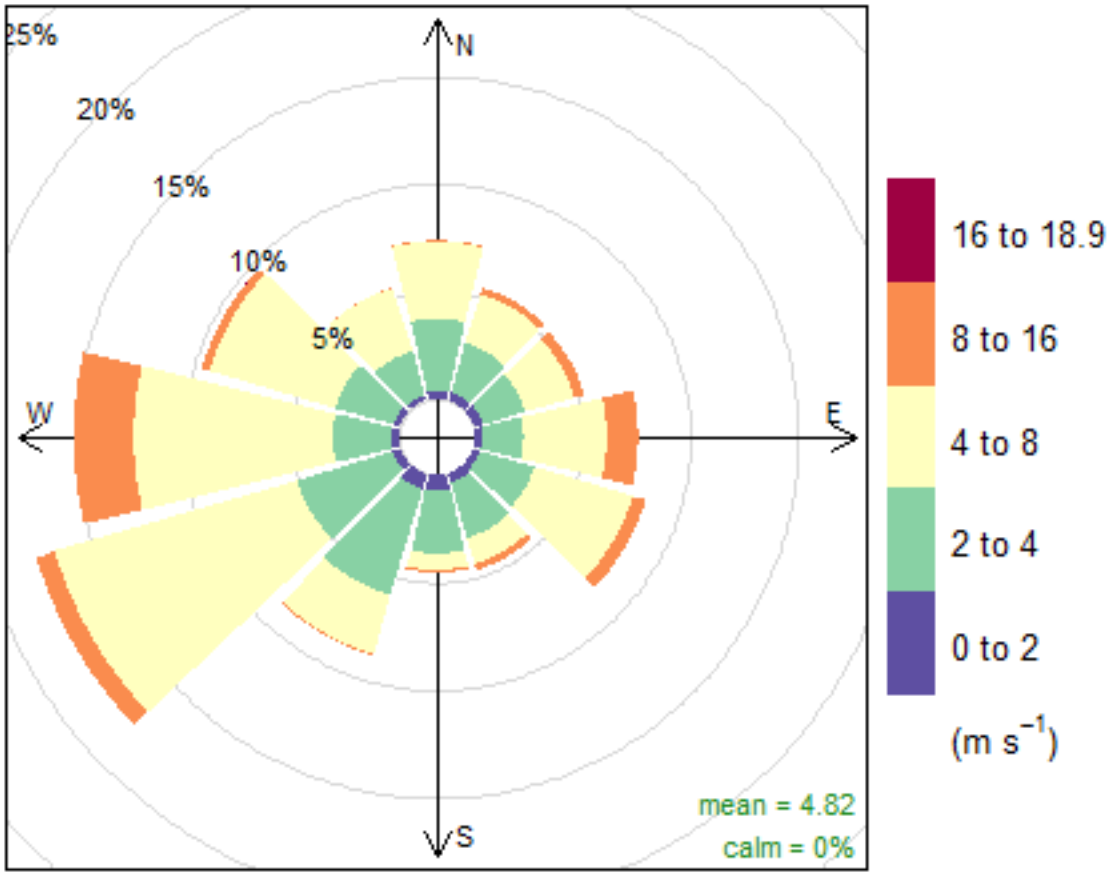


Figure 4 Wind rose for period 2013 to 2014 at Point Samson

7. Risk Assessment

To ensure that there is not an unacceptable risk of harm to public health or the environment, the following section provides for a risk-assessment and rating of potential key emissions and discharges.

7.1 Emissions, Pathway, Receptor Identification

As part of the risk assessment, Table 10 identifies potential key emission inherent to the Primary Activity for the prescribed premises Categories regulated on L5278/1973/13. Where inherent category emissions do not relate to the Premises or do not have a pathway or impact on a receptor, they do not continue on to the risk assessment section 7.4.

Definitions of emissions in Table 10 are as follows:

Dust: Includes emissions from infrastructure and equipment e.g. conveyor belts and large scale land disturbance activities including extractive industry.

Noise: Includes noise generated from mobile and stationary sources and can include; engines, exhausts and processing such as crushing and screening.

Odour: Includes emissions that by reason of its strength, nature, duration, character or quality is harmful or interferes unreasonably with the comfort of a person outside the premises.

Other: Includes vermin, pathogens and fire.

Waste and leachate: Includes emissions through seepage, leaks and spills of waste from storage, process and handling areas.

Waste water*:* washwater or process water discharged to land or waters.

Table 10: Identification of potential key emissions, pathway and receptor

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Continued to detailed risk assessment?	Reasoning
Source	**Category 5** Processing or beneficiation of metallic or non-metallic ore	Operation of crushing and screening equipment, movement of ore product between these and the stockyard via conveyors.	**Dust:** associated with material storage, conveyors, screening plant and vehicles on unsealed surfaces.	Residential, recreational and tourism. See section 6.3 for distances.	**Air:** Particulate matter (dust) mainly consisting of iron oxides arising from the handling of ore.	**Dust:** Public health and amenity.	No - See section 4.1	Dust emission impacts are addressed through Ministerial Statements 741 and 840.
			Noise: associated with crushing and screening activities.	Residential, recreational and tourism. See section 6.3 for distances.	**Air:** Noise generated by the operation of equipment.	**Noise:** Public health and amenity.	No - See section 4.1	Noise emission impacts are addressed through Ministerial Statements 840.
			Spillage of material, sediments and hydrocarbons: associated with seepage, leaks and spills of waste from storage, process and handling areas	Terrestrial ecosystems – adjacent to the marine environment and surface water. See section 6.4 and 6.5	**Land and waters:** Stormwater runoff into marine, sumps and sedimentation ponds prior to discharge into the environment.	**Waste and Leachate:** Terrestrial ecosystem Public health (drinking water) Surface water ecosystems Groundwater dependent ecosystems.	Yes - See section 7.4	***Stormwater runoff***
							Yes - See section 7.4	***Seepage to groundwater and impact on drinking water***
	Category 12 Screening etc. of material	Operation of mobile crushing and screening equipment within the premises	**Dust:** associated with material crushing and screening.	Residential, recreational and tourism. See section 6.3 for distances.	**Air:** Particulate matter (dust) from crushing and screeening.	**Dust:** Public health and amenity.	No - See section 4.1	Dust emission impacts are addressed through Ministerial Statements 741 and 840.
			Noise: associated with crushing and screening activities.	Residential, recreational and tourism. See section 6.3 for distances.	**Air:** Noise generated by the operation of equipment.	**Noise:** Public health and amenity.	No - See section 4.1	Noise emission impacts are addressed through Ministerial Statements 840.

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Continued to detailed risk assessment?	Reasoning
			Spillage of material, sediments and hydrocarbons: associated with seepage, leaks and spills of waste from storage, process and handling areas	Terrestrial ecosystems – adjacent to the marine environment and surface water. See section 6.4 and 6.5	**Land and waters:** Stormwater runoff into marine, sumps and sedimentation ponds prior to discharge into the environment.	**Waste and Leachate:** Terrestrial ecosystem Public health (drinking water) Surface water ecosystems Groundwater dependent ecosystems.	Yes - See section 7.4	***Stormwater runoff***
							Yes - See section 7.4	***Seepage to groundwater and impact on drinking water***
	Category 58 Bulk material loading or unloading	In-loading and out-loading of iron ore through car dumpers, stackers, reclaimers and shiploaders.	**Dust:** associated with material storage, conveyors, machinery and unsealed surfaces.	Residential, recreational and tourism. See section 6.3 for distances.	**Air:** Particulate matter (dust) mainly consisting of iron oxides arising from the handling of ore.	**Dust:** Public health and amenity	No - See section 4.1	Dust emission impacts are addressed through Ministerial Statements 741 and 840.
			Noise: associated with operations.	Residential, recreational and tourism. See section 6.3 for distances.	**Air:** Noise generated by the operation of equipment.	**Noise:** Public health and amenity	No - See section 4.1	Noise emission impacts are addressed through Ministerial Statements 840.
			Waste and Leachate: contaminated with sediments in sediment ponds.	Terrestrial ecosystems – adjacent to the marine environment and surface water. See section 6.4 and 6.5	**Land and waters:** Stormwater runoff into marine, sumps and sedimentation ponds prior to discharge into the environment.	**Waste and Leachate:** Terrestrial ecosystem Public health (drinking water) Surface water ecosystems Groundwater dependent ecosystems.	Yes - See section 7.4	***Stormwater runoff***
			Waste water: contaminated with sediments.				Yes - See section 7.4	***Seepage to groundwater and impact on drinking water***
			Spillage: Iron ore spillage during vessel loading	Marine environment and surface water	**Waters:** Spillage of iron ore directly into marine environment	**Waste:** Surface water ecosystems	Yes – See section 7.4	***Spillage of material into marine environment***
	Category 63 Class I inert landfill site	Disposal of inert material.	**Dust:** associated with clean fill waste and unsealed surfaces. **Noise:** associated with operations and vehicles. **Waste and Leachate:** associated with seepage from pits. **Other:** associated with vermin habitat.	No receptors in proximity	**Air:** Dust predominately from unsealed surfaces Noise through dumping of inert landfill. **Land and waters:** Seepage of materials leached from waste disposed in landfill **Other:** Through nuisance avian and land fauna.	**Noise, dust and other:** Public health and amenity **Waste and Leachate:** Public health (drinking water) Groundwater dependent ecosystems.	No	**Noise, dust, waste and leachate, other** As landfill no longer required and there are no apparent ongoing groundwater seepage risks associated with the closure of the landfill Category 63 has been removed from the Revised Licence.
	Category 73 Bulk storage of chemicals	Storage of a total of 1,650m^3 of fuel at the Premises contained in	**Odour:** associated with volatile fumes.	Transient receptors (recreational. See section 6.3 for distances.	**Air:** Odorous fumes.	**Odour** Public Health and Amenity	No	**Odour** Given the distance to the nearest permanent residential zone odour is not likely to impact the comfort of persons outside the premises.

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Continued to detailed risk assessment?	Reasoning
	etc	15,110 kilolitre storage tanks.	**Chemicals:** associated with hydrocarbon transferal and storage areas. **Waste and Leachate:** from stormwater ponds, sumps. Water discharge, potentially containing minor levels of residual hydrocarbon contamination. Spills and leaks from failure to contain within hydrocarbons and other chemicals with storage areas.	Terrestrial ecosystems – adjacent to the marine environment and surface water. See section 6.4 and 6.5	**Land and water:** Stormwater runoff into sumps and sedimentation ponds prior to discharge into the environment. Runoff collected in oily-water sumps and treated via oily water separator systems. May become mixed with general runoff depending on site segregation controls.	**Waste and Leachate:** Terrestrial ecosystem Public health (drinking water) Surface water ecosystems Groundwater dependent ecosystems.	Yes - See section 7.4	***Stormwater runoff***
							Yes - See section 7.4	***Seepage to groundwater and impact on drinking water***
	Other factors	Night works and native vegetation clearing impacts.	**Light** emissions and vegetation impacts on nesting marine turtles at Bell's Beach and Cooling Water Beach.	Terrestrial ecosystems. See section 6.5	**Air**	**Light and Noise:** Terrestrial ecosystem amenity	No	Light emission impacts on nesting marine turtles are addressed through Ministerial Statement 840. Native vegetation impacts at rookery beaches are captured through the Ministerial Statement and Clearing Permit CPS5272/3.

7.2 Risk Criteria

During the assessment the risk criteria in Table 11 below will be applied to determine a risk rating set out in section 7.5.

Table 11: Risk Criteria

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

Likelihood		**Consequence**		
The following criteria has been used to determine the likelihood of the risk / opportunity occurring.		**The following criteria has been used to determine the consequences of a risk occurring:**		
			Public Health	**Ecosystem/ Environmental**
Almost Certain	The event is expected to occur in most circumstances	Severe	• Loss of life • Exposure to hazard with permanent prolonged adverse health effects expected to large population • Health criteria is significantly exceeded	• Irreversible impact to significant high value or sensitive ecosystem expected • Irreversible and significant impact on a wide scale • Total loss of a threatened species expected • Ecosystem criteria is significantly exceeded
Likely	The event will probably occur in most circumstances	Major	• Exposure to hazard with permanent prolonged adverse health effects expected to small population • Significant impact to amenity for extended periods expected to large population • Health criteria is exceeded	• Long-term impact to significant high value or sensitive ecosystem expected • Long-term impact on a wide scale • Adverse impact to a listed species expected • Ecosystem criteria is exceeded
Possible	The event could occur at some time	Moderate	• Exposure to hazard with short-term adverse health effects expected requiring treatment • Impact to amenity expected for short periods to large population • Health criteria is at risk of not being met	• Minor and short-term impact to high value or sensitive ecosystem expected • Off-site impacts at a local scale • Ecosystem criteria is at risk of not being met

Likelihood	
The following criteria has been used to determine the likelihood of the risk / opportunity occurring.	
Unlikely	The event is unlikely to occur
Rare	The event may only occur in exceptional circumstances

Consequence		
The following criteria has been used to determine the consequences of a risk occurring:		
	Public Health	**Ecosystem/ Environmental**
Minor	• Exposure to hazard with short-term adverse health effects expected • Impact to amenity expected for short periods to small population • Health criteria are likely to be met	• Moderate to minor impact to ecosystem component (physical, chemical or biological) • Minor off-site impacts at a local scale • Ecosystem criteria are likely to be met
Insignificant	• No detectable impacts to health • No detectable impacts to amenity • Health criteria met	• None or insignificant impact to ecosystem component (physical, chemical or biological) expected with no effect on ecosystem function • Ecosystem criteria met

7.3 Risk Treatment

DER will treat risks in accordance with the Risk Treatment Matrix in Table 12 below:

Table 12: Risk Treatment

Risk Rating	Acceptability	Treatment
Extreme	Unacceptable	Risks will not be tolerated. DER will refuse proposals.
High	Acceptable subject to primary and secondary controls	Risks will be subject to multiple regulatory controls including primary and secondary controls. This will include both outcome-based and management conditions.
Moderate	Acceptable, generally subject to primary controls	Risks will be subject to regulatory controls with a preference for outcome-based conditions where practical and appropriate.
Low	Acceptable, generally not controlled	Risks are acceptable and will generally not be subject to regulatory controls.

7.4 Risk Assessment - Discharge to land, water and groundwater

7.4.1 General Hazard Characterisation and Impact

Contaminated stormwater and waste water may be discharged through infrastructure and equipment failure impacting marine environment and surface water. Potential contaminants are iron ore and hydrocarbons from infrastructure, machinery and transport activities on site. Iron ore is not soluble so will be present as suspended solids only.

Discharges containing high sediments loads and hydrocarbons can impact receiving water quality and disrupt the ecology of marine waters and creeks, and may also cause turbidity impacting water quality and visibility. Discharges can also cause sedimentation; impacting the surrounding mangrove community.

Contaminants may also enter the marine environment, directly through spillage during the loading of vessels, through contaminated stormwater and wash down water discharges and spills directly to land and water or by infiltration of soluble contaminants to groundwater.

The groundwater is 2-9mbgl, the Premises are not in a PDWSA with drinking water sourced from Bungaroo borefields and therefore will have no risk on drinking water.

Iron ore is not soluble in water or considered toxic and not likely to impact on groundwater.

The soils are fine / very fine sands, which can have a lower permeability. The risk that leaks and spills would reach the groundwater is low. Remediation due to legacy groundwater contamination required under the CS Act is being undertaken and captured under that Act. See section 4.2.

7.4.2 Criteria for Assessment

The Premises are located at Cape Lambert which has been characterised through the Department of Environment 2006, *Pilbara Coastal Water Quality Consultation Outcomes: Environmental Values and Environmental Quality Objectives* as requiring moderate (dark green around wharfs in Figure 5) to high (light green in Figure 5) ecological protection (DoE 2006).

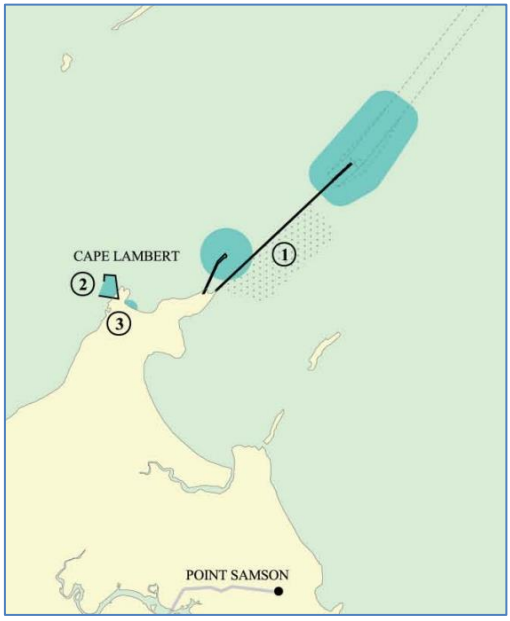


Figure 5: Ecosystem Health Value for Cape Lambert (DoE, 2006).

7.4.3 Licence Holder controls

The Licence Holder provided to DER on 29 July 2016 its controls for stormwater and waste water management at the Premises (Rio Tinto, 2016) and is provided in Tables 13 to 15 below.

Table 13: Licence Holder's controls for stormwater and waste water management

Stormwater and waste water management		**Reference to map**
Stormwater infrastructure	Designed to provide protection and immunity to infrastructure to the following levels: Stockyard drainage – 100 year annual reoccurrence interval (ARI) immunity plus 300 millimetres (mm) freeboard Local plant (minor catchments) – five year ARI immunity plus 300mm freeboard Local plant (major catchments) – 20 year ARI immunity plus 300mm freeboard	Schedule 1 – CLA and CLB Infrastructure Maps
Stormwater discharge	Stormwater discharge points (and associated sediment basins) to be maintained in good repair: • CLB southern discharge point via and unnamed creek • At the northern end of the stockyard via Sam's Creek • At the northern end near the abutment; and • Cooling water beach discharge	Schedule 1 - Discharge Point Map
Surface water and contaminated water infrastructure	Infrastructure to manage surface water and contaminated water Capture of water from plant areas where there is the potential for hydrocarbon contamination Separate systems for contaminated water and general stormwater Surface water and contaminated water collected, contained, treated and reused	Schedule 1 - Discharge Point Map

Table 14: Licence Holder's controls for oily water management

Waste water management	
Oily water separator	Treated prior to disposal. Has following characteristics: • a sump to allow sediment to settle prior to oil removal treatment; • a sampling point in the post treatment discharge line to allow regular sampling of the treated water; • screens to prevent general waste from entering the oily water treatment system; and • above ground piping wherever practicable.

Table 15: Licence Holder's controls for ore and hydrocarbon spills

Control	Description	Reference to map
Spill prevention	Hydrocarbon storage areas are appropriately bunded to contain any spills.	Schedule 1 - Category 73 Infrastructure Map
Spill cleanup	Iron ore Clean up undertaken at regular intervals according to a planned schedule, but is mostly ad hoc and opportunistic. The material is collected and transported back into the Cape Lambert stockyards. Wharf – cleaned by operators and street sweepers. Excess sediment is stored in a contained area on the wharf and collected by a truck and transported back to the stockyard at scheduled times.	N/A
	Hydrocarbon Spill kits will be available.	N/A

7.4.4 Consequence

Based upon the relevant factors discussed in this report, in particular the high level of ecological protection afforded to the Cape lambert marine area adjacent to the Premises, the Delegated Officer has determined that discharges of contaminated stormwater, wash down water or direct spills to land or marine waters may have minor or short term impacts to sensitive ecosystems. Therefore, the Delegated Officer considers the consequence to be ***moderate***.

7.4.5 Likelihood of consequence

Taking into consideration the relevant factors discussed in the report, the Delegated Officer has determined that the likelihood of consequence is considered as possibly occurring some of the time. Therefore, the Delegated Officer considers the consequence to be **possible.**

7.4.6 Overall rating

The Delegated Officer has compared the consequence and likelihood ratings described above through the Risk Matrix (Table 11) and determined that the overall rating for the risk of discharge to water associated with leaks and spills from storage, process and handling areas on potential receptors during operation to be **moderate.** This means that the risks will be subject to regulatory controls with a preference for outcome-based conditions where practical and appropriate.

7.5 Summary of Risk Assessment and Acceptability

The risk items identified in section 7 including the application of risk criteria and the acceptability with treatment are summarised in Table 16 below.

Table 16: Risk rating of emissions

	Emission		Pathway and Receptor	Licence Holder's controls	Impact	Risk Rating	Acceptability with treatment (conditions on instrument)
	Type	**Source**					
1.	Waste and waste water to land, groundwater and marine waters	Spills of ore or hydrocarbons and discharges of wash down water or contaminated stormwater from infrastructure and runoff within the Premises (Category 5 58 and 73).	Direct spills and discharge points to land. Overland or subsurface flow towards creek lines or marine waters. Spills directly to marine waters Runoff directly to marine waters Receptors – Mangroves Marine Waters	Infrastructure, specified actions and monitoring.	Land and groundwater contamination Reduction in ecosystem health and water quality	Moderate consequence possible to occur **Moderate risk**	Acceptable subject to regulatory controls

8. Determined Regulatory Controls

A summary of the risks with corresponding controls are set out in Table 17. The risks are set out in the assessment in section 7 and the controls are detailed in this section 8. Controls will form the basis of conditions in the Revised Licence set out in Attachment 1.

Table 17: Controls

		Controls		
		8.1 Specified Infrastructure and Equipment	8.2 Limits	8.3 Monitoring
Risk Items (see section 7.4)	**1. Discharge of waste and waste water to land, groundwater and marine waters** **(stormwater / wash down water and spills)**	•	•	•

8.1 Specified Infrastructure and Equipment Controls

8.1.1 Waste water, stormwater and spill controls

Environmental controls, infrastructure and equipment should be maintained and operated onsite for waste water, stormwater and spill management as currently undertaken by the Licence Holder and outlined in section 7.4.3.

Grounds: The infrastructure and equipment for waste water and stormwater management is currently used by the Licence Holder and considered necessary based on the materials handled and the risk to public health and marine ecosystem. Conditions on the Revised Licence require the continued use of the infrastructure and equipment ensuring regulatory oversight.

8.2 Limits

Waste water discharges from oily water separators and directed to drainage network and through:

- CLB southern discharge point (CLD3)
- Sams Creek (CLD2)
- CLA stockyard (CLD7)
- Cooling water beach discharge (CLD4)

shall not contain greater than 15mg/L TRH.

Note: The limit is derived from the Existing Licence.

8.3 Monitoring and Reporting Requirements

The water discharged via discharge points shall be monitored quarterly (when flowing) for TRH in mg/L.

Note: The monitoring is derived from the Existing Licence.

9. Setting Conditions

The conditions in the proposed Revised Licence have been determined in accordance with DER's *Guidance Statement on Regulatory Principles* (July 2015), *Guidance Statement on Setting Conditions* (October 2015) and *Guidance Statement: Decision Making*.

DER's *Guidance Statement on Licence Duration* has been applied and the Revised Licence expires 19 years from date of issue. The grounds for controls being placed on the Revised Licence and their condition reference is outlined in Table 18.

Table 18: Revised Licence Conditions

Condition Ref	Grounds
Emissions Condition 1	This condition is valid, risk-based and consistent with the EP Act.
Infrastructure and Equipment Conditions 2 and 3	These conditions are valid, risk-based and contain appropriate controls (see section 7 of this decision report).
Wash water and Stormwater Monitoring and Reporting 4 and 5	These conditions are valid, risk-based and contain outcome based controls.
Information 6, 7, 8 and 9	These conditions are valid and are necessary administration and reporting requirements to ensure compliance.

DER notes that it may review the appropriateness and adequacy of controls at any time, and that following a review, DER may initiate amendments to the licence under the EP Act.

10. Applicant's Comments on Risk Assessment

The applicant was provided with the draft Decision Report and draft revised licence on 9 September 2016. The applicant provided comments, with the most recent dated 18 November 2016. DER's response to the applicant's comments is in Appendix 4.

11. Conclusion

This assessment of the risks of activities on the Premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this Decision Report (summarised in Appendix 1 and References). This assessment was also informed by a site visit by DER officers on 28 May 2016.

Based on this Review, it has been determined that the Revised Licence will be granted subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

7 December 2016

Agnes Tay
Director Strategy and Reform
delegated Officer under section 20 of the *Environmental Protection Act 1986*

Appendix 1: Key Documents and References

Key Documents

	Document Title	Availability
1	Licence L5278/1973/13 – Pilbara Iron Pty Ltd, issued 25 June 2015	der.wa.gov.au
2	Licence amendment L5278/1973/13 – Pilbara Iron Pty Ltd, issued 17 June 2016	internal
3	Works Approval W4800/2010/1 – Pilbara Iron Pty Ltd, issued 29 May 2014	der.wa.gov.au
4	Environmental Protection Authority Reports: - 924 - 1246 - 1412 - 1357	epa.wa.gov.au
5	Ministerial Statements: - 514 - 741 - 743 - 840 - 876	epa.wa.gov.au
6	DER *Guidance Statement on Regulatory principles* (July 2015)	der.wa.gov.au
7	DER *Guidance Statement on Setting conditions* (September 2015)	
8	DER *Guidance Statement on Licence duration* (November 2014)	
9	DER *Guidance Statement on Licensing and works approvals processes* (September 2015)	
10	DER *Guidance Statement: Land Use Planning* (October 2015)	

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Rio Tinto (2012). Rio Tinto. Request to amend works approval W4800/2010/1 and supporting works approval application documentation: Cape Lambert Port B (353Mtpa) Project, report no. CLBB-REP-G-010. Works approval amendment application, 4 September 2012, DER ref: A541735.

Rio Tinto (2015) Coastal Community Environmental Forum, Agenda, minutes and slide package. DER ref: A1156709.

Rio Tinto (2016) Additional information provided by Rio Tinto 29 July 2016. DER ref: A1146146.

Appendix 2: Methodology - GIS

Section	Subsection	GIS theme
Cover page	Premises details	Tenure
Legislative Context and Operational History	Clearing Permits	Clearing Permit System
Legislative Context and Operational History	Contaminated Sites	Contaminated sites
Legislative Context and Operational History	Compliance	ICMS points ICMS polygon
Location and Siting	Siting Context and Residential and Sensitive Premises	Aerial imagery – Roebourne 2013 50cm Orthomosiac Topography (AHD)
Location and Siting	Residential and Sensitive Premises	Aerial imagery – Roebourne 2013 50cm Orthomosiac Town Planning Scheme
Location and Siting	Specific Ecosystems	Aerial imagery – Roebourne 2013 50cm Orthomosiac TEC and PEC Rare flora Parks and Wildlife Managed Lands and Waters
Location and Siting	Groundwater and water sources	WIN Groundwater Sites Groundwater salinity - statewide RIWI – Groundwater areas RIWI – Surface Water CAWS Area PDWSA Hydrography linear hydrogeography
Location and Siting	Soil Type (Fa19 and MM17)	Soils - statewide
Location and Siting	Meteorology	Rainfall – mean annual

Appendix 3: History Check

The following searches of records and incident checks were undertaken as part of this assessment.

Search	Document Title / Incident Details	Availability
Australian Securities & Investments Commission	Company Extract	www.asic.gov.au/online-services/search-asics-registers/
DER's Incident and Complaints Management System	ICMS No. 35400	DER internal
DER's Contaminated Sites Database	Lot 65 on Plan 241547 site classification.	DER Internal
DER Records Management System	Compliance Inspection Report, 14 May 2014	DER Internal (DER ref: A760220)
DER Records Management System	Compliance Inspection Report, 26 May 2015	DER Internal (DER ref: A937691)
Rio Tinto documentation	Annual Environment Report (2013), received 30 April 2014	DER Internal (DER ref: A752395)
Rio Tinto documentation	Annual Audit Compliance Report (2013), received 30 April 2014	DER Internal (DER ref: A75225)
Rio Tinto documentation	Annual Environment Report (2014), received 30 April 2015	DER Internal (DER ref: A901775)
Rio Tinto documentation	Annual Audit Compliance Report (2014), received 30 April 2015	DER Internal (DER ref: A902508)
Rio Tinto documentation	Annual Environment Report (2015), 8 April 2016	DER Internal (DER ref: A1085774)
Rio Tinto documentation	Annual Audit Compliance Report (2015), 18 April 2016	DER Internal (DER ref: A1085772)

Appendix 4: Summary of Applicant's Comments on Risk Assessment and Draft Conditions

The following comments were received from the Licence Holder on 18 November 2016.

Condition	Rio Tinto Comment	DER Response
Condition 1: Environmental Compliance	The Licensee recommends the deletion of Condition 1 in the draft Licence on the basis that it replicates *Environmental Protection Act 1986* (**EP Act**) offences by requiring compliance with *"the EP Act and all regulations prescribed under the EP Act applicable to the Premises."* In our view, it is: • unnecessary and uncertain in its application; and • creates additional and unnecessary compliance burden on the Licensee without reference to the particular environmental risk profile of the premises. *Suggested Amendment* It is recommended that this condition is removed.	Noted. Condition 1 has been deleted. An explanatory note as a preamble to the licence. The preamble provides additional information about legislative requirements generally under the EP Act and specific requirements for the licence.
Conditions 2, 3 and 4 (and Definition Section): Notification of Material Change	The Licensee appreciates the intent behind this condition, however is concerned that the condition duplicates aspects of section 53 of the EP Act, which requires the occupier of prescribed premises to ensure that any changes to the premises (as prescribed in this section) be undertaken in accordance with a works approval or Licence. Therefore, changes to prescribed premises (of a nature	Noted. The intent of the condition was to allow for the Licence Holder to have increased flexibility in relation to requirements for works approval and licensing amendments when the changes were not material in nature and resulted in better environmental outcomes and/or reduced levels of risk. The 'Material Change' conditions (2-4) have been deleted and other references in the Licence to 'Material Change'.

	that the legislature deemed relevant) require separate approval before that change takes place. Any additional requirements requiring notification of "Material Change" is the licence document could create uncertainty for licensees as to when further approval is required, or not. There are likely to be a range of activities that will not constitute a 'Material Change' (as defined in the draft Licence) but may require approval under section 53 and vice versa. This therefore could create an additional compliance burden, uncertainty and risk for the Licensee. The definition of 'Material Change' also includes 'changes to the control or ownership of the infrastructure or equipment within the premises'. This aspect of the definition is not necessary as section 61 of the EP Act already imposes a duty on persons becoming occupiers of prescribed premises to apply for a transfer of or a new approval. *Suggested Amendment* It is recommended that this condition is removed.	
Condition 5 and 6: Infrastructure and Equipment	No comment	Note these conditions have been relocated in the Licence and are now shown through conditions 2 and 3.
Condition 7: Wash water and stormwater	No comment	Note this condition has been relocated and is now condition 4. The format of the condition has changed so that it is clearer and easier to understand.

monitoring		
Condition 8: Monitoring	The Licensee requests confirmation as to when this monitoring report is required to be submitted. Is the report to be included as an attachment in the annual compliance report? *Suggested Amendment* It is requested that a single consolidated reporting condition be drafted which requires the submission of an annual report that includes monitoring data required by the Licence. We suggest that Conditions 8, 9 and 14 could be combined into a single condition.	Noted. A single report to be provided on an annual basis is required to demonstrate that compliance with the Licence has been achieved. This would include documentation demonstrating compliance with condition 4 and 5 of the Licence (Monitoring). The monitoring requirements from Schedule 4 have been removed as the Delegated Officer notes this may have been confusing. A limit has now been clearly presented (through condition 5) which if exceeded represents a breach of the licence.
Condition 9: Monitoring data	The Licensee requests further background regarding the intention behind this condition. Is the Licensee required to develop a report template that the CEO then approves?	Noted. Condition 9 has been removed from the licence and consolidated into one condition (condition 8) which provides the standalone condition for the reporting required for the department. The definition of Compliance Report provides for the report to be presented by the Licence Holder and approved by the CEO or as specified from the CEO from time to time. The CEO has not specified a format and subsequently the report can be presented by the Licence Holder and approved by the CEO. In addition specific requirements through Schedule 3 are detailed and can be incorporated or added to the Compliance Report.
Condition 10: Emissions	The Licensee has met with the DER on 17, 27 October and 10 November 2016, and understands its position and context of this condition. As such, the Licensee accepts this condition, proposes additional specified	Noted. This condition has been amended and moved to condition 1. The reference to Material Change has been removed from the

	emissions, and suggests alternative wording. Further, to ensure consistency with the Licensees comments above in relation to conditions 2, 3 and 4 (Notification of Material Change) the reference to Material Change should be removed from condition 10. *Suggested Amendment* The Licensee proposes the following amendments in relation to Condition 10 to clarify that the regulation of emissions under the licence are those that arise from Prescribed Premises activities. The Licence Holder must not cause any Emissions from **Prescribed Premises activities on** the Premises except for Specified Emissions and General Emissions described in column 1, subject to the exclusions, limitations or requirements specified in column 2, of Table 2. A new definition of **Prescribed Premises** is also requested to be included as per the below text: ***Prescribed Premises*** refer to the relevant categories of activities prescribed in Schedule 1 of the *Environmental Protection Regulations 1987* as specified at the front of this ***Licence.*** The licensee would also like to add light spill, iron ore spillage and liquid chemical storage to the Specified Emissions in Condition 10. Proposed controls have been incorporated into Schedule 3 of the licence.	licence and this condition. The Delegated Officer has considered the proposed addition of the drafting "prescribed premises activities" in the context of authorised emissions (specified and general emissions). However, the Delegated Officer considers it more appropriate to refer to 'Primary Activities' as this is consistent with recently published *Guidance Statement: Risk Assessments* and the emissions and discharges which have been considered through the risk assessment and subsequent setting of regulatory controls. Emissions that occur on the Premises but are unrelated to the Primary Activities have not been considered in this Licence and will be subject to the general provisions of the EP Act. ***Specified Emissions (recommended)*** *"Potential hydrocarbon spills from storage vessels or refueling activities from the Premises."* The Delegated Officer notes that the Licence Holder has provided an additional control to support the above recommended specified emission. This control is detailed as containment infrastructure (low permeability compounds) for hydrocarbon and chemical storage (limited to substances that exceeding 250 litres in volume). The Delegated Officer notes that there are no controls proposed for refuelling activities. The Delegated Officer considers that the desired specified emission for potential hydrocarbon spills and refuelling activities is not appropriate given the lack of controls provided for the refuelling activities. The Delegated Officer has specified the emissions as: "Minor Spillage of hydrocarbon from storage vessels related to

		the Primary Activity". Note – Minor Spillage has been defined in the Licence. *"Potential iron ore spillage from the Premises"* Noted. Accepted in part. The Delegated Officer has specified the emission as: "Minor Spillage of iron ore from the bulk loading of vessels" *"Light emissions associated with Port actives from the Premises"* The Delegated Officer considers that light emissions (and impacts to marine fauna) are not required to be specified in this licence. Light emissions are regulated through Ministerial Statement 840 (Turtle Management). The risk from light emissions was not risk assessed by the Delegated Officer due to duplication with the Ministerial Statement. This is documented in this Decision Report.
Condition 11: Information	As discussed in relation to Conditions 2, 3 and 4, we would suggest the deletion of the reference to "Material Change" in Condition 11. *Suggested Amendment* Delete paragraph (b) in Condition 11.	Noted. Condition amended and reference to Material Change removed.
Condition 12: Information	In our view, this condition is not environmentally necessary or proportionate to the risk. It creates unnecessary administrative burden on the proponent and the Department in respect of emissions that are not material and may lower the threshold at which actions	Noted. Condition removed from the Licence. Provisions of the EP Act continue to apply through section 72 in relation to the discharges of waste (cause or likely to cause pollution, material environmental harm or serious environmental

	must be taken in respect of an emission.	harm). In addition condition 7 requires the submission of an annual Compliance Report which must specify the extent to which compliance with conditions of the Licence has been met.
Condition 13: Information	While the general objectives and requirements of this clause are acceptable, we would request that a clarification be added make it clear that only complaints relevant to the EP Act are required to be reported on. The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to **prescribed activities undertaken at** the **Prescribed** Premises, and any action taken by the Licence Holder in response to the complaint.	Noted. This condition has been amended to provide additional clarity for the Licence Holder. The Licence Holder will be required to record and investigate any complaints as they relate to activities at the premises and their legal obligations under the Licence.
Condition 14: Information	The Licensee requests the following clarification regarding this condition. • Is the intent of this condition for the Licensee to report on compliance with every condition, rather than non-compliance 'by exception' as per the current practice? • Will the compliance report referenced in this condition expected to be a combination of the current AER and AACR? For example, do we need to provide: - Records of complaints e.g. information required by Condition 13 - Records of infrastructure maintenance e.g. cleaning up spilled ore (Condition 5, schedule 3)	Noted. The Delegated Officer responds to each of the questions as follows: • The Licence Holder will be required to report on the non-compliance(s), the details of the non-compliance and the management and mitigation measures implemented to address the non-compliance. *Guidance Statement: Publication of Annual Audit Compliance Reports* and *Guideline: Annual Audit Compliance Reports* provide further guidance on the content of Compliance Reports. • The Delegated Officer agrees to amend the anniversary date to 31 January of each year. The Delegated Officer agrees to amend the Annual Period in the definitions section.

	Suggested Amendment The Licensee would prefer that all compliance reporting to be completed at same time for all company licenses e.g. 30 April of each year and be for a calendar year reporting period. As per RTIO's comment on Condition 8. We would also like to suggest that the annual reporting only include the presentation of the monitoring data and non-compliances only. The DER also confirmed at 17 October 2016 meeting that there are no issues in changing the reporting dates for RTIO licenses. Anniversary date in definitions section to be amended to 31 January of each year to allow for compliance reporting to be required by 30 April of each year. Annual Period in definitions section to be amended to a calendar year reporting period.	
Licence Holder	In our view, Pilbara Iron Pty Ltd is the correct occupier/Licensee holder for Cape Lambert Port Operations for the purposes of section 56 of the EP Act. The participants in the Robe River Joint Venture are the tenure holders (as tenants in common) of the Cape Lambert Port. Together with Hamersley Iron Pty Ltd, they have appointed Pilbara Iron Pty Ltd (a member of the Rio Tinto Group) to exclusively operate and maintain their ports on an integrated basis, on commercial terms	Noted. The Delegated Officer considers Pilbara Iron Pty Ltd as the Licence Holder for the premises.

	agreed between Hamersley Iron and Robe. Accordingly Pilbara Iron Pty Ltd is the "occupier" for the purposes of section 56 of the EP Act, and is the entity that makes decisions and implements procedures relevant to the control of emissions and discharges regulated under Part V of the EP Act.	
Prescribed Premises Category	The Licensee notes that Category 12 for existing mobile crushing and screening plants is not listed. Is the intention that the mobile screening of spilled ore and/or crushing and screening for construction purposes are covered by Category 5? The existing mobile crushing and screening plants are also not currently mentioned in the decision report. *Suggested Amendment* Include Category 12 in the licence	Noted. The Delegated Officer has considered Category 12 for the purposes of mobile crushing and screening of rail ballast and other similar basic raw materials. The rescreening of iron ore has been considered through the Category 5 risk assessment. The decision report and licence has been amended to include Category 12.
Schedule 2. Tables 4 & 5. Infrastructure and Equipment	The Licensee has the following comments on Schedule 2. • Including the names of individual pieces of infrastructure is too onerous and administratively difficult to maintain for little environmental benefit. An updated table and maps with suggested infrastructure to be included have been provided.	Noted. The Delegated Officer has amended Schedule 2 and removed reference to each of the items of infrastructure and equipment. The Delegated Officer notes that the key pieces of infrastructure and their location are shown through Schedule 1. The type and location of the infrastructure is considered appropriate.

	The Cape Lambert Power Station (CLPS) is currently being constructed under W5435/2013/1. How will the commissioning/operation of this facility be incorporated into this Licence? Will the Licensee need to submit a Licence amendment once the facility is constructed, or will a condition be added to the license incorporating the works approval requirements (as per recent amendments)? The CLPS is currently due for completion early 2018, and is expected to commence commissioning Q3 2017. *Suggested Amendment* Suggest that the works approval for the Cape Lambert Power Station (W5435/2013/1) be incorporated into the licence.	Noted. The Delegated Officer notes that the Works Approval Holder for the Cape Lambert Power Station works approval (W5435/2013/1) is Robe River Mining Co. Pty. Ltd while the Licence Holder for the Cape Lambert Port Operations (L5278/1973/13) is Pilbara Iron Pty Ltd. Given the holders of both of the instruments are different parties the Delegated Officer has not incorporated the Cape Lambert Power Station. In addition to include the Cape Lambert Power Station the Delegated Officer would be required to undertake a risk-assessment the prescribed premises (Category 52) as part of this review which may result in different regulatory requirements. It is recommended that a licence amendment is sought by the appropriate occupier of the Cape Lambert Power Station together with required supporting information.
Schedule 3: Infrastructure and Equipment	*Car dumpers* Suggested amendment to sampling point text and above ground piping.	Noted. Accepted.
	Stockyard and local plant stormwater infrastructure Suggested amendment to operation details regarding size of stormwater catchment areas and freeboard requirements.	Noted. Accepted.
	Stormwater discharge points (and associated sediment basins) Suggested amendment to reference locations	Noted. Accepted.

	Surface water and contaminated water infrastructure Suggested minor amendments to provide examples of contaminates and wherever possible for the water reuse.	Noted. Accepted.
	Liquid Chemical Storage Suggested addition of control for the liquid chemical storage of chemical	Noted. Accepted.
	Lighting Suggested addition of control for light spill	Noted. The Delegated Officer considers that light emission (and impacts to marine fauna) is not required to be specified in this licence. It is regulated through Ministerial Statement 840 (Turtle Management). The risk from light emissions was not risk assessed by the Delegated Officer due to the presence of the Ministerial Statement. This is documented in the decision report
	Premises Iron ore spill clean up Suggested addition of clean up control to minimise spillage to marine environment. In addition it was requested by the Delegated Officer that the Licence Holder provide additional details on the clean-up schedules undertaken at the Premises. The following response was provided by the Licence Holder: *"Different management areas of the port have clean up schedules, however these are subject to change depending on risk and ship loading schedules, and as such it would not be appropriate to imposes adherence to a specific schedule as a condition on the licence"*	Noted. The Delegated Officer notes that no clean-up schedule has been provided by the Licence Holder for the clean-up of iron ore spills at the berth and wharf. The Delegated Officer considers that alternative wording is required for this control to ensure that it is valid and enforceable. It is further noted that the *'potential spillage of iron ore from the Premises*' is a specified emission detailed through condition 1 (Authorised Emissions). As such, it is considered that there is requirement to provide adequate specificity around the control for the authorised emission.

Attachment 1: Revised Licence L5278/1973/13