Government of Western Australia
Department of Environment Regulation

Licence

Licence Number	L8194/2007/3
Licence Holder	Fortescue Metals Group Ltd (ACN 002 594 872)
Registered business address	87 Adelaide Terrace EAST PERTH WA 6004
Duration	16 April 2014 to 23 April 2027
Amendment	7 December 2016
Prescribed Premises	Category 58 - Bulk material loading or unloading; and Category 70 - Screening, etc. of materials
Premises	Anderson Point Materials Handling Facility Part of Lot 1497 on Plan 404497, Part of Lot 370 on Plan 35619, Part of Lot 556 on Plan 60836, Part of Lot 321 on Plan 74344 and Lot 322 on Plan 74344 PORT HEDLAND WA 6721 within coordinates defined in Schedule 1

This Licence is granted to the Licence Holder, subject to the following conditions, on 07 December 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)

Conditions

Environmental compliance

1. The Licence Holder must comply with the EP Act and all regulations prescribed under the EP Act applicable to the Premises, including:

(a) the duties of an occupier under s 61;

(b) the duty to notify the CEO of Discharges of Waste under s 72; and

(c) not causing, or doing anything that is likely to cause, an offence under the EP Act,

except where the Licence Holder does something in accordance with a Condition which expressly states that a defence under s 74A of the EP Act may be available.

Notification of Material Change

2. The Licence Holder must notify the CEO of any Material Change within 14 days of a Material Change occurring and such notification (which the CEO will make publicly available) must:

(a) be in writing;

(b) include details of the changes, including duration, infrastructure details (if any); and

(c) include risk analysis of the changes, including proposed controls to mitigate risks.

Nothing in this Condition constitutes a defence to offences under the EP Act.

3. The Licence Holder must provide to the CEO any additional information the CEO may reasonably require to assess the Material Change under Condition 2 and in order for the CEO to determine if an amendment is required under the EP Act.

4. The Licence Holder must cease carrying out, or modify, a Material Change in the manner and at the time required by the CEO if:

(a) the CEO forms the view, acting reasonably, that the Material Change has or may have an unacceptable impact on public health, amenity or the environment; and

(b) the CEO has provided written notice (which the CEO will make publicly available) to the Licence Holder specifying the grounds for the CEO's views.

Nothing in this Condition prevents the Licence Holder subsequently submitting an amendment in relation to the Material Change.

Infrastructure and Equipment

5. The Licence Holder must ensure that the infrastructure and equipment specified in column 1 and column 2 of Table 6 in Schedule 3 is maintained and operated in accordance with the requirements specified in column 3 of Table 6 in Schedule 3.

6. The Licence Holder must ensure that the equipment and infrastructure in Table 6 in Schedule 3 are maintained in good working order.

Wash water Monitoring and Limits

7. The Licence Holder must undertake wash down water monitoring:

(a) for the parameters specified in column 1;

(b) at the locations specified in column 2;

(c) at the frequency specified in column 3;

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

in Table 1.

Table 1: Wash water Monitoring

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Parameter	**Location**	**Period**	**Limit**	**Sample**	**Method**
Total recoverable hydrocarbons (TRH)	L1 and L2. Post treatment water contained in the process water tanks shown in the map in Schedule 1	Quarterly	15mg/L	Grab sample	AS5667.10: 1998

8. The Licence Holder must ensure that the parameter specified in column 1 of Table 1 of Condition 7 for the discharge of wash water, do not exceed the limit specified in column 4 of Table 1 in Condition 7.

9. Upon request by the CEO, the Licence Holder must provide such information as reasonably necessary to demonstrate compliance with monitoring requirements specified in Condition 7 and 8.

10. The Licence Holder must provide the monitoring data referred to in Condition 7 in the format approved by the CEO as presented by the Licence Holder or as specified by the CEO from time to time.

Emissions

11. The Licence Holder must not cause any Emissions from 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.

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 (including offences under section 56).

Table 2: Authorised Emissions Table

Column 1	Column 2
Emission Type	**Exclusions/Limitations/Requirements**
Specified Emissions	
Discharge of wash water and stormwater from the Premises	Subject to:

Column 1	Column 2
Emission Type	**Exclusions/Limitations/Requirements**
	• Conditions 5 to 10.
General Emissions (excluding Specified Emissions)	
Emissions which: • arise from the activities on the Premises through matters set out in the General Description in Schedule 3; or • arise from the activities on the Premises from a Material Change (except where Condition 4 applies).	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 discharged under the *Environmental Protection (Unauthorised Discharges) Regulations 2004*.

Information

12. 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 required by Condition 7; and

(c) any Material Change.

13. If an Emission that is not a Specified Emission or General Emission occurs on the Premises, then the Licence Holder must:

(a) investigate why the Emission occurred;

(b) take all reasonable steps to prevent the Emission occurring again;

(c) record the details of the investigation and all steps taken; and

(d) provide a copy of the record to the CEO within 21 days of the date the Licence Holder became aware of the Emission occurring.

14. The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to 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.

15. The Licence Holder must submit to the CEO within 91 days after the Anniversary Date, a Compliance Report indicating the extent to which the Licence Holder has complied with the Conditions in this Licence for the Annual Period.

16. 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.

17. The Licence Holder must immediately notify the CEO of the cessation of any relevant approvals or tenure issued in relation to the activities/works under the Railway and Port (Pilbara Infrastructure) Agreement Act 2004.

18. The Licence Holder must cease any activities/works immediately on the cessation of the approvals or tenure referred to in Condition 17.

Definitions and Interpretation

Definitions

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

Anniversary Date means 31 December of each year.

Annual Period means a 12 month period commencing from 1 January until 31 December in that 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.*

CEO for the purposes of notification means:

Director General
Department of Environment Regulation
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.

Compliance Report means a report in a format specified by the ***CEO*** from time to time.

Condition means a condition to which this ***Licence*** is subject under s 62 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***.

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

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

EP Regulations means the *Environmental Protection Regulations 1987* (WA).

General Description means the description of activities and operations carried out on the ***Premises*** as set out in Schedule 3 of this ***Licence***.

General Emission has the meaning set out in ***Condition*** 10 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 Change means a change to the activities carried out on the ***Premises*** as described in the ***General Description*** set out in Schedule 2 and:

(a) that may result in an increased risk to public health, amenity or the environment; and

(b) includes the types of changes specified in Schedule 2; and

(c) does not include the Non - Material Change specified in Schedule 2.

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

OWS means oily water separator.

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***.

Quarterly means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December in that year.

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

Specified Emission has the meaning set out in ***Condition*** 10 of this ***Licence***.

TRH means Total Recoverable Hydrocarbons.

TUL means **Train Unloading Facility**

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: Coordinates and Maps

Premises Coordinates

Point	Easting	Northing
1	663755.4703	7749805.97
2	664039.5832	7750912.963
3	664039.7716	7750913.698
4	664039.2861	7750913.267
5	664037.5358	7750915.057
6	663884.678	7751071.354
7	663851.7799	7751071.399
8	663829.4115	7751041.582
9	663828.3979	7751040.231
10	663814.7289	7751050.508
11	663784.6116	7751073.152
12	663784.069	7751073.661
13	664246.2404	7751696.36
14	664293.2603	7751761.03
15	664354.9803	7751716.67
16	665206.6503	7751110.64
17	665262.4903	7751070.31
18	665243.4404	7751041.94
19	664302.9804	7751707.97
20	664281.6203	7751635.27
21	664313.3705	7751627.361
22	664310.2746	7751603.339
23	664330.252	7751564.663
24	664311.5346	7751490.448

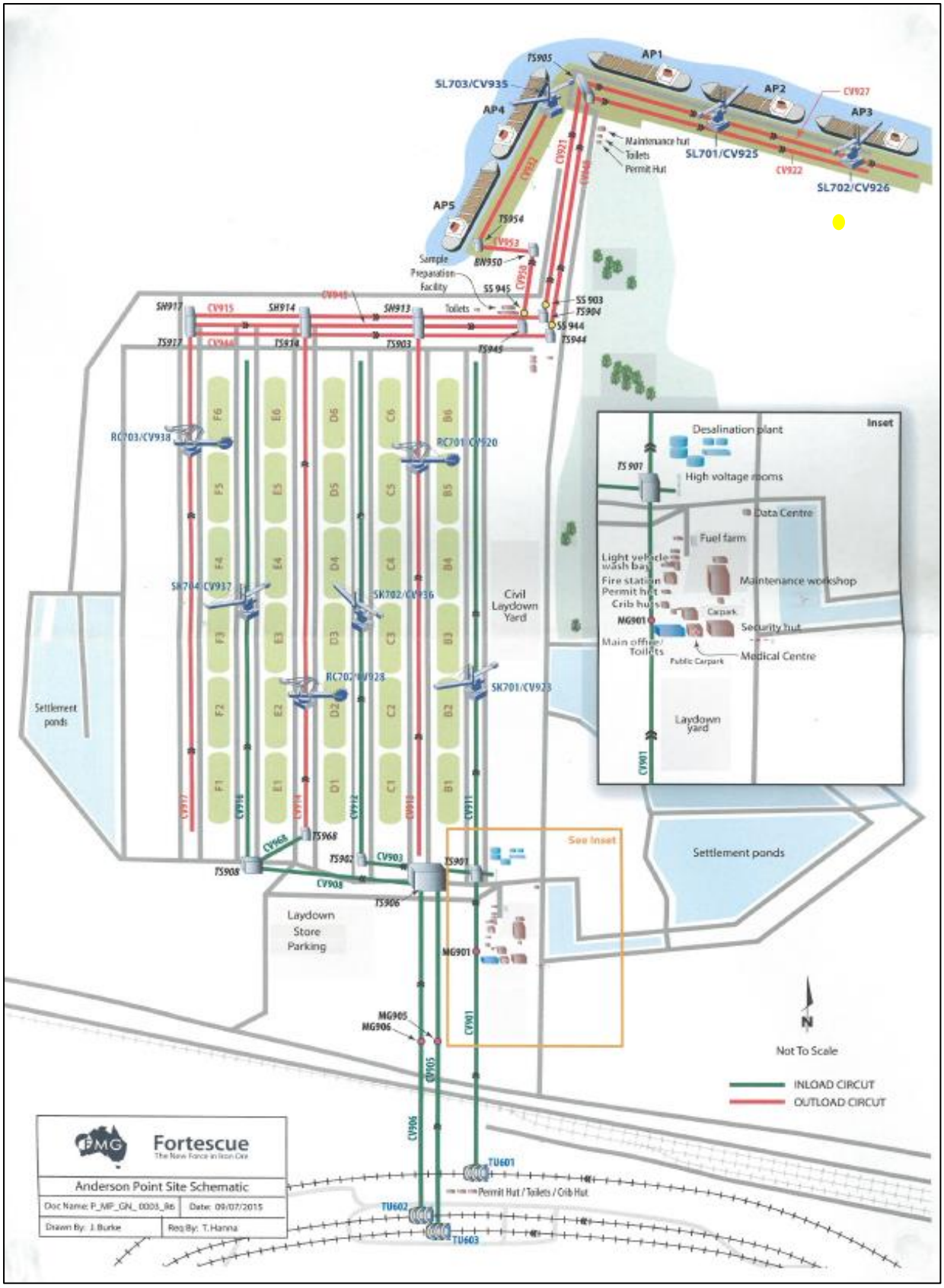
25	664284.9731	7751394.848
26	664238.8856	7751363.926
27	664205.4797	7751246.493
28	664189.7303	7750943.82
29	664122.4404	7750932.69
30	663747.8603	7749495.2
31	663416.2803	7747690.02
32	663381.7503	7747499.99
33	663252.9616	7746805.601
34	663136.2716	7746875.129
35	663102.1845	7746690.535
36	663164.0174	7746580.324
37	663112.5934	7746353.076
38	662982.6375	7746376.951
39	662808.7196	7746425.635
40	662857.5403	7746617.77
41	662933.7504	7746602.43
42	663024.6691	7746943.684
43	662953.8126	7747001.317
44	662786.4282	7747158.631
45	662729.0871	7747201.973
46	662679.6994	7747487.69
47	663128.2181	7749890.306
48	663180.1003	7749929.26

MGA Zone 50

Premises Map

The Premises and Discharge monitoring locations are shown in the map below. The green line depicts the boundary to the Premises.

Site Plan


AP1
AP2
AP3
AP4
AP5
SL703/CV935
SL701/CV925
SL702/CV926
CV927
CV922
Maintenance hut
Toilets
Permit Hut
TS905
TS954
CV953
BV950
Sample Preparation Facility
SS 945
SS 903
TS904
SS 944
TS944
TS945
Toilets
SW917
CV915
SW914
CV946
SW913
TS917
CV944
TS914
TS903
RC703/CV938
RC701/CV920
SK704/CV937
SK702/CV936
RC702/CV928
SK701/CV923
Civil Laydown Yard
Settlement ponds
Laydown Store Parking
TS968
TS902
CV903
TS901
TS908
CV908
TS906
MG901
MG905
MG906
CV901
CV905
CV906
TU601
TU602
TU603
Permit Hut / Toilets / Crib Hut
See Inset
Inset
Desalination plant
TS 907
High voltage rooms
Data Centre
Fuel farm
Light vehicle wash bay
Fire station
Permit hut
Crib huts
Maintenance workshop
Carpark
Security hut
Main office/ Toilets
Public Carpark
Medical Centre
Laydown yard
Settlement ponds
N
Not To Scale
INLOAD CIRCUT
OUTLOAD CIRCUT
Fortescue
The New Force in Iron Ore
Anderson Point Site Schematic
Doc Name: P_MP_GN_0003_R6
Date: 09/07/2015
Drawn By: J. Burke
Req By: T. Hanna

Schedule 2: General Description

At the time of assessment, the following activities and operations were considered in the determination of the risk and related conditions for the Premises.

The Licence Holder is carrying out activities at the Premises which fall within the meaning of Prescribed Premises under the EP Act. The Premises constitute:

- 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.

- Category 70 - Screening etc. of material: Premises on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.

Infrastructure and equipment

The following infrastructure and equipment are situated on the Premises:

Table 3: Infrastructure and equipment

No.	Infrastructure	Plan reference
1	3 x Train unloaders	Site Plan: TU601, TU602, TU603
2	3 x Stackers	Site Plan: SK701/CV923, SK702/CV936, SK704/CV937
3	3 x Reclaimers	Site Plan: RC701/CV920, RC702/CV928, RC703/CV938
4	Stockpiles	Site Plan: B1 – B6, C1 – C6, D1 - D6, E1 – E6 and F1 – F6
5	Inload Conveyors	Site Plan: CV901, CV903, CV905, CV906, CV908, CV911, CV912, CV916, CV968
6	Outload Conveyors	Site Plan: CV913, CV914, CV917, CV944, CV915, CV921, CV922, CV927, CV932, CV945, CV948, CV950, CV953
7	Transfer Stations	Site Plan: TS901, TS902, TS903, TS904, TS905, TS906, TS908, TS914, TS917, TS944, TS945, TS954, TS968,
8	Shuttle conveyors	Site Plan: SH913, SH914, SH917
9	Surge bin	Site Plan: BN950
10	3 x Ship loaders	Site Plan: SL701/CV925,

No.	Infrastructure	Plan reference
		SL702/CV926, SL703/CV935
11	5 x Berths (located on Wharf)	Site Plan: AP1, AP2, AP3, AP4, AP5
12	Mobile screening plant	N/A
13	Maintenance workshop	N/A
14	Wash bay	N/A
15	Stormwater discharge points and associated sedimentation ponds	Premises Map: W1, W2 and W3
16	Oily water separators (OWS)	Premises Map: OWS
17	Process water tanks for OWS 1 and 2	Premises Map: L1
18	OWS 3 for Train Unloader 3 Silt Trap discharge	Premises Map: L2
Other Infrastructure		
19	Desalination plant	N/A
20	Desalination plant emission point	N/A
21	Fuel farm (1 x 52,400 L tank)	N/A

Site layout

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

Bulk materials loaded and unloaded

The bulk material (listed in Table 4) arrives at the Premises via trains from the Licence Holder's three inland mines (Cloudbreak, Christmas Creek and Solomon). Train unloaders receive the trains and unload ore with rotary car dumpers. The ore is then conveyed to a stockpile by a stacker for stockpiling at the stockyard area. Ore is then removed from the stockpiles by reclaimers and transferred to the ship loading section of the Premises via conveyor.

Table 4: Bulk material volumes assessed

Commodity	Volume (annual)
Iron ore	up to 175,000,000 tonnes (exported)
Total volume	**175,000,000 tonnes**

Screening of material

The Licence Holder uses a mobile screening plant to rescreen rail ballast from stacker lines in the stockyard at the rate listed in Table 5.

Table 5: Screening throughput volumes assessed

Material	Volume (annual)
Rail ballast	up to 45,000 tonnes
Total volume	**45,000 tonnes**

Examples of Material Change

- new commodities;
- volume increases of commodities;
- changes to the control or ownership of the infrastructure or equipment within the Premises; and
- changes to the site layout of prescribed premises infrastructure and equipment as specified on the plans in Schedule 2, Table 3.

Non-Material Change

- Improvements or additions to, or replacement of, infrastructure and equipment that do not increase the risk of emissions and discharges.

Schedule 3: Infrastructure and Equipment

Table 6: Infrastructure Controls Table

	Column 1	Column 2	Column 3	Column 4
	Site Infrastructure	**Description**	**Operation requirements**	**Reference to plan**
	Stormwater and wastewater management			
1.	Stormwater discharges points	Sedimentation ponds, silt traps and discharge points	Stormwater runoff from areas other than those areas handling or storing hydrocarbons (specifically workshop, vehicle washdown bay, train unloader, conveyor transfer points, refuelling areas and fuel storage tanks) is directed to sedimentation ponds. Stormwater is retained within the sedimentation ponds/silts traps for a sufficient period for the majority of suspended particles to settle prior to discharge from the following locations: • W1 - Sedimentation basin discharging to South West Creek; • W2 - Australia Island silt trap discharge; • W3 - Sample laboratory silt trap discharged via overflow pipe into South West Creek; and • L2 - Train Unloader 3 Silt Trap discharge to rail loop;	Premises Map: W1, W2, W3 and L2
2.	Train unloading infrastructure area sump and OWS	Impermeable concrete sump OWS	Area of the train unloading facilities to drain into sump for treatment through the OWS. TUL1 has a concrete containment area and OWS TUL2 and TUL 3 have their own discharge point through L2. Treated water stored within the process water tanks prior to use including dust suppression.	Site Plan: TU601, TU602, TU603
3.	Workshop, Light Vehicle refuelling area, vehicle washdown bays, fuel farm	Impermeable concrete sump OWS	Area workshop, light vehicle refuelling area, vehicle washdown bays and fuel farm drain to sump for treatment through the OWS. Treated water stored within process	Site Plan

	Column 1	Column 2	Column 3	Column 4
	Site Infrastructure	**Description**	**Operation requirements**	**Reference to plan**
	and OWS		water tanks prior to use for dust suppression.	
	Spill control infrastructure			
4.	Conveyor	Concave conveyor design	Conveyor sides concave to prevent spillage of ore	N/A
5.		Enclosed conveyor transfer points	Transfer points covered to prevent spillage of ore onto the ground.	N/A
6.	Wharf (berths)	Concrete flooring	Dedicated cleaning crew engaged to undertake clean-up of ore built under conveyors and transfer stations on daily basis. Inspections undertaken on regular basis (minimum daily) to determine whether ore has spilt and requires clean-up and removal. Clean-up undertaken using street sweeper or appropriate alternative method/equipment. Significant spills cleaned-up and removed within 72 hours.	Site Plan: AP1, AP2, AP3, AP4, AP5.
7.	Spill kits	Equipped with hydrocarbon spill kit equipment.	Equipment deployed in the event of hydrocarbon spills and leaks.	N/A

Government of Western Australia
Department of Environment Regulation

Decision Report

Review of Existing Premises

Division 3, Part V *Environmental Protection Act 1986*

Applicant:	**Fortescue Metals Group Ltd**
ACN:	**002 594 872**
Licence Number:	**L8194/2007/3**
File Number:	**DER2013/001082**
Premises:	**Anderson Point Materials Handling Facility** **Part of Lot 1497 on Plan 404497, Part of Lot 370 on Plan 35619, Part of Lot 556 on Plan 60836, Part of Lot 321 on Plan 74344 and Lot 322 on Plan 74344 within coordinates as defined in Appendix 1** **WEDGEFIELD WA 6721**
Date of report:	**Wednesday, 7 December 2016**
Status of Report	**Final**

Table of Contents

Definitions of terms and acronyms

Term	Definition
AACR	Annual Audit Compliance Report
AER	Annual Environmental Report
Annual period	The inclusive period from 1 January until 31 December in that year
Anderson Point	Anderson Point Materials Handling Facility
AP5	Anderson Point Berth 5
AS 1940-2004	Australian Standard 1940-2004: The storage and handling of flammable and combustible liquids
AS1692-2006	Australian Standard 1692-2006 (R2016): Steel tanks for flammable and combustible liquids
Assigned noise level	Noise level not to be exceeded at receiving premises, defined by Part 2, Division 1 of the Noise Regulations
ASS	Acid Sulfate Soils
BOM	Bureau of Meteorology
BPPH	Benthic Primary Producer Habitat
BHPBIO	BHP Billiton Iron Ore Pty Ltd
Category	As used in Schedule 1 of the *Environmental Protection Regulations 1987*
Decision Report	This document
DER	The Department of Environment Regulation
DMMA	Dredge Material Management Areas
DoH	The Department of Health
DSD	The Department of State Development
EIP	Environmental Improvement Plan
EP Act	The *Environmental Protection Act 1986*
EP Regulations	The *Environmental Protection Regulations 1987*
EPA	Environmental Protection Authority
Existing Licence	The licence issued under Part V, Division 3 of the EP Act and in force

	prior to the commencement of, and during completion of, this review
FMG	Fortescue Metals Group Ltd
HRA	The Port Hedland Air Quality Health Risk Assessment for Particulate Matter published by the Department of Health dated January 2016)
ICMS	Incidents and Complaints Management System
kL	kilolitre
km	kilometre
Licence Holder	Fortescue Metals Group Ltd (FMG)
Management Plan	The Port Hedland Air Quality and Noise Management Plan published by the Department of State Development dated March 2010
$\mu g/m^3$	Micrograms per cubic metre
mbgl	Metres below ground level
mg/L	Milligrams per litre
ML/d	Megalitres per day
MS	Ministerial Statement
Mtpa	Million tonnes per annum
NEPM	National Environment Protection (Ambient Air Quality) Measure
Noise Regulations	The *Environmental Protection (Noise) Regulations 1997*
OEPA	The Office of the EPA
OWS	Oily Water Separator
PDWSA	Public Drinking Water Source Area
PHIC	Port Hedland Industries Council
PM	Particulate Matter
$PM_{2.5}$	Particulate matter that is smaller than 2.5 microns (µm) in diameter
PM_{10}	Particulate matter that is smaller than 10 microns (µm) in diameter
PPA	Pilbara Ports Authority
Prescribed Premises	is defined in the EP Act to mean premises prescribed for the purposes of Part V
the Premises	Anderson Point Materials Handling Facility

the Review	This licence review
Registration	An instrument issued under Part V, Division 3 of the EP Act in relation to Categories of Prescribed Premises listed in Part 2 of Schedule 1 of the EP Regulations.
Revised Licence	The amended licence issued under Part V, Division 3 of the EP Act following the finalisation of this review
RIWI Act	The *Rights in Water Irrigation Act 1914*
the Taskforce	The Port Hedland Dust Management Taskforce
TDS	Total Dissolved Solids
TRH	Total Recoverable Hydrocarbons
TUL	Train Unloading Facility

1. Purpose and Scope of Assessment

This licence Review was initiated by the Department of Environment Regulation (DER), with the agreement of Fortescue Metals Group Ltd (Licence Holder), as part of a wider review of Category 58 premises within the Port Hedland port. The purpose of this review is to apply a risk-based assessment approach which is consistent with DER's Regulatory Framework and to apply a coordinated regulatory approach following the release of the Department of Health (DoH) Port Hedland Air Quality Health Risk Assessment for Particulate Matter, January 2016 (HRA).

This assessment has considered the activities and infrastructure at the Anderson Point Materials Handling Facility (the Premises) which fall within the definition of Prescribed Premises Categories 58 and 70 in Schedule 1 to the *Environmental Protection Regulations 1987* (EP Regulations).

The Premises also includes a desalination plant designed for a maximum inflow of approximately 12 megalitres per day (ML/d) of seawater and a maximum waste discharge of 8 ML/d of saline water. The salinity of the brine discharged from the desalination plant is approximately 60,000 milligrams per litre (mg/L) total dissolved solids (TDS). The desalination plant has not been considered in this assessment (see section 3.2 - Excluded Infrastructure).

The Dredge Material Management Areas (DMMA) are also situated on the western and eastern sides of the Premises (referred to in Figure 1 as Settlement ponds). These are for the management of dredge material and were approved and conditioned under Ministerial Statements issued under Part IV of the Environmental Protection Act 1986 (EP Act). These ponds are not considered to meet the definition of a Prescribed Premises and are not within the Premises boundary. Therefore the settlement ponds have not been considered further as part of this Review.

The Revised Licence (L8194/2007/3) is set out in Attachment 1.

2. Background

The Licence Holder holds the Existing Licence L8194/2007/3 under the EP Act for the Premises. Iron ore handled and exported from the Premises is received from a number of iron ore mines (Solomon, Christmas Creek and Cloudbreak) in the east Pilbara region of Western Australia.

A Works Approval (W5749/2014/1) has been issued to the Licence Holder for the receipt and handling of ore from an additional mine, referred to as the North Star project. To date DER has not received an application from the Licence Holder to incorporate these activities into the Existing Licence.

Previously ore from the Nullagine Iron Ore Project (a joint venture between the Licence Holder and BC Iron Nullagine Pty Ltd) was also transported to shared facilities at the Premises prior to shipping. The Nullagine Iron Ore Project was suspended in January 2016 with the final shipment occurring in early March 2016.

The Existing Licence relates only to the activities undertaken at the port, specifically those Prescribed Premises categories listed in Table 1. Category 12 was added to the Existing Licence through an Amendment Notice in June 2016 to allow the Licence Holder to undertake the rescreening of ballast from the stacker rail lines in the stockyard.

Table 1: Prescribed Premises Categories

Classification of Premises	Description	Approved Premises Production or Design Capacity
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	175,000,000 tonnes per Annual Period
Category 70	Screening, etc. of material: premises on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated	45,000 tonnes per Annual Period

3. Overview of the Premises

3.1 Infrastructure

The Premises infrastructure, as it relates to Category 12 and 58 activities, including activities outside the scope of this Review but within the Premises, is detailed in Table 2 with reference to Figures 1 and 2.

Table 2: The Premises infrastructure

Category 70: Screening, etc. of material		
A mobile screening plant is utilised on-site to screen ballast underlying stackers in the Premises stockyard, as a result of spilt ore making the stacker rail foundation unstable. The assessed total throughput of the screening plant is 45,000 tonnes and the rescreening program is anticipated to operate for a 10 week period (FMG UID-63691, 12 October 2016).		
No.	**Infrastructure**	**Plan reference**
1	Mobile screening plant	N/A
Category 58: Bulk material loading or unloading		
The Premises receives iron ore via train from three Pilbara mine sites (Cloudbreak, Christmas Creek and Solomon). Three rotary car dumpers (train unloaders) unload ore from the trains and ore is then conveyed to the stockyard and placed into stockpiles by three stackers. The stockyard has a maximum capacity of 9.7 million tonnes with a total of eight rows (six live rows and two bulk-out rows). At the Premises, blending of the raw products takes place at the stockyard through horizontal stacking methods. Ore is then removed from the stockpiles by a reclaimer and transferred to the wharves via conveyor. Three ship loaders operate across the five berths (AP 1 – 5) to load the ore product onto ships for export.		
No.	**Infrastructure**	**Figure reference**
2	3 x Train unloaders	Figure 1: TU601, TU602, TU603
3	3 x Stackers	Figure 1: SK701/CV923, SK702/CV936, SK704/CV937
4	3 x Reclaimers	Figure 1: RC701/CV920,

		RC702/CV928, RC703/CV938
5	Stockpiles	Figure 1: B1 – B6, C1 – C6, D1 - D6, E1 – E6 and F1 – F6
6	Inload Conveyors	Figure 1: CV901, CV903, CV905, CV906, CV908, CV911, CV912, CV916, CV968
7	Outload Conveyors	Figure 1: CV913, CV914, CV917, CV944, CV915, CV921, CV922, CV927, CV932, CV945, CV948, CV950, CV953
8	Transfer Stations	Figure 1: TS901, TS902, TS903, TS904, TS905, TS906, TS908, TS914, TS917, TS944, TS945, TS954, TS968,
9	Shuttle conveyors	Figure 1: SH913, SH914, SH917
10	Sample stations	Figure 1: SS 903, SS 944, SS 945
11	Surge bin	Figure 1: BN950
12	3 x Ship loaders	Figure 1: SL701/CV925, SL702/CV926, SL703/CV935
13	5 x Berths	Figure 1: AP1, AP2, AP3, AP4, AP5
14	Maintenance workshop	Figure 1: Maintenance workshop
15	Wash bay	Figure 1: Light vehicle wash bay
16	Stormwater discharge points and associated sedimentation ponds.	Figure 2: W1, W2 and W3
17	Oily water separators (OWS)	Figure 2: OWS
18	Process water tanks for OWS 1 and 2	Figure 2: L1
19	OWS 3 for Train Unloader 3 Silt Trap discharge	Figure 2: L2
Other infrastructure		
No.	**Infrastructure**	**Plan reference**
20	Desalination plant	Figure 1
21	Desalination plant emission point	Figure 1: Desalination plant discharge
22	Fuel farm (1 x 52,400 LL tank)	Figure 1: Fuel farm

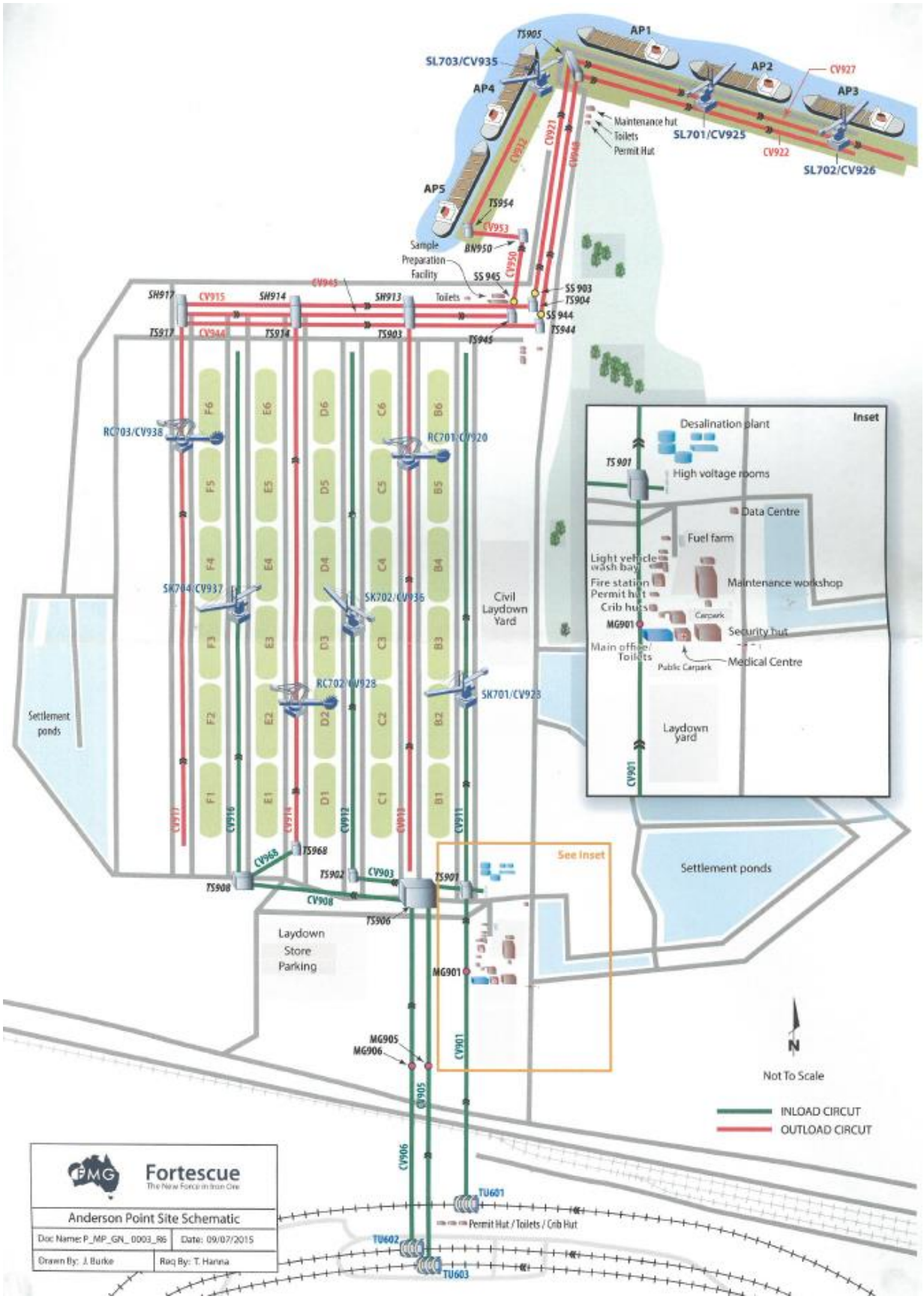


Figure 1: Site Plan of the Premises

Figure 2: Stormwater discharge and emissions to land locations

3.2 Excluded Infrastructure

The Licence Holder operates a desalination plant which was constructed in 2011 under works approval W4979/2011/1. The plant provides supplementary water supply for operations at the premises.

The plant has a maximum throughput of 12 ML/d which equates to approximately 4.4 gigalitres (GL) per year, and maximum waste discharge of 8 ML/d which equates to 2.92 GL per year. The average water supply is 2.5-3 ML/d or 0.91 to 1.1 GL per year.

The production or design capacity threshold for Prescribed Premises category 54A (Sch.1 Part 1 - Water desalination plant) is 10GL or more per year and the Prescribed Premises Category 85B (Sch.1 Part 2 - Water desalination plant) threshold is 0.5GL or more per year (provided waste water is discharged to land or waters (other than marine waters)). The discharge from the desalination plant is directed to the Dredge Material Management Areas (DMMA), which is regulated under Ministerial Statement 859 granted under Part IV of the EP Act. The DMMA's contain dredge material from previous dredge campaigns.

Key Finding: The Delegated Officer has not considered the desalination plant in the revised licence and has determined based on the relevant facts that:

- the occupier may apply under r.5B of the EP Regulations for the prescribed premises category 85B to be registered; or
- the occupier may apply under s.59B of the EP Act or to amend the Licence (L8194/2007/3) to include the prescribed premises category 85B.

Noting the above, given the presence of Ministerial Statements which regulate emissions from the DMMA, additional regulatory controls issued under Part V of the EP Act will unlikely to be required.

4. Legislative Context

Approvals and underlying tenure associated with the Premises which are held by the Licence Holder, subsidiaries and related companies are outlined in Table 3.

Table 3. Approvals and tenure

Legislation	Number	Holder	Approval
Environment Protection and Biodiversity Conservation Act 1999 (Cth)	Referral number 2004/1562	Fortescue Metals Group Ltd	Construction of the port rail infrastructure determined not to be a controlled action.
	Referral number 2010/5513		Approval of additional rail infrastructure, including rail loop at the Premises.
	Referral number 2012/6314		Construction of additional rail infrastructure determined not to be a controlled action.
Part IV of the EP Act (WA)	Statement Number 000690	Fortescue Metals Group Ltd	Construction of a port at Anderson Point in Port Hedland, which includes shipping facilities, reclaimed areas for iron ore handling infrastructure, stockpiles and ancillary facilities and a connecting north-south railway.
	Statement Number		Dredging of not more than 3,500,000 cubic metres off Anderson Point, for a

	000771		third ship berth; disposal of dredge spoil on preexisting and previously approved land at Anderson Point; and extension of the approved open-pile wharf.
Part V of the EP Act (WA)	W4283/2006/1	Fortescue Metals Group Ltd	Construction of the Anderson Point Materials Handling Facility.
	W4392/2007/1		Construction of a wastewater treatment plant with a maximum throughput of 33,000 L/day to cater for construction workforce (no longer in use).
	W4814/2010/1		Upgrade of port infrastructure to increase throughput capacity from 45Mtpa to 120Mtpa
	W5284/2012/1		Changes to the discharge point from the desalination plant
	W4979/2011/1		Construction of a temporary desalination plant
	W5643/2014/1		Expansion of the existing port operations and an increase in throughput capacity from 120 Mtpa to 175Mtpa.
	W5749/2014/1		Construction of the North Star Stage 1 Export Facility.
	R1963/2007/1		Category 85 Wastewater treatment plant
	L8194/2007/3		The Existing Licence
Railway and Port (Pilbara Infrastructure) Agreement Act 2004	N/A	The Pilbara Infrastructure Pty Ltd and Fortescue Metals Group Ltd	State Agreement
Rights in Water and Irrigation Act 1914	GWL1639999(6)	Fortescue Metals Group Ltd	Groundwater abstraction licence

4.1 Part IV of the EP Act

4.1.1 Background

The Pilbara Iron Ore and Infrastructure Project was referred to the Environmental Protection Authority (EPA) in December 2003. The project was assessed in two stages:

- Stage A – The proposed port at Anderson Point and 345 kilometre (km) of railway to associated mine sites in the East Pilbara; and
- Stage B – The development of proposed mining and an additional 160km of rail.

The rail and port aspects of the project (Stage A) were assessed by the EPA (EPA Bulletin 1173) through a Public Environmental Review process which considered the construction of:

- Approximately 345km of railway from Anderson Point to Mindy Mindy;
- The materials handling facility at Anderson Point;

- A single wharf (Berth 1) and parking berth (Berth 2);
- Infrastructure such as power, water, roads and sewerage; and
- Support infrastructure such has site offices, workshops and maintenance facilities.

Ministerial Statement 690 granting approval for the project (subject to conditions) was signed by the Minister on 3 October 2005.

Stage B of the project was assessed separately and is not discussed further in this Decision Report as the assessed activities do not form part of the Premises.

The EPA also assessed a proposal to upgrade the port facility including additional dredging, dredge spoil disposal, construction of Berth 3 and extension of the wharf alongside Berths 2 and 3. The EPA's report (EPA Bulletin 1286, 2008) informed the Minister's decision to approve the proposal subject to the conditions contained within Ministerial Statement 771.

The Licence Holder submitted a referral to the EPA in August 2010 for the expansion of the materials handling facility from 45 Mtpa to 120 Mtpa. This included the onshore components of the expansion including construction works for an additional wharf and additional ore handling facilities. The OEPA notified the Licence Holder on 20 September 2010 that the referral was not assessed and the proposal would be managed by Part V of the Act.

The Port Hedland Port Authority (now the Pilbara Port Authority/PPA) referred a proposal to the EPA for dredging of an area of South-West Creek to allow for the construction of a number of additional berths. Ministerial Statement 859 was issued in relation to this proposal.

4.1.2 Report of the EPA Bulletin 1173

In its assessment of the Stage A proposal, the EPA undertook a detailed evaluation of the following factors:

(a) terrestrial biodiversity;

(b) benthic primary producer habitat (BPPH) - mangroves;

(c) surface water hydrology;

(d) dust;

(e) noise; and

(f) marine and sediment quality.

Relevant to this review, the EPA's assessment:

- considered the disturbance of 300ha of supratidal and intertidal habitats for the construction of the port facilities, including the clearing of core closed-canopy mangrove habitat.
- noted that the sub-tidal marine communities in the harbour were tolerant of the natural levels of turbidity and that the inner harbour did not support any significant seagrass or coral reef. In addition, increases in turbidity were not expected to impact on turtles or dolphins.
- considered that the risk of indirect impacts to mangrove communities from dust deposition was low.
- noted that the greatest potential for the port operations to generate dust emissions was from rail car dumpers; ore conveyors; stockpiles, ship loading and vehicle traffic.
- reviewed modelling from Environ which indicated that the operation of the Premises could contribute to an increase of approximately 6 per cent in maximum 24-hour

average concentrations of particulates (PM_{10} and $PM_{2.5}$) at the Port Hedland townsite.

- noted that the modelling indicated potential increases in maximum 24-hour average particulate concentrations at Wedgefield of between 2.3 - 8.8 per cent.
- acknowledged that, while FMG's individual contribution to dust impacts in Port Hedland would be relatively small, the cumulative impacts of all operations were predicted to result in an increase in the annual exceedances of dust concentrations.
- noted that dust would be subject to regulation through Part V of the EP Act licence conditions.
- noted that the Assigned Noise Levels, as prescribed by the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations), were regularly exceeded in the Port Hedland area as a result of existing operations.
- considered that, because the noise levels in Port Hedland were already so far above the Assigned Noise Levels, that efforts by FMG to reduce noise emitted from their infrastructure would make no measureable difference to the overall noise level. Therefore, the EPA concluded that it would be reasonable to allow FMG to reduce noise levels over a period of time.

4.1.3 Ministerial Statement No. 690

MS 690 was first issued in October 2005 and related to Stage A of the Pilbara Iron Ore and Infrastructure Project. Subsequent changes to MS 690 which have relevance to this Review are listed below:

- In August 2008 two additional train unloaders were approved (three in total).
- In February 2014 Berth AP5 was added to MS 690 and a previous reference to an authorised export tonnage of 45Mtpa was removed. In removing the reference to export tonnage, the amended Ministerial Statement states that relevant environmental matters, such as noise and dust, can be managed under Part V of the EP Act.

Despite the above, MS 690 retains conditions relating to dust and noise as detailed below:

17-1 The proponent shall monitor and control dust associated with construction and operation of the port in accordance with a Dust Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

18-1 The proponent shall not conduct port or rail operations other than in accordance with an Operations Noise Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The current versions of these plans received approval from the Office of the Environmental Protection Authority (**OEPA**) on 29 July 2011.

4.1.4 Report of the EPA Bulletin 1286

The EPA assessed a proposal by the Licence Holder to expand the port with a third berth (AP3), including dredging of the berth, extension of the wharf and land based disposal of the dredge spoil. This proposal did not include an increase in the throughput of the port which, at the time, was authorised at 45Mtpa.

In its assessment the EPA undertook a detailed evaluation of the following factors:

(a) coral and mangrove health;

(b) rehabilitation;

(c) noise;

(d) introduced marine organisms; and

(e) dust.

Relevant to this review, the EPA's assessment:

- Noted that seepage from the existing DMMAs onto tidal flats had caused the death of a small number of mangroves, probably as a result of increased waterlogging and salinity, but otherwise mangrove numbers and health remained unchanged;
- Noted that pile-driving from wharf construction could have noise impacts on nearby residential receptors;
- Considered noise monitoring undertaken during the construction of facilities approved under MS 690 which showed no exceedances of the Assigned Noise Levels in the Noise Regulations;
- Noted that MS 690 required a Dust Management Plan and that construction of the additional berths would be covered by that plan.

4.1.5 Ministerial Statement No. 771

MS 771 was issued in August 2008 for the dredging and construction of a third ship berth, including the disposal of dredge spoil. MS 771 contains conditions:

- Limiting the total core closed-canopy mangroves directly or indirectly adversely affected within the port project area (including affects from Stage A) to less than 14.8 hectares;
- Requiring dust to be monitored and controlled in accordance with the Dust Management Plan already required under MS 690;
- Requiring construction noise to comply with Regulation 13 of the Noise Regulations.
- Requiring the proponent to incorporate monitoring and management of the new DMMA into the Dredging and Reclamation Monitoring and Management Plan required by MS 690.

A change to MS 771 was made in November 2008 to increase the dredge volumes, area and disposal area.

4.1.6 Ministerial Statement No. 859

MS 859 relates to a proposal to dredge an area of South West Creek for new berth pockets, turning circles and shipping channels. Some of the berth pockets are used by the Licence Holder as part of the operation of the Premises however the proponent for this project was the Port Hedland Port Authority (now the Pilbara Ports Authority/PPA).

Relevant to this review, conditions of MS 859 relate to the monitoring and management of mangrove health and requirements to limit direct or indirect impacts upon BPPH. MS 859 also requires the proponent to manage water quality of water discharged from DMMAs.

These DMMAs are located on either side of the Premises boundary and do not form part of the Premises however the Licence Holder discharges saline effluent from the desalination plant within the Premises into the DMMAs on the eastern side of the Premises (shown in MS 859 as DMMA B and DMMA B South).

Key Finding: The Delegated Officer has reviewed the relevant EPA reports and Ministerial Statements and finds that:

1. Despite comments in EPA Bulletin 1173 and MS 690 that noise and dust emissions will be regulated under Part V of the EP Act, the primary instrument for the regulation of noise and dust emissions from the Premises is MS 690;
2. The OEPA has approved dust and noise management plans which are the primary mechanisms for the regulation of these emissions from the Premises; and
3. Water quality of discharges from the DMMAs, including any contribution from the Licence Holder's desalination plant discharges, are managed under MS 771 and MS 859.

As a result, the Delegated Officer has determined that controls in relation to dust, noise and discharges form the desalination plant will not be considered further as part of this Review.

4.2 Contaminated Sites

The Premises is not classified as contaminated under the *Contaminated Sites Act 2003.*

4.3 Department of Water

The Licence Holder holds a Groundwater Licence (GWL) under the *Rights in Water Irrigation Act 1914* (RIWI Act). GWL1639999(6) allows the abstraction of water from a borefield located adjacent to the rail line.

4.4 Planning

The Premises is located within an area designated under the Town of Port Hedland: Town Planning Scheme No. 5 as "Other purpose: Port Facilities".

4.5 Other Relevant Approvals

4.5.1 Department of State Development

The Premises is operated under the *Railway and Port (Pilbara Infrastructure) Agreement Act 2004* which is administered by the Department of State Development (DSD).

This agreement requires the State to provide an area of the Port Hedland Port as a lease under the *Port Authorities Act 1999* for the port facilities and additional port infrastructure.

4.5.2 Department of Mines and Petroleum

The Department of Mines and Petroleum (DMP) regulates the Premises under the *Mines Safety & Inspection Act 1994*.

4.6 Port Hedland Dust Management Taskforce

4.6.1 Management Plan

The State Government established the Port Hedland Dust Management Taskforce (the Taskforce) in May 2009 to review existing reports and develop an integrated dust

management plan for Port Hedland. The Taskforce is coordinated by DSD and includes a range of industry and government members including DER.

The Taskforce issued the *Port Hedland Air Quality and Noise Management Plan,* DSD, March 2010 (Management Plan) to manage planning conflicts between industrial growth and adjacent residential areas. The Management Plan was adopted by the Government. Relevant to this Decision Report, the Management Plan recommended:

- adoption of an interim guideline measure for air quality of PM_{10} of 70µg/m^3 (24 hour average) with 10 exceedances per year at Taplin Street (residential street in Port Hedland); and
- the establishment of a State Environmental Policy for Port Hedland to monitor and manage noise using the Noise Regulations regulation 17 exemptions where appropriate. This included the development of a cumulative noise model, defining the noise sensitive zones, clarifying planning measures and clarifying building standards.

The Port Hedland Industries Council (PHIC) was established in parallel to the Taskforce to facilitate whole-of-industry cooperation with the target guideline specifically and the Management Plan generally and to develop an integrated approach to air quality and noise management.

4.6.2 Health Risk Assessment (HRA)

The DoH recently released the Port Hedland Air Quality Health Risk Assessment for Particulate Matter dated January 2016 (HRA). The report provides the final health risk assessment for Port Hedland.

The HRA found that PM_{10} concentrations above the current interim guidance of 24-hour average of 70µg/m^3 PM_{10} (+10 exceedances) are associated with potential adverse health impacts. It therefore recommended continuing to implement the interim guidance for residential areas of Port Hedland.

The HRA also stated that the interim guideline can be applied to South Hedland and Wedgefield but it may also be possible to achieve the National Environment Protection (Ambient Air Quality) Measure (NEPM) in South Hedland if the source of local exceedances can be identified and managed.

Acknowledging the cumulative nature of dust impacts in Port Hedland, the HRA identified that effective dust management needs to address all controllable sources including local sources such as the spoil-bank.

The HRA recommended a coordinated approach involving industry and government and highlighted the benefits of employing a long-term planning strategy to establish appropriate buffer zones and to ultimately move residential areas away from dust impacts in the proximity of the port.

The HRA notes that it should not be the only source of information guiding decisions and must be combined with other studies including the noise model, the air quality model and the source apportionment model. There have been other models including cumulative air quality impacts undertaken by PHIC to date. DER does not have access to the analysis of the data for the models undertaken by PHIC and, at the time of this assessment, the analysis of this data has not been considered by DER.

4.7 Applicable Regulations, Standards and Guidelines

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

DER's Guidance Statements which inform the assessment in line with this legislation are as

follows:

- Guidance Statement: *Regulatory principles* (July 2015);
- Guidance Statement: *Licensing and works approvals process* (September 2015);
- Guidance Statement: *Setting Conditions* (October 2015);
- Guidance Statement: *Land Use Planning* (October 2015); and
- Guidance Statement: *Licence duration* (November 2014).

Other key documents used in this assessment are documented in Appendix 2.

5. Part V of the EP Act

5.1.1 Works Approvals

Since December 2006, seven works approvals have been issued to the Licence Holder under section 54(3)(a) of the EP Act for activities at the Premises. Summarised below are the details of the most recent issued works approvals (past three years).

W5643/2014/1

Works approval W5643/2014/1 was issued on 15 May 2014 for the expansion of the existing port operations and an increase in throughput capacity from 120 Mtpa to 175Mtpa.

The increase in capacity was assessed as occurring in three stages (1, 2A and 2B). The stages are characterised as follows:

- Stage 1 – Increase to 155Mtpa throughput achieved through efficiency measures;
- Stage 2A – Increase to 175Mtpa partly achieved through extension of South West Creek Wharf to allow for a fifth berth (AP5) and upgrades to associated conveyors.
- Stage 2B – Increase to 175Mtpa partly achieved through an additional in-load circuit (conveyors, transfer station, stacker and two additional stockpile rows).

A compliance report for Stage 1 was received on 29 May 2011 and the Stage 2A compliance report was received on 6 March 2015.

The Licence Holder advised DER in a letter dated 30 December 2014 that Stage A alone would be sufficient to operate at the 175Mtpa capacity and that a review of the Stage 2B was being undertaken. To date, the Stage 2B in-load infrastructure has not been constructed.

The Delegated Officer notes that the expiry date of W5643/2014/1 is 18 May 2017.

W5749/2014/1

Works approval W5749/2014/1 was issued on 19 February 2015 for the construction of the North Star Stage 1 Export Facility.

This addition was required to accommodate the trucking of approximately 2Mtpa of mag-hematite ore from the North Star deposit. This proposal involved the dumping of ore by side-tipping trucks, collection by front end loaders and stockpiling by either a mobile telestacker or front end loaders. An existing reclaimer was proposed to be used to reclaim the ore for ship loading.

As part of these proposed changes, a truck re-fuelling bay was proposed to be constructed. This refueling bay was proposed to utilise the existing 110kL fuel tank which was already in use as part of the AP5 development project. The application states that this tank is self-bunded and compliant with AS1940 (The Storage and Handling of Flammable and

Combustible Liquids) and AS1692 (Steel Tanks for Flammable and Combustible Liquids).

Compliance documentation has not yet been received by DER. Available aerial imagery indicates that construction of the stockyard access road, discussed in the Works Approval application, may have commenced. Following construction of the works authorised under the works approval and prior to commissioning the Works Approval holder must submit the compliance documentation.

5.1.2 Registrations

One registration (R1963/2007/1) related to the Premises is recorded in DER's system. This registration is for a category 85 sewage facility and relates to the wastewater treatment system authorised through works approval W4392/2007/1.

During a site visit on 19 July 2016, DER officers were advised by representatives of the Licence Holder that this wastewater treatment facility is no longer in use and wastewater is removed from site by a contractor.

5.1.3 Licence Amendments

From the date the licence was originally issued on 23 April 2004, the licence has been amended five times with amended licences issued on 11 August 2011, 14 March 2013, 29 May 2014, 11 June 2015 and 7 July 2016.

The licence has been renewed twice on 14 April 2011 and 17 April 2014.

The most recent amendment to the Existing Licence L8194/2007/3 was on 7 July 2016 via an Amendment Notice. The amendment included the following:

- Inclusion of Category 12 (with an approved premises production or design capacity of 63,000 tonnes per Annual Period) for the use of a mobile screening plant onsite (rescreening project); and
- Inclusion of an emission point to surface water for the sample laboratory silt trap which will discharge via an overflow pipe into South West Creek. This emission point was also included in the quarterly monitoring requirement for total recoverable hydrocarbons with a limit of 15mg/L.

In a letter dated 12 October 2016, the Licence Holder advised DER that the scope of the rescreening project had changed. The letter outlined the following changes from the original amendment application:

- Ballast screened for stacker 701 only (previously 701, 702 and 704);
- Total throughput reduced from 63,000 tonnes to 45,000 tonnes;
- Program duration reduced from 15 to 10 weeks; and
- Hourly throughput may exceed the 50 tonnes per hour limit specified in the Amendment Notice.

The key emissions and risks associated with the operation of the mobile screening plant are noise and dust. As discussed in section 4.1, these matters are regulated under Part IV of the EP Act and therefore conditions will not be included in the Revised Licence.

Environmental Improvement Plan

Condition 4.1.1 of the Existing Licence requires the Licence Holder to implement an Environmental Improvement Plan (EIP) detailing dust control initiatives to be implemented onsite. The dust control initiatives included sealing primary trafficable areas, using chemical dust suppressant on secondary trafficable areas, installing a real time air quality management

system linked to Port operations, upgrading priority belt scrapers and dust hood covers, installing belt wash stations on priority conveyors, automating stockyard water cannons, upgrading priority transfer stations to prevent spillage and engaging additional clean up crews to capture spilt ore under conveyors. The Licence Holder submitted the *Herb Elliott Port Environmental Improvement Plan* (EIP FY16) on 13 May 2015.

On 2 May 2016 the Licence Holder submitted the *Anderson Point Materials Handling Facility – Environmental Improvement Plan* (EIP FY17) which replaces the previous version.

As discussed in section 4.1, dust emissions are regulated under Part IV of the EP Act and therefore conditions will not be included in the Revised Licence.

5.1.4 Clearing

Clearing associated with the Premises has been assessed and approved through Part IV of the EP Act and as such does not require a clearing permit under Part V of the EP Act.

5.1.5 Compliance

A summary of recent inspections, including dates and findings, is provided below:

- 26 March 2013 – Two potential non-compliances noted in relation to spilt ore on the wharf and a failure to clean out a wash bay sump.
- 29 April 2014. No non-compliances identified.
- 16 October 2014. No non-compliances identified.

Previous inspections have also been undertaken on 16 June 2008, 13 January 2010 and 22 June 2012.

The Licence Holder were issued with a formal Letter of Warning on 16 December 2013 for an alleged contravention of the conditions of Works Approval W4814/2010/1. This related to the commissioning of infrastructure prior to the submission of a compliance document.

DER's ICMS is the system used to record complaints received and non-compliances requiring investigation. A review of ICMS indicates that there have not been any complaints received in relation to the Premises.

5.1.6 Annual Audit Compliance Reports

A requirement of the current licence is the submission of an Annual Audit Compliance Report (AACR) by 31 March each year. A review of the previous three AACRs has been undertaken and reported non-compliances are detailed below.

2015 AACR

The 2015 AACR covered the reporting period from 1 January to 31 December 2015. In the AACR the Licence Holder declared compliance with all conditions of the licence. DER notified the Licence Holder by letter dated 19 April 2016 that the AER and AACR were compliant.

2014 AACR

The 2014 AACR covered the reporting period from 1 January to 31 December 2014. In the AACR the Licence Holder declared non-compliance with condition 4 due to gaps in dust monitoring data. The Licence Holder stated that data for BAM-1 (Wedgefield), BAM-2 and E-BAM-1 was unavailable on a number of occasions and provided reasons such as scheduled maintenance, telemetry communication errors and power outages due to cyclone events.

The Licence Holder undertook a number of initiatives to improve data availability from the dust monitoring network including data logger and modem upgrades, and installing a battery back-

up supply at BAM-1 (Wedgefield). The licence was renewed on 24 April 2014 and a footnote added to the ambient environmental air quality monitoring table to allow up to 5% data loss.

2013 AACR

The 2013 AACR covered the reporting period from 1 January to 31 December 2013. In the AACR the Licence Holder declared non-compliance with condition 4 for the following:

(1) Dust Deposition Gauge 2 (DD02) was not monitored in March as it was damaged.

(2) Dust Deposition Gauge 1-6 (DD01-DD06) were not monitored in June as samples were lost in transit.

(3) Dust Deposition Gauge 5 (DD05) was not monitored in July and September as it was found to be damaged on both occasions.

(4) BAM-1 (Wedgefield), BAM-2 and E-BAM-1 were not monitored for PM_{10} at a sample frequency of every 10 minutes on approximately 23,000 (out of a possible 157,680) occasions during the reporting period. Various reasons were provided such as scheduled maintenance, telemetry communications errors, power outages and damaged equipment due to weather events.

The Licence Holder stated that all broken sample bottles were replaced for sampling.

5.1.7 Modelling and monitoring data

Stormwater and washdown water discharges

Conditions 2.3.2 and 2.5.2 of the Existing Licence set a limit for Total Recoverable Hydrocarbons (TRH) concentrations within stormwater discharges from the Premises of 15mg/L. Conditions 3.3.1 and 3.5.1 require the Licence Holder to monitor point source emissions to surface water and land for TRH.

Sampling of discharge points W1 and W2 for TRH has been intermittent as sampling can only be undertaken when the discharge points are flowing (generally only after rainfall events). For the 2015 reporting year, the Licence Holder reported (AER & AACR 2015) that these discharge points were only sampled once each with TRH concentrations below detectable levels (0.10mg/L) in both samples. Similar results are reported for the 2014 reporting year (AER & AACR 2014), with samples returning results of TRH below detection.

The 2014 AER & AACR reports that sampling of L1 and L2 discharge points also returned below detectable levels of TRH. In the 2015 reporting year, two minor increases of TRH are noted (3.13mg/L at L2 in Quarter 2 and 0.47mg/L at L2 in Quarter 4) however both of these are well below the limit of 15mg/L.

6. Consultation

DER referred the draft licence and Decision Report on 31 October 2016 to the Licence Holder. Licence Holder response to the documents was received on 23 November 2016.

7. Location and Siting

7.1 Siting Context

The Premises is located on the south side of the Port Hedland Harbour at Anderson Point, within the Town of Port Hedland in Western Australia. The port of Port Hedland is the world's largest volume port for bulk materials export, with the main commodity passing through the port being iron ore.

The existing port operations in Port Hedland are listed in Table 8.

In addition to port operations, a number of other industrial activities are undertaken in Port Hedland including a variety of light and service industries at the Wedgefield Industrial Estate.

Table 8: Port of Port Hedland operators (Category 58 and 58A premises)

Operator	Bulk Granular Material	Scale of operation
BHPBIO	Iron ore	Allocated capacity 270Mtpa Four berths at Nelson Point Four berths at Finucane Island
FMG	Iron ore	Allocated capacity 175Mtpa Five berths at Anderson Point
PPA – Utah Point	Iron ore, Manganese ore, Chromite ore	Allocated capacity 21.35Mtpa Single berth at Utah Point
PPA - Eastern Operations	Copper concentrate	Throughput approximately 500,000 tonnes per annum Two berths in Port Hedland (berth 1 and 2)
Dampier Salt	Salt	Allocated capacity 75,000 tonnes per day Single berth (berth 3) leased from PPA
Roy Hill	Iron ore	Allocated capacity 55Mtpa Two berths at South West Creek

7.2 Sensitive Land Uses

The distances to residential and sensitive receptors are detailed in Table 9.

The Town Council of Port Hedland reported a permanent population of 4,590 people in 2012/13 and has a larger population of fly-in-fly-out workforce (DoH 2016). The closest residential area to the Premises is the West End, shown in Figure 3.

Table 9: Receptors and distance from prescribed activity

Sensitive Land Uses	Distance from Prescribed Activity
The Esplanade Hotel (zoned town centre – retail/business in Town of Port Hedland Planning Scheme No. 5)	1.32km to the north of the Anderson Point berths
Port Hedland Visitors Centre (zoned town centre – retail/business in Town of Port Hedland Planning Scheme No.5)	1.47km to the north of the Anderson Point berths
Closest residential zoned premises (zoned residential in Town of Port Hedland	1.750km to the north of the Anderson Point berths

Planning Scheme No. 5)	
Taplin Street (zoned residential in Town of Port Hedland Planning Scheme No. 5)	3.1km to the north-east of the Anderson Point berths
South Hedland (zoned residential and community: education in Town of Port Hedland Planning Scheme No. 5)	4.5km to the south-east of the Anderson Point train loadout.
Other Relevant Land Uses	**Distance from Prescribed Activity**
Wedgefield Industrial Estate (zoned industry – industrial zone in Town of Port Hedland Planning Scheme No. 5)	2.5km to the south-east of the Anderson Point stockyard

Figure 3: Aerial image of the Anderson Point berths and stockyard

7.3 Specified Ecosystems

The distances (within a 30km radius) from the Premises to specified ecosystems are shown in

Table 10.

Table 10: Specified ecosystems

Specified ecosystems	Distance from Prescribed Premises
Port Hedland harbour – marine ecosystem	Within and directly adjacent to the premises boundary Moderate level of ecosystem protection*
Public Drinking Water Source Area (PDWSA)	The Premises is not located within a PDWSA
RAMSAR wetland	No RAMSAR wetlands are located within a 30km radius of the Premises
Geomorphic Wetlands	No geomorphic wetlands are located within a 30km radius of the Premises
Parks and Wildlife tenure	No Parks and Wildlife managed lands are located within a 30km radius of the Premises
Threatened Ecological Communities and Priority Ecological Communities	There are no threatened ecological communities and priority ecological communities within a 30km radius of the Premises
Declared Rare flora	There are no declared rare flora species recorded within a 30km radius of the Premises
Other relevant ecosystem values	**Distance from Prescribed Premises**
Mangrove community (high value ecosystem)[#]	There are six species of mangroves found in the Port Hedland Harbour. The occurrence of mangrove communities within the Premises are considered to be consistent with distribution patterns observed in similar environments in the Pilbara region. The intertidal mangrove communities provide habitat to a wide range of bird and bat species and marine invertebrates
Waterbodies	The ephemeral South West Creek passes through the operations and discharges to the west of Anderson Point, whilst South Creek, which is located outside of the operations, discharges to the east of Anderson Point

*Department of Environment, 2006

[#]EPA, 2001

7.4 Groundwater and water sources

The distances to groundwater and water sources is shown in Table 11.

Table 11: Groundwater and water sources

Groundwater and water	Distance from Premises	Environmental Value

sources		
Groundwater and groundwater salinity	The hydrogeology around the premises is characterised by shallow aquifers within surficial sediments. During construction of thetrain unloading facilities the Licence Holder observed groundwater at approximately 1-2 metres below ground level (mbgl). The nearest bore is 1.3km from the train unloading facilities (based on available GIS dataset – WIN Groundwater Sites)	Groundwater salinity (total dissolved solids) is 1,000-3,000mg/L which is considered brackish. Water used in the operation of the Premises is sourced from both groundwater and the desalination plant at the Premises
RIWI Act	The Premises is located in a RIWI Act Pilbara Groundwater Area	N/A

7.5 Soil Type

The Premises is located on coastal plains mainly beyond marine flooding influence. The main soils are pedal calcareous earths with some associated highly calcareous earths (Northcote et al. 1960-1968).

The area surrounding Anderson Point is dominated by tidal mudflats. The marine habitat in the Port Hedland harbour has already been extensively modified and comprises of bare sandy silty sediments, which create a turbid environment from the large tidal movements in the harbour creek system.

7.6 Meteorology

7.6.1 Regional climatic aspects

Port Hedland is located in a semi-arid environment. The Port Hedland region has a dominant north-westerly wind direction during the summer months and south-easterly during the winter months. Spring also shows high north-westerly dominance.

7.6.2 Rainfall and temperature

The Bureau of Meteorology provides the mean rainfall and maximum temperature for Port Hedland (data from 1942 to 2016 and 1948 to 2016 respectively). The Port Hedland region is hot to warm all year round with rainfall predominantly over December to July (Figure 4).

7.6.3 Wind direction and strength

DER's Air Quality Branch has analysed five minute averaged wind speed and direction data for Taplin Street, for the period spanning 25 January 2012 to 24 December 2014. Taplin Street is located approximately 3.5km north east of the BHP Billiton Iron Ore ship loading area. The following wind rose (Figure 5) provides the annual wind direction and strength for this period at Taplin Street.

Figure 4: Mean temperature and rainfall Port Hedland

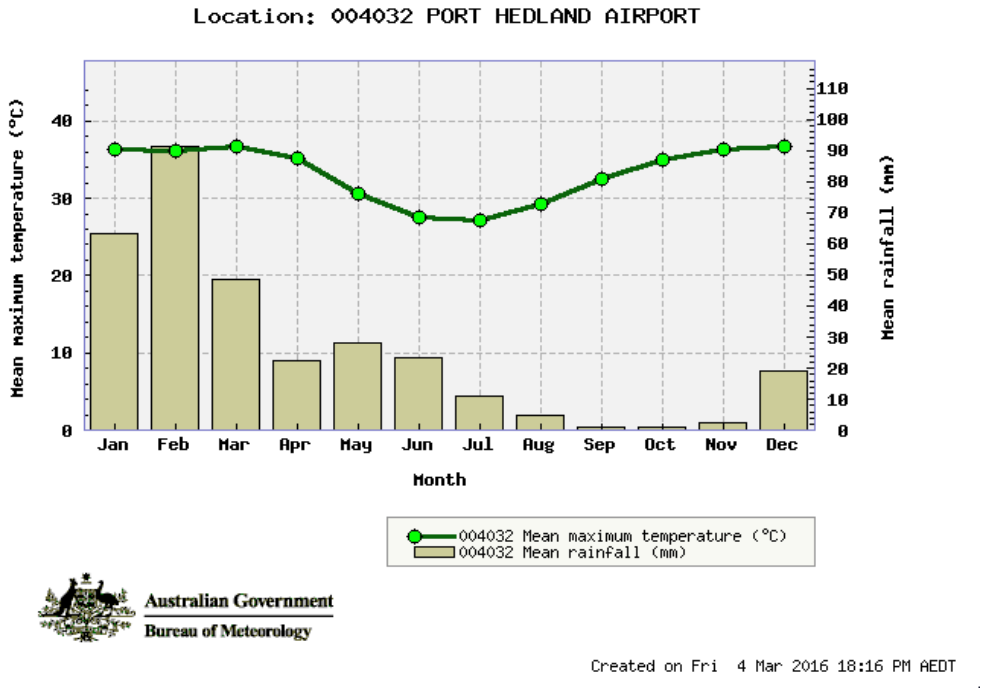
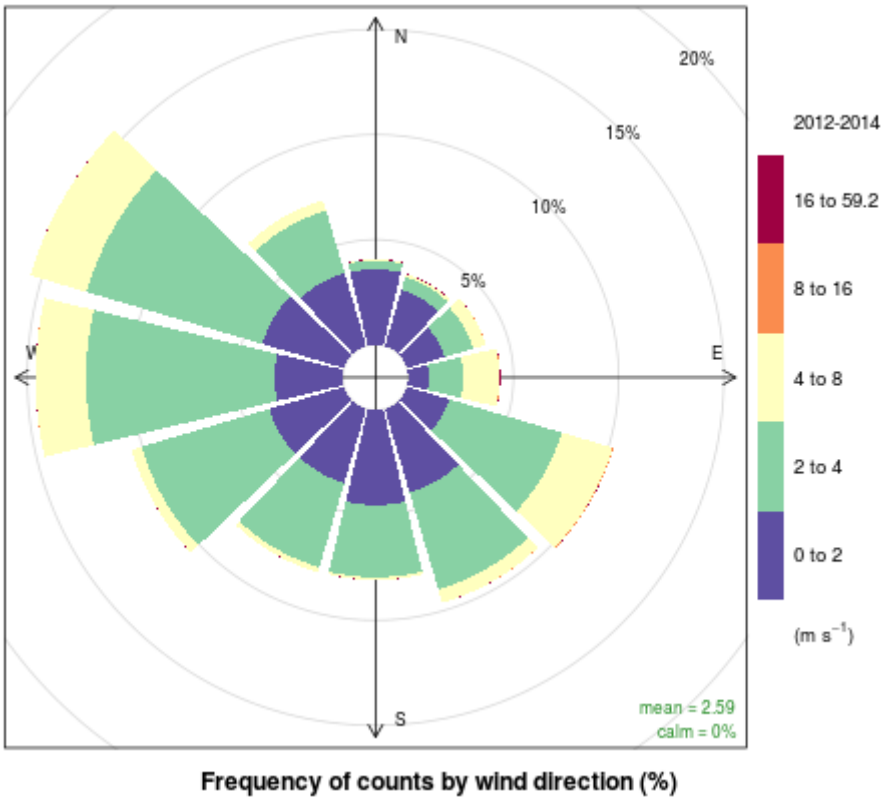


Figure 5: Wind Rose for Taplin Street, Port Hedland



Frequency of counts by wind direction (%)

*90% valid data for the 2012-14 period.

8. Risk Assessment

8.1 Emissions, pathway, receptor identification

Identification of key potential emissions, pathways, receptors and impacts are set out in Table 12 below. Table 12 also identifies which potential emissions and impacts will be progressed to a full risk assessment. Some potential emissions/impacts may not receive a full risk assessment if a potential receptor or pathway cannot be identified or if assessment of the emission would result in regulatory duplication.

Table 12: Identification of key emissions

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Continued to detailed risk assessment ?	Reasoning
Source	**Ore unloading, stockpiling, processing, transport and ship loading**	Ore train unloading. Ore stockpiling by stackers. Reclaiming of ore by bucket wheel reclaimer.	Dust	Esplanade and Pier Hotels in Port Hedland town centre Residences in Port Hedland Wedgefield Industrial Estate (zoned industry)	Air/wind dispersion	Impact on health – potentially includes allergic reactions and respiratory problems Impact on amenity – visible dust leaving the Premises and dust fallout onto cars and homes	No	Currently managed under Part IV of the EP Act (refer to section 4.1)

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Continued to detailed risk assessment ?	Reasoning
		Ore screening at screening plant. Ore transport via conveyors within stockyard area and overland to ship loading area. Ship loading via rail mounted ship loader at berths.	Noise	Esplanade and Pier Hotels in Port Hedland town centre Residences in Port Hedland Wedgefield Industrial Estate (zoned industry)	Air	Impact on amenity	No	Currently managed under Part IV of the EP Act (refer to section 4.1)
			Waste and wastewater to marine waters – Spills of ore or hydrocarbons Discharge of wash down water or contaminated stormwater via specified stormwater discharge points.	BPPH Marine ecosystem Habitat	Spills directly to land Infiltration through soils to groundwater Overland or subsurface flow towards creek lines or marine waters	Land and groundwater contamination. Reduction in ecosystem health and water quality	Yes - Refer to sections 8.4	N/A
				Marine ecosystem	Spills directly to marine waters Runoff directly to marine waters	Reduction in ecosystem health and water quality	Yes - Refer to sections 8.4	N/A

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Continued to detailed risk assessment ?	Reasoning
	Screening plant	Re-screening of ballast	Dust	Esplanade and Pier Hotels in Port Hedland town centre Residences in Port Hedland Wedgefield Industrial Estate (zoned industry)	Air/wind dispersion	Impact on health – potentially includes allergic reactions and respiratory problems Impact on amenity – visible dust leaving the Premises and dust fallout onto cars and homes	No	Currently managed under Part IV of the EP Act (refer to section 4.1)
			Waste and wastewater to marine waters – Spills of ore or hydrocarbons Discharge of wash down water or contaminated stormwater via specified stormwater discharge points.	BPPH Marine ecosystem Habitat	Spills directly to land Infiltration through soils to groundwater Overland or subsurface flow towards creek lines or marine waters	Land and groundwater contamination. Reduction in ecosystem health and water quality	Yes - Refer to sections 8.4	N/A
	Associated workshop and maintenance area		Waste and wastewater to marine waters – Spills of ore or hydrocarbons Discharge of wash down water or	BPPH Marine ecosystem Habitat	Spills directly to land Infiltration through soils to groundwater	Land and groundwater contamination. Reduction in ecosystem health and water quality	Yes - Refer to sections 8.4	N/A

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Continued to detailed risk assessment ?	Reasoning
			contaminated stormwater via specified stormwater discharge points.		Overland or subsurface flow towards creek lines or marine waters			
	Unsealed trafficable areas		Dust	Esplanade and Pier Hotels in Port Hedland town centre Residences in Port Hedland Wedgefield Industrial Estate (zoned industry)	Air/wind dispersion	Impact on health – potentially includes allergic reactions and respiratory problems Impact on amenity – visible dust leaving the Premises and dust fallout onto cars and homes	No	Currently managed under Part IV of the EP Act (refer to section 4.1)
	Desalination Plant	Reverse Osmosis desalination of sea water	Saline discharge to land (DMMA)	BPPH Marine ecosystem Habitat	Discharge to settlement areas with potential to subsequently discharge to South Creek	Reduction in ecosystem health and water quality	No	Discharge to DMMA which is currently managed under Part IV of the EP Act (refer to section 4.1)

8.2 Risk Criteria

During the assessment the risk criteria in Table 13 below will be applied to determine a risk rating set out in section 8.7.

Table 13: 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	
The following criteria has been used to determine the likelihood of the risk / opportunity occurring.	
Almost Certain	The event is expected to occur in most circumstances
Likely	The event will probably occur in most circumstances
Possible	The event could occur at some time
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**
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
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
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
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

8.3 Risk Treatment

DER will treat risks in accordance with the Risk Treatment Matrix in Table 14 below:

Table 14: 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 requiring controls beyond the proponents controls.	Risks are acceptable and will generally not be subject to regulatory controls.

8.4 Risk Assessment - Discharge to land, groundwater and marine waters

8.4.1 General Hazard Characterisation and Impact

Contaminants may enter the marine environment or impact BPPH through contaminated stormwater and wash down water discharges, spills directly to land and surface water or by infiltration of soluble contaminants to groundwater. The contaminants may be from iron ore or hydrocarbons from infrastructure, machinery and transport activities on the Premises. Iron ore is not soluble so will be present as suspended solids only.

The Premises has four dedicated stormwater discharge points, each with associated sedimentation ponds/silt traps. These are shown in Figure 2 as:

- L2 – Stormwater discharge point with associated silt trap capturing runoff from the train unloading area.
- W1 – Stormwater discharge point with associated sedimentation basin fed from stockyard stormwater drains.
- W2 – Stormwater discharge point with associated silt trap capturing runoff from Australia Island laydown area.
- W3 - Stormwater/ washdown water discharge point with associated sediment pond capturing runoff from the laboratory/ sample station area.

The discharge point shown as L3 in Figure 2 discharges effluent from the desalination plant. As discussed in section 4.1, this discharge is effectively managed under Part IV of the EP Act and will not be considered further through this Review.

Discharge point L1 in Figure 2 relates to a discharge of treated water into process water tanks for OWS 1 and 2. According to DER's report on the findings of the October 2014 site inspection, all contaminated waters generated from the washdown bays, train unloader and fuel farm are treated through the OWS network. The process water tanks collect treated water from the OWSs and store it for use in dust suppression. Hydrocarbon wastes are collected and removed from site by a contractor.

Monitoring data summarised in section 5.1.6 indicates that TRH levels in discharges from the Premises are consistently low and generally below detection levels.

Discharges containing hydrocarbons can impact receiving water quality and disrupt the ecology of marine waters and creeks. Discharges with high sediment loads (possibly as a result of spilt ore or soil picked up by runoff) can also cause sedimentation, potentially impacting the surrounding mangrove community. Hydrocarbon discharges may also result in the contamination of land and impacts upon aquatic ecosystems.

8.4.2 Criteria for Assessment

The ship loading infrastructure which forms part of the Premises is located within the Port Hedland harbour, which has been characterised as requiring moderate ecological protection (Department of Environment, 2006) and the mangrove community in the Port Hedland harbour is a high value ecosystem (EPA 2001).

8.4.3 Licence Holder's controls

The Licence Holder operates the Premises in accordance with the following management plans.

- *Surface Water Management Plan*, 2014;

- *Mangrove Protection Management Plan*, 2011; and
- *Chemical and Hydrocarbon Management Plan*, (Revision 2) 2014.

The Licence Holder's stormwater, wash-down and process water controls are identified in Table 15.

Table 15: Licence Holder's controls for stormwater, wash-down and process water

Controls for stormwater, wash-down and process water	
Infrastructure	**Description**
Stormwater discharge locations	Stormwater collected at the Premises is directed to settlement ponds to minimise sediment loads prior to discharge at the following locations: • Sedimentation basin discharging into South West Creek (W1) • Australia Island silt trap discharged via spillway into South Creek (W2) • Sample laboratory silt trap discharged via overflow pipe into South West Creek (W3)
Process Water Tanks for OWS 1 and 2	Water from the vehicle washdown bays, workshop, train unloader, fuel farm and refueling bays is passed through an oily water separator and temporarily stored in tanks (L1) prior to use in dust suppression.
Train Unloader 3 Silt Trap	Excess wash-down and dust suppression water from the train unloader areas is collected in a silt trap (L2) prior to being discharged to the rail loop.
Desalination plant	Desalination plant wastewaters are discharged to a DMMA (regulated through MS) which may occasionally overflow into South Creek.

The Licence Holder's controls for chemical and hydrocarbon storage are shown in Table 16.

Table 16: Licence Holder's controls for ore and hydrocarbon spills

Controls for chemical and hydrocarbon storage	
Controls	**Description**
Required actions	• Chemicals and hydrocarbons will be stored in a manner consistent with AS 1940-2004, utilising specially designed facilities, including any necessary bunding. Hydrocarbons and chemicals are to be stored only at designated areas; • Ensure a current Material Safety Data Sheets for chemicals stored is maintained near all storage areas, in a clearly identified file; • Class 3 chemicals and hydrocarbons shall be separated from boundaries, ignition sources, (including cigarettes) protected places and accumulations of combustible materials by the distances indicated in AS 1940-2004; • Ensure that safe access to and egress from the storage vessels is maintained at all times; • Storage facilities containing greater than 10 kL of chemicals or hydrocarbons shall be located on open land; • Storage facilities should be secured from public access;

	• Bunding at the Main Tank Farm at Anderson Point will have a capacity of 22 ML; • Bunding at the Truck Loading Facility will have a capacity of 1 ML; • In other instances, storage shall utilise bunding capable of storing 110% of the volume of the largest vessel, or 10% of the total volume; • Any drainage valves within storage bunds should be kept closed at all times, unless being used to drain the bund into an appropriate vessel for treatment or disposal; • Bunding shall be inspected following all rainfall events and if necessary during major rainfall events where safety permits; • Spill cleanup within bunded areas shall utilise only materials that are compatible with the oil/water separators; • Any potential flow of a spill shall be prevented from draining to a protected place or watercourse via drainage management; • Water collected at the facility shall be managed according to the relevant section in this management plan. For other chemicals, or where there is the potential for contamination of water, liaise with the Environment Superintendent to determine an appropriate testing and disposal approach; • Storage tanks shall not be overfilled; • Tank vents and fittings shall be inspected at least annually, or on arrival on site for temporary storage vessels; • Tanks shall only be used to store the chemicals for which they are labelled.

The Licence Holder's controls for ore and hydrocarbon spills are shown in Table 17.

Table 17: Licence Holder's controls for ore and hydrocarbon spills

Controls for ore spillages	
Management controls	**Description**
Minimise spillage	The conveyor along the wharf to the ship loaders is over marine waters. Risk of spillage to the harbour is minimised by: • Ore being maintained at a moisture content that prevents dispersion into the air • Sides of the conveyor are concave to prevent spillage
Ore clean up	Street sweepers operate on a regular basis removing spilt ore from roads and hardstands around the ore handling infrastructure
Controls for chemical and hydrocarbon spills	
Controls	**Description**
Required actions	• Maintain spill trailers for spills during transport • Spill clean up within bunded areas shall only use materials compatible

	with the relevant oily water separator • Prevent significant spills from reaching surface or ground water systems and the drainage network • For spills that cannot be managed with the use of spill kits, ensure that the spill response checklist is completed to ensure that the spill has been effectively managed or that the Emergency Response Procedure is implemented as required • Bulk spills of hydrocarbons and chemicals shall be managed according to the site Emergency Response Procedure • Appropriate spill equipment shall be located in close proximity to where chemicals and hydrocarbons are being used • Ensure that spill kits and trailers are regularly audited and following use, and are replenished as necessary • Any contaminated soils or sediments should be removed for treatment within an approved hydrocarbon bioremediation facility

8.4.4 Consequence

Based upon the relevant factors discussed in this report, the Delegated Officer has determined that discharges of contaminated stormwater, wash down water or direct spills to land or surface waters may result in minor and short-term impacts to sensitive ecosystems. Therefore, the Delegated Officer considers the consequence to be ***moderate***.

8.4.5 Likelihood of consequence

Based upon the relevant factors discussed within this report, the Delegated Officer has determined that it is unlikely that the discharge of contaminated stormwater, wash down water or direct spills will cause an impact to sensitive ecosystems. Therefore, the Delegated Officer considers the consequence to be ***unlikely***.

8.4.6 Overall rating

The Delegated Officer has compared the consequence and likelihood ratings described above through the Risk Matrix (Table 13) and determined that the overall rating for the risk of discharges of contaminated stormwater, wash down water or direct spills causing an impact to sensitive receptors during operation is ***Moderate***.

8.5 Summary of Risk Assessment and Acceptability

The risk items identified in section 8 including the application of risk criteria and the acceptability with treatment are summarised in Table 17 below.

Table 17: Risk rating of emissions

	Emission		Pathway and Receptor	Proponent controls	Impact	Risk Rating	Acceptability with treatment (conditions on instrument
	Type	Source					
1.	Waste and wastewater to land, groundwater and marine waters	Spills of ore or hydrocarbons and discharge of wash down water or contaminated stormwater from infrastructure and runoff within the Premises	Direct spills and discharges points to land or marine waters Infiltration through soil to groundwater Overland or subsurface flow towards creek lines or marine waters	Infrastructure, specified actions and monitoring	Land and groundwater contamination. Reduction in ecosystem health and water quality	Moderate consequence Unlikely **Moderate risk**	Acceptable subject to Licence Holder controls conditioned

9. Determined Regulatory Controls

9.1 Summary of Controls

A summary of the regulatory controls determined by the risk rating of emissions in section 8.7 is summarised in Table 18.

Table 18: Regulatory controls

		Controls			
		8.2 Infrastructure and Equipment controls	8.3 Specified Actions	8.4 Limits	8.5 Monitoring
Risk Items (see section 8)	1. Discharges of waste and wastewater to land, groundwater and marine waters (stormwater/wash down water and spills)	•	• (Spills only)	•	•

9.2 Infrastructure and Equipment controls

9.2.1 Treatment and discharge of potentially hydrocarbon contaminated water

The following environmental controls, infrastructure and equipment should be maintained and operated onsite for stormwater and wash water management:

- Hardstands and drains around areas storing or using hydrocarbons which are likely to enter washdown water or stormwater (i.e. the workshop, vehicle washdown bays, train unloader facilities, refueling areas, fuel storage tanks etc.) must be installed and maintained so that potentially contaminated water is directed into an OWS.
- OWS and associated sump infrastructure must be maintained and operated to effectively treat potentially contaminated water so that TRH concentrations in treated water are below the limit of 15mg/L.
- Treated water within the process water tanks to be used for dust suppression purposes must have a TRH concentration of less than or equal to 15 mg/L (tested monthly via a grab sample).

Note: Infrastructure and Equipment controls are derived from those currently undertaken by the Licence Holder.

Grounds: Monitoring for TRH is required to confirm that water has been effectively treated by the OWS prior to use in dust suppression.

9.2.2 Discharge of uncontaminated stormwater

Stormwater (other than potentially contaminated stormwater captured within the areas described in section 9.2.1) must be temporarily contained within a sedimentation basin or silt trap to allow for the settling of suspended sediment prior to being discharged from the locations listed in Table 19.

Table 19: Emission points to surface water

Emission point	Description	Source including abatement
W1	Sedimentation basin discharging into South West Creek	Stormwater
W2	Australia Island silt trap discharged via spillway into South Creek	Stormwater
W3	Sample laboratory silt trap discharged via overflow pipe into South West Creek	Stormwater
L2	Silt trap discharge from train unloading area	Stormwater

Note: Infrastructure and Equipment controls are derived from those currently undertaken by the Licence Holder.

Grounds: As there is a direct discharge to the marine environment, the discharge points listed in Table 19 and the description of control (sedimentation basin or silt trap) will be retained on the Revised Licence. Monitoring of discharges is not required as this water should not have come in to contact with hydrocarbons and should have been retained in sedimentation basins or silt traps to remove the majority of suspended sediments prior to discharge.

9.2.3 Spill control infrastructure

The following environmental controls, infrastructure and equipment should be maintained and operated onsite for spill management:

- conveyor skirts have sufficient distance from the product to belt edge to minimize spillage;
- spill kits available and utilised where needed.

9.3 Specified actions

9.3.1 Spill control actions

The following action should be undertaken for spill management;

- Spilled ore is cleaned up after every ship loading event.

9.4 Limits

9.4.1 Discharge to land

Wastewater discharges from OWS shall not contain a greater than 15 mg/L TRH. Post treatment wastewater is directed to process water tanks for use in dust suppression.

The *Environmental Protection (Unauthorised Discharge) Regulations 2004* (UDR) outlines a number of materials including petrol, diesel or other hydrocarbons that if discharged into the environment causes an offence. Should hydrocarbons be released into the environment it may be considered an offence. Should the hydrocarbons be considered to be from the treated wastewater (post oily water separator treatment) and requirements of the licence are met, a defence to the offence provision in the UDR is available.

9.5 Monitoring Requirements

9.5.1 Discharges to land monitoring

The treated wastewater stored within the process water tanks following treatment in an OWS shall be monitored for TRH in mg/L.

Samples shall be analysed by a NATA accredited laboratory.

10. Setting Conditions

The conditions in the Revised Licence have been determined in accordance with DER's Guidance Statement: *Setting Conditions* (October 2015). The grounds for the applied conditions is shown in Table 20.

DER's Guidance Statement: *Licence Duration* (November 2014) has been applied and the Revised Licence expires in 13 years from date of issue.

Table 20: Grounds for applied conditions

Condition Ref	Grounds
Environmental Compliance Condition 1	Environmental compliance is a valid, risk-based condition to ensure appropriate linkage between the licence and the EP Act
Notification of Material Change Conditions 2, 3 and 4	These conditions are valid, risk-based and enable flexibility in operations
Infrastructure and Equipment Conditions 5 and 6	These conditions are valid, risk-based and contain appropriate controls (see section 9.2 of this Decision Report)
Wash water Monitoring and Limits Conditions 7, 8, 9 and 10	These conditions are valid, risk-based and contain appropriate controls (see section 9.2 of this Decision Report)
Emissions Condition 11	This condition is valid, risk-based and consistent with the EP Act
Information Conditions 12, 13, 14, 15, 16, 17 and 18	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.

11. Applicant's Comments on Risk Assessment

The applicant was provided with the draft decision report and draft Revised Licence on 31 October 2016.

12. 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 2). This assessment was also informed by a site visit by DER officers on 19 July 2016.

Based on this assessment, 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.

Agnes Tay
Director Strategy and Reform

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

Appendix 1: Premises coordinates

Point	Easting	Northing
1	663755.4703	7749805.97
2	664039.5832	7750912.963
3	664039.7716	7750913.698
4	664039.2861	7750913.267
5	664037.5358	7750915.057
6	663884.678	7751071.354
7	663851.7799	7751071.399
8	663829.4115	7751041.582
9	663828.3979	7751040.231
10	663814.7289	7751050.508
11	663784.6116	7751073.152
12	663784.069	7751073.661
13	664246.2404	7751696.36
14	664293.2603	7751761.03
15	664354.9803	7751716.67
16	665206.6503	7751110.64
17	665262.4903	7751070.31
18	665243.4404	7751041.94
19	664302.9804	7751707.97
20	664281.6203	7751635.27
21	664313.3705	7751627.361
22	664310.2746	7751603.339
23	664330.252	7751564.663

24	664311.5346	7751490.448
25	664284.9731	7751394.848
26	664238.8856	7751363.926
27	664205.4797	7751246.493
28	664189.7303	7750943.82
29	664122.4404	7750932.69
30	663747.8603	7749495.2
31	663416.2803	7747690.02
32	663381.7503	7747499.99
33	663252.9616	7746805.601
34	663136.2716	7746875.129
35	663102.1845	7746690.535
36	663164.0174	7746580.324
37	663112.5934	7746353.076
38	662982.6375	7746376.951
39	662808.7196	7746425.635
40	662857.5403	7746617.77
41	662933.7504	7746602.43
42	663024.6691	7746943.684
43	662953.8126	7747001.317
44	662786.4282	7747158.631
45	662729.0871	7747201.973
46	662679.6994	7747487.69
47	663128.2181	7749890.306
48	663180.1003	7749929.26

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Appendix 2: Key Documents and References

	Document Title	In text ref	Availability
1	ANZECC & ARMCANZ, 2000. *Australian and New Zealand guidelines for fresh and marine water quality. Volume 1, The guidelines. National Water Quality Management Strategy Paper No 4*, Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand.	ANZECC & ARMCANZ, 2000	Accessed at https://www.environment.gov.au/
2	BOM, 2016. *Climate statistics for Australian locations.* Bureau of Meteorology. Accessed 25 May 2016	BOM 2016	Extracted from www.bom.gov.au
3	DEC, 2013, *Compliance Inspection Checklist & Report – 26 March 2013.* Department of Environment Conservation.	DEC 2013	DER records (hardcopy)
4	DER, 2014, *Compliance Inspection Report – 29 April 2014.* Department of Environment Regulation.	DER April 2014	DER records (hardcopy)
5	DER, 2014, *Compliance Inspection Checklist & Report – 16 October 2014* Department of Environment Regulation.	DER October 2014	DER records (A831929)
6	DER, 2015, *Guidance Statement: Regulatory principles.* Department of Environment Regulation.	DER July 2015	https://www.der.wa.gov.au/our-work/regulatory-reform
7	DER, 2015, *Guidance Statement: Licensing and works approvals processes*. Department of Environment Regulation.	DER September 2015	
8	DER, 2015, *Guidance Statement: Setting conditions.* Department of Environment Regulation.	DER October 2015	
9	DER, 2014, *Guidance Statement: Licence duration.* Department of Environment Regulation.	DER November 2014	
10	DER, 2016, *Amendment Notice -*	DER 2016	www.der.wa.gov.au

	Document Title	In text ref	Availability
	Notice of Amendment to Licence L8194/2007/3, 7 July 2016. Department of Environment Regulation.		
11	DoE, 2006. *Pilbara Coastal Water Quality Consultation Outcomes: Environmental Values and Environmental Quality Objectives March 2006,* Department of Environment.	DoE 2006	Accessed at http://edit.epa.wa.gov.au/EPADocLib/pilbaracoastalwaterquality_Marine%20Report%201.pdf
12	DoH, 2016, *Port Hedland Air Quality Health Risk Assessment for Particulate Matter January 2016.* Department of Health.	DoH 2016	Accessed at http://ww2.health.wa.gov.au/~/media/Files/Corporate/general%20documents/Environmental%20health/Port%20Hedland%20Health%20Assessment.ashx
13	DSD, 2010, *Port Hedland Air Quality and Noise Management Plan – March 2010.* Department of State Development.	Management Plan	Accessed at http://www.dsd.wa.gov.au/docs/default-source/default-document-library/ph_air_quality_noise_management_plan_0310?sfvrsn=8
14	EPA, 2001, *Guidance Statement for the protection of tropical arid zone mangroves along the Pilbara coastline, No. 1.* Environmental Protection Authority.	EPA 2001	Accessed at http://www.epa.wa.gov.au/epadoclib/1011_gs1.pdf
15	EPA, 2005, *Pilbara Iron Ore and Infrastructure Project: Port and North-South Railway (Stage A), Fortescue Metals Group Limited, Report of EPA Bulletin 1173.* Environmental Protection Authority.	Bulletin 1173	Accessed at http://epa.wa.gov.au/EPADocLib/2685_Bulletin1286.pdf
16	EPA, 2008, *Port Facility Upgrade Anderson Point, Port Hedland Dredging and wharf construction-third berth, Report of EPA Bulletin 1286.* Environmental Protection Authority.	Bulletin 1286	Accessed at http://www.epa.wa.gov.au/EIA/EPAReports/Pages/2685_PortFacilityUpgrade-AndersonPointPortHedlan.aspx
17	FMG, 2011, *Dust Environmental Management Plan (P-PL-EN-0010), 18 May 2011.* Fortescue Metals Group Ltd.	FMG May 2011a	Accessed at http://fmgl.com.au/community/environment/environment-library
18	FMG, 2011, *Mangrove Protection Management Plan (P-PL-EN-0012), 18 May 2011.* Fortescue Metals Group Ltd.	FMG May 2011b	Accessed at http://fmgl.com.au/community/environment/environment-library

	Document Title	In text ref	Availability
19	FMG, 2011, *Chemical and Hydrocarbon Management Plan, 2011. Chemical and Hydrocarbon Management Plan (45-PL-EN-0011), 16 June 2011.* Fortescue Metals Group Ltd.	FMG June 2011c	Accessed at http://fmgl.com.au/community/environment/environment-library
20	FMG, 2014, *Annual Environmental Monitoring Report – 2013 45-RP-EN-1012, 31 March 2014 and Annual Audit Compliance Report L8194/2007/2*. Fortescue Metals Group Ltd.	FMG 2014a	DER records (A742168)
21	FMG, 2014, *Surface Water Management Plan (100-PL-EN-1015), December 2014.* Fortescue Metals Group Ltd.	FMG 2014b	Accessed at http://fmgl.com.au/community/environment/environment-library
22	FMG, 2015, *Annual Environmental Monitoring Report – 2014 100-RP-EN-9613, 31 March 2015 and Annual Audit Compliance Report L8194/2007/2.* Fortescue Metals Group Ltd.	FMG 2015a	DER records (zA82326)
23	FMG, 2015, *EIP FY16. Herb Elliott Port Environmental Improvement Plan P-PL-EN-0024, Revision 2, 13 May 2015.* Fortescue Metals Group Ltd.	FMG 2015b	DER records
24	FMG, 2016, *Annual Environmental Monitoring Report – 2015 100-RP-EN-9628, 28 March 2016 –Annual Audit Compliance Report L8194/2007/3.* Fortescue Metals Group Ltd.	FMG 2016a	DER records (A1075248)
25	FMG, 2016, *EIP FY17. Anderson Point Materials Handling Facility – Environmental Improvement Plan FY17 P-PL-EN-0026 Rev0, 30 April 2016.* Fortescue Metals Group Ltd.	FMG 2016b	DER records
26	FMG, 2016, *RE: Anderson Point Materials Handling Facility (L8194/2007/3) Amendment Notice, Category 58* - 12 October 2016. Fortescue Metals Group Ltd,	FMG 2016c	DER records (A1178774)
27	Ministerial Statement No. 690	MS 690	Accessed at http://www.epa.wa.gov.au/peia/approvalstat
28	Ministerial Statement No. 771	MS 771	

	Document Title	In text ref	Availability
29	Ministerial Statement No. 859	MS 859	ements/Pages/default.aspx?a=Y&ind=7
30	Northcote,K.H. with Beckmann,G.G., Bettenay,E., Churchward,H.M., Van Dijk,D.C., Dimmock,G.M., Hubble,G.D., Isbell,R.F., McArthur,W.M., Murtha,G.G., Nicolls K.D., Paton,T.R., Thompson,C.H., Webb,A.A. and Wright,M.J. (1960-1968). Atlas of Australian Soils, Sheets 1 to 10. With explanatory data (CSIRO Aust. and Melbourne University Press: Melbourne).	Northcote et al. 1960-1968	DER internal systems

Appendix 3: Summary of Applicant's Comments on Risk Assessment and Draft Conditions

The following comments were received from the Licence Holder on 22 November 2016

Condition	Licence Holder Comments	DER response
Condition 7: Wastewater Monitoring and Limits	The Licensee requested rewording of *Monitoring results to be reported*. *Suggested amendment* *Monitoring to be undertaken…* as the Licensee does not wish to undertake monthly reporting to the DER. The Licensee also noted that the existing licence requires annual reporting.	Noted and amended. Format of the condition has also been amended so that it is presented in a clear and easily understand manner.
Condition 7: Wastewater Monitoring and Limits	The Licensee commented that the risk assessment does not indicate an increased risk of hydrocarbon emissions on or to the environment with respect to requiring monthly monitoring of TRH within treated wastewater. *Suggested amendment* The Licensee requested the monitoring period as listed in Condition 7, Table 1, Column 3 be quarterly, as per the existing monitoring frequency.	Noted and accepted. The monitoring frequency has been amended to quarterly.

Condition	Licence Holder Comments	DER response
Condition 7: Wastewater Monitoring and Limits	The Licensee noted that the information provided in Condition 7, Table 1, Column 2, excludes monitoring for other surface water discharges (W1, W2) which are referred to in Schedule 1, Tables 3 and 6.	Noted. The Delegated officer has considered that based on the risk assessment and on understanding that there is minimal to no sources hydrocarbon monitoring at other emission points for TRH is not required. The Delegated Officer has determined that the primary source of hydrocarbon is from the OWS which collected wastewater from the fuel farm, wash down facility and train unloading facility. As such, a condition has only been applied to the monitoring of treated water at the process water tanks to determine if the OWS facility is working to remove hydrocarbons to below the indicated TRH limits. The Delegated Officer also notes that there are offences detailed in the *Environmental Protection (Unauthorised Discharge) Regulation 2004* for the discharge of certain material into the environment.
Condition 7: Wastewater Monitoring and Limits	The Licensee requested Table 1, Column 2, clarified to specify the named discharge point location of L1.	Noted and updated.
Condition 14: Information – Compliance Reporting dates	The Licensee requested a change to the wording of the condition. The ***Licence Holder*** must submit to the ***CEO*** within 91 days after the ***Anniversary Date***, a ***Compliance Report*** indicating the extent to which the ***Licence Holder*** has complied with the ***Conditions*** in this Licence for the ***Annual Period***. The request was made to allow the Licensee to streamline current reporting for other licences which are due on 31 March.	Noted and amended.
Definitions and Interpretation - Material Change	The Licensee queried the wording of part (c) whereby *excluded changes* had not been specified within the licence and wording was to be replaced with *non-material-change*.	Noted and amended.
Schedule 2, Table 3: Infrastructure and Equipment	The Licensee confirmed that there was a singular tank of 52,400L capacity within the Premises.	Noted and amended.
Schedule 3, Table 6: Infrastructure Controls table (Point 1.)	The Licensee confirmed that the stockyard and causeway conveyors do not have silt traps.	Noted and operation details column amended.
Schedule 3, Table	W2 removed The Licensee noted	Noted. Reference to the spillway into

Condition	Licence Holder Comments	DER response
6: Infrastructure Controls table (Point 1.)	that the W2 – *Australia Island silt trap discharged via spillway into South Creek* is outside the proposed revised premises boundary.	South Creek has been removed. The discharge point (W3) has remained on the premises figure and within the Licence.
Schedule 3, Table 6: Infrastructure Controls table (Point 2.)	The Licensee advised that TUL1 has a concrete containment area and OWS. TUL2 and 3 have their own discharge point (of L2).	Noted and information added.
Schedule 3, Table 6: Infrastructure Controls table (Points 2, 3, and 4)	The Licensee requested that the reference to concrete permeability be removed from the Description column and that concrete used around infrastructure was poured meeting relevant Australian Standards.	Noted and amended to include a comment
Schedule 3, Table 6: Infrastructure Controls table (Point 4)	The Licensee indicated that the '*fuel farm tank is self-bunded and that an apron around the fuel tank is designed to capture minor refueling spills'*.	Noted. Reference to the fuel farm has been removed as this is considered to be a secondary activity at the Premises (below threshold of Category 73) The Delegated Officer notes that there are Dangerous Good requirements (administered by the Department of Mines and Petroleum) for the storage of hydrocarbons and other chemicals. In addition to Delegated Officer notes that provisions of the EP Act apply in the event of an incident or spill.
Schedule 3, Table 6: Infrastructure Controls table (Point 5 *now deleted*)	The Licensee indicated that '*there is no containment bunds around the conveyor transfer stations. The only discharge is infrequent iron ore spills which don't need to be sent to an OWS*.' This row was requested for deletion.	Noted and deleted.
Schedule 3, Table 6: Infrastructure Controls table (Point 6 *now deleted*)	The Licensee noted that only '*Utah Point Road overhead conveyors are covered (CV901, CV905 and CV906)*'.	Noted. The Delegated Officer has removed the row in its entirety. This is due to conveyor covers as a control to aid storm water management does not exist for the majority of conveyors across the site.
Schedule 3, Table 6: Infrastructure Controls table (Point 8)	The Licensee requested confirmation on where the Description information on the 15% surge capacity specification.	Noted and replaced with information on the conveyor having enclosed transfer points.
Schedule 3, Table 6: Infrastructure Controls table (Point 10 – Berth Clean up	The Licensee requested that the proposed Operation details, be removed.	Noted. The Delegated Officer has amended this control to ensure that it reflects the current practice, addresses the risk as is valid and enforceable. The Delegated Officer has derived the control from *FMG, Environmental Improvement Plan, Herb Elliot Port, 13 May 2015 – P-PL-EN-0024* (Action 1.1, and Action 1.4, p.30) and based on the

Condition	Licence Holder Comments	DER response
		Delegated Officers understanding of the current operational practices in place at the Premises for the management of ore spills and clean-up.

Attachment 1: Revised Licence L8194/2007/3