



Licence

Environmental Protection Act 1986, Part V

Licensee: BHP Billiton Iron Ore Pty Ltd

Licence: L6168/1991/11

Registered office: Level 1, City Square, Brookfield Place
125-127 St Georges Terrace
PERTH WA 6000

ACN: 008 700 981

Premises address: Yandi (Marillana Creek) Iron Ore Mine
Mining Tenements M270SA, M47/292, G47/12, G47/13, G47/14,
G47/15, G47/16, G47/17, G47/18, G47/19, M47/69, M47/70 and M47/71
NEWMAN WA 6753
As depicted in Schedule 1

Issue date: Thursday, 12 November 2015

Commencement date: Tuesday, 17 November 2015

Expiry date: Friday, 16 November 2035

Prescribed premises category

Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
5	Processing or beneficiation of metallic or non-metallic ore	50,000 tonnes or more per year	87,000,000 tonnes per annual period
6	Mine dewatering	50,000 tonnes or more per year	15,000,000 tonnes per annual period
54	Sewage facility	100 cubic metres or more per day	773 cubic metres per day
64	Class II putrescible landfill site	20 tonnes or more per year	4,800 tonnes per annual period
73	Bulk storage of chemicals, etc	1,000 cubic metres in aggregate	3,000 cubic metres in aggregate

Conditions

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

Date signed: 22 September 2016

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Alana Kidd

Manager Licensing – (Resource Industries)

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



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Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.



Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

BHP Billiton Iron Ore Pty Ltd (BHPBIO) currently operates the Yandi (Marillana Creek) Iron Ore Mine (Yandi), located approximately 90 kilometres (km) north-west of Newman in the Pilbara region of Western Australia.

Mining activities at Yandi are focused upon extraction of the Marillana Formation, a channel iron deposit (CID) following the meandering paleochannels of Marillana Creek. Mining is conducted using conventional open-cut mining methods, including drill and blast, load and haul and processing through ore handling plants. Following drilling and blasting, the ore is loaded by front end loaders and hydraulic excavators into haul trucks for transport to the primary crushing areas.

Ore is transported from the primary crushing areas via conveyor to one of three of the ore handling plants where the ore goes through further crushing and screening before being placed on stockpiles. The ore is then loaded from the stockpiles into trains through two train load outs and railed to Port Hedland for shipment. Waste rock is transported to designated waste dumps, used in construction or used to backfill pits.

Mine dewatering is undertaken to facilitate mining below the water table. Water is extracted and used to meet local mine water demand, with the surplus being discharged to Marillana Creek via two discharge points. Marillana Creek, located within the premises, is a tributary of Weeli Wolli Creek which is itself a tributary of the Fortescue River. Stream flow in the Yandi area is highly ephemeral and for most of the year the Marillana Creek and its tributaries are dry except for occasional pools. Groundwater levels at Yandi are typically 30-40 metres (m) below ground level (mbgl).

The main infrastructure on site includes:

- Open cut mines;
- Dewatering infrastructure;
- Waste dumps;
- Crushing and screening facilities;
- Ore stackers and stockpiles; and
- Rail loop and car loading facilities.

Infrastructure ancillary to the mining operations includes:

- Wastewater treatment plants (WWTP);
- Putrescible and inert landfills;
- Ammonium nitrate facility;
- Office buildings;
- Heavy and light vehicle workshops;
- Yandi accommodation village;
- Fuel storage and handling areas; and
- Power station.



The closest residential sites to Yandi are the Marillana and Juna Downs homesteads, located approximately 35 km from the mine site.

The main emissions associated with the operation of Yandi include the discharge of excess mine dewatering water to Marillana Creek and the discharge of treated wastewater to the designated irrigation areas.

This Licence is the result of an amendment sought by the Licensee to include an additional inert landfill location, update the premises address; and to implement other minor changes to the Licence.

At the time of this amendment, DER has also implemented changes to ensure that conditions are valid, enforceable and/or risk-based. Accordingly, conditions that are not valid, enforceable and/or risk based have been removed from the Licence.

The licences and works approvals issued for the Premises since November 2000 are:

Instrument log		
Instrument	Issued	Description
L6168/1991/3	15/11/2000	Licence renewal
L6168/1991/4	13/11/2001	Licence renewal
W3691/2002/1	28/10/2002	Works approval
L6168/1991/5	15/11/2002	Licence renewal
L6168/1991/6	17/11/2003	Licence renewal
L6168/1991/7	15/11/2004	Licence renewal
L6168/1991/8	15/11/2005	Licence renewal
W4475/2008/1	11/12/2008	Works approval
L6168/1991/9	12/11/2009	Licence renewal
W477/2010/1	16/12/2010	Works approval
W4859/2011/1	17/02/2011	Works approval
W5018/2011/1	6/10/2011	Works approval
L6168/1991/10	15/11/2012	Licence renewal
L6168/1991/11	12/11/2015	Licence renewal
L6168/1991/11	22/09/2016	Licence amendment to update premises address, include inert waste disposal location and other minor amendments, including removal of conditions that are not valid, enforceable and/or risk based

Severance

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

END OF INTRODUCTION



Licence conditions

1 General

1.1 Interpretation

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

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

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

'annual period' means the inclusive period from 1 July until 30 June in the following year;

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

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

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

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

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

'CEO' for the purpose of correspondence means;
Chief Executive Officer
Department Division 3 Part V of the *Environmental Protection Act 1986*
Locked Bag 33 Cloisters Square
PERTH WA 6850
Email: info@der.wa.gov.au;

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

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

'controlled waste' has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;

'Department' means the department established under section 53 of the Public Sector Management Act and designated as responsible for the administration of Division 3 Part V of the *Environmental Protection Act 1986*;

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

'HDPE' means high density polyethylene;



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

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

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

'Licence' means this Licence numbered L6168/1991/11 and issued under the Act;

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

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'normal operating conditions' means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

'Putrescible' has the meaning defined in Landfill definitions;

'quarterly' means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March;

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

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

'spot sample' means a discrete sample representative at the time and place at which the sample is taken;

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

'WWTP' means wastewater treatment plant.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

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

1.2 Premises operation

1.2.1 The Licensee shall only accept waste on to the landfill and WWTPs if:

- (a) it is of a type listed in Table 1.2.1;
- (b) the quantity accepted is below any quantity limit listed in Table 1.2.1; and
- (c) it meets any specification listed in Table 1.2.1.



Table 1.2.1: Waste acceptance		
Waste type	Quantity limit	Specification ¹
Inert Waste Type 1	4,800 tonnes	None specified
Inert Waste Type 2		Tyres, conveyor belts and plastic only
Putrescible Waste		None specified
Clean Fill		None specified
Sewage	1,028 m ³ /day ²	Accepted through sewer inflow(s) only

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

Note 2: Quantity limit measured as volume of treated wastewater discharged to designated irrigation areas.

1.2.2 The Licensee shall ensure that where waste does not meet the waste acceptance criteria set out in condition 1.2.1 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.

1.2.3 The Licensee shall ensure that wastes accepted onto the landfill and WWTP are only subjected to the process(es) set out in Table 1.2.2 and in accordance with any process limits described in that Table.

Table 1.2.2: Waste processing		
Waste type	Process(es)	Process limits ^{1,2}
Inert Waste Type 1	Receipt, handling and disposal of waste by landfilling	<u>All waste types</u> <ul style="list-style-type: none"> disposal of waste by landfilling shall only take place within the landfill area shown on the Map in Schedule 1; waste is disposed of in a defined trench or within an area enclosed by earthen bunds; no waste shall be temporarily stored or landfilled within 35 metres from the boundary of the premises; the tipping area is restricted to a maximum linear length of 30 metres and is no greater than 2 metres in height; and the separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m <u>Used Tyres and Conveyor belts</u> Shall only be buried in the areas located within the prescribed premises boundary shown in Schedule 1.
Inert Waste Type 2		
Clean Fill		
Putrescible Waste		
Sewage	Biological, physical and chemical treatment	None specified
Sewage sludge	Drying and storage	None specified
Hydrocarbon contaminated waste	Bioremediation	Contaminated soil is only to be remediated within the Landfarm facilities shown on the Map in Schedule 1

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

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



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

Table 1.2.3: Cover requirements ¹			
Waste Type	Material	Depth	Timescales
Inert Waste Type 1	No cover required		
Inert Waste Type 2	Type 1 Inert waste or soil	100 mm	As soon as practicable after deposit Plastic waste with the potential to become windblown shall be covered as soon as practicable after deposit
Putrescible Waste		300 mm	As soon as practicable after deposit and not later than weekly

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

- 1.2.5 The Licensee shall ensure that wind-blown waste is contained within the boundary of the Premises and that wind-blown waste is returned to the tipping area on at least a monthly basis.
- 1.2.6 The Licensee shall ensure that the waste material specified in Table 1.2.4 is only stored and/or treated within the vessels or compounds provided with the infrastructure detailed in Table 1.2.4.

Table 1.2.4: Containment infrastructure		
Vessel or compound	Material	Infrastructure requirements
Spinifex Camp WWTP anaerobic, facultative and maturation ponds	Effluent from the Spinifex Camp	<ul style="list-style-type: none">• HDPE lined to achieve a permeability of 1×10^{-9} m/s or less• Maintain vertical freeboard of 400 mm
OHP3 Oily Wastewater Ponds	Treated oily water from the OHP3 oily water separator	<ul style="list-style-type: none">• HDPE lined to achieve a permeability of 1×10^{-9} m/s or less• Maintain vertical freeboard of 400 mm
OHP3 Sewage Treatment Facility Evaporation Ponds	Treated wastewater from the OHP3 Wastewater Treatment facility	<ul style="list-style-type: none">• HDPE lined to achieve a permeability of 1×10^{-9} m/s or less• Maintain vertical freeboard of 400 mm
Central and Eastern Landfarms	Hydrocarbon contaminated soils	<ul style="list-style-type: none">• Any potentially contaminated runoff from the treatment cells is contained



1.2.7 The Licensee shall ensure the limits specified in Table 1.2.5 are not exceeded.

Table 1.2.5 Production or design capacity limits		
Category ¹	Category description ¹	Premises production or design capacity limit
5	Processing or beneficiation of metallic or non-metallic ore	87,000,000 tonnes of ore per annual period
6	Mine dewatering	15,000,000 gigalitres per annual period
73	Bulk storage of chemical, etc	3,000 cubic metres in aggregate

Note 1: *Environmental Protection Regulations 1987*, Schedule 1.

2 Emissions

2.1 Point source emissions to surface water

2.1.1 The Licensee shall ensure that where waste is emitted to surface water from the emission points in Table 2.1.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.1.1: Emission points to surface water		
Emission point reference and location on Map of emission points	Description	Source including abatement
MCDMDEW040 MCDMDEW031	Discharge of excess mine dewatering water to Marillana Creek	Water abstracted to facilitate mining below the water table
MCDMDEW041	Contingency discharge point to Marillana Creek	Discharge of water during wet weather events

2.2 Emissions to land

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

Table 2.2.1: Emissions to land			
Emission point reference and location on Map of emission points	Emission point reference on Map of emission points	Description	Source including abatement
MCSWSTP001	Yandi Camp WWTP irrigation area	3.4 hectare irrigation area	Treated wastewater from the Yandi Camp WWTP (273 m ³ /day)
MCSWSTP004	Spinifex Camp WWTP irrigation area	6.9 hectare irrigation area	Treated wastewater from Spinifex Camp WWTP (420 m ³ /day)
OHP3 Oily Waste Water Ponds	OHP3 Oily Waste Water Ponds	Discharge of treated wastewater	Treated wastewater from the OHP3 Oily Water Treatment Facility



3 Monitoring

3.1 General monitoring

3.1.1 The Licensee shall ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
- (c) all surface water sampling is conducted in accordance with AS/NZS 5667.6 as relevant; and
- (d) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

3.1.2 The Licensee shall ensure that:

- (a) monthly monitoring is undertaken at least 15 days apart; and
- (b) quarterly monitoring is undertaken at least 45 days apart.

3.1.3 The Licensee shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

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

3.2 Monitoring of point source emissions to surface water

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

Table 3.2.1: Monitoring of point source emissions to surface water					
Emission point reference	Monitoring point location	Parameter	Units	Averaging Period	Frequency
MCDMDEW040 MCDMDEW031 MCDMDEW041	Flow meters to discharge point	Volumetric flow rate (cumulative)	m ³ /day	Quarterly	Continuous
	Discharge points	pH ¹	-	Spot sample	Quarterly
		Electrical Conductivity	(µS/cm)		
		Total Dissolved Solids	mg/L		
		Total Suspended Solids	mg/L		
		Total Recoverable Hydrocarbons	mg/L		
		Sodium	mg/L		
		Potassium	mg/L		
		Calcium	mg/L		
		Magnesium	mg/L		
		Chloride	mg/L		
		Carbonate	mg/L		
		Bicarbonate	mg/L		
		Sulfate	mg/L		



		Nitrate	mg/L		
		Aluminium	mg/L		
		Boron	mg/L		
		Iron	mg/L		
		Copper	mg/L		
		Zinc	mg/L		
		Silver	mg/L		
		Arsenic	mg/L		
		Chromium	mg/L		
		Cadmium	mg/L		
		Mercury	mg/L		
		Nickel	mg/L		
		Selenium	mg/L		
		Manganese	mg/L		

Note 1: In-field non-NATA accredited analysis permitted.

3.3 Monitoring of emissions to land

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

Table 3.3.1: Monitoring of emissions to land						
Emission point reference	Monitoring point location	Parameter	Limit	Units	Averaging period	Frequency
MCSWSTP001	Treated wastewater from final storage tank prior to discharge	Volumetric flow rate	-	m ³ /day	Quarterly	Continuous
MCSWSTP004	Spinifex Camp WWTP maturation pond	pH ¹	-	-	Spot sample	Quarterly
		Biochemical Oxygen Demand	-	mg/L		
		Total Suspended Solids	-	mg/L		
		Residual Chlorine ¹	-	mg/L		
		Total Nitrogen	-	mg/L		
		Total Phosphorus	-	mg/L		
		<i>E.coli</i>	-	cfu/100 mL		
OHP3 Oily Wastewater Ponds	Treated wastewater pond prior to discharge	Total Recoverable Hydrocarbons	15	mg/L	Spot sample	Prior to discharge

Note 1: In-field non-NATA accredited analysis permitted.

3.4 Monitoring of inputs and outputs

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



Table 3.4.1: Monitoring of inputs and outputs				
Input/Output	Parameter	Units	Averaging period	Frequency
Waste inputs	Inert Waste Type 1 and Inert Waste Type 2	Tonnes	N/A	Annual records of total waste arriving at the landfill facility

3.5 Ambient environmental quality monitoring

3.5.1 The Licensee shall undertake the monitoring in Table 3.5.1 according to the specifications in that table and record and investigate results.

Table 3.5.1: Monitoring of ambient surface water quality				
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Marillana Creek surface water monitoring sites YNSWPC001 YNSWPC002	pH ¹	-	Spot sample	Following rain events
	Electrical Conductivity	(µS/cm)		
	Total Dissolved Solids	mg/L		
	Total Suspended Solids	mg/L		
	Total Recoverable Hydrocarbons	mg/L		
	Sodium	mg/L		
	Potassium	mg/L		
	Calcium	mg/L		
	Magnesium	mg/L		
	Chloride	mg/L		
	Carbonate	mg/L		
	Bicarbonate	mg/L		
	Sulfate	mg/L		
	Nitrate	mg/L		
	Aluminium	mg/L		
	Boron	mg/L		
	Iron	mg/L		
	Copper	mg/L		
	Zinc	mg/L		
	Silver	mg/L		
	Arsenic	mg/L		
	Chromium	mg/L		
	Cadmium	mg/L		
	Mercury	mg/L		
	Nickel	mg/L		
	Selenium	mg/L		
	Manganese	mg/L		

Note 1: In-field non-NATA accredited analysis permitted.



4 Information

4.1 Records

- 4.1.1 All information and records required by the Licence shall:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
 - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The Licensee must submit to the CEO a Compliance Report indicating the extent to which the Licensee has complied with the conditions in this Licence for the Annual Period.
- 4.1.3 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

- 4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by the 1 October each year. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form ¹
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 1.2.1	Waste acceptance	None specified
Table 1.2.5	Production or design capacity data and limit exceedances	None specified
Table 2.1.1	Cumulative volume discharged via each separate emission point	None specified
Table 3.2.1	Point source emissions to surface water monitoring results and a comparison of results against established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances and a discussion of any trends identified	None specified
Table 3.3.1	Limit exceedances and emissions to land monitoring results and comparison of results against the manufacturers specifications	None specified
Table 3.4.1	Monitoring of inputs and outputs	None specified
Table 3.5.1	Ambient surface water quality monitoring results and a comparison of results against established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances and a discussion of any trends identified	None specified
4.1.2	Compliance	None specified
4.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2



4.2.2 The Licensee shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits.

4.2.3 The Licensee shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.

Table 4.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form ¹
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties

Note 1: Forms are in Schedule 2

4.3 Notification

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

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
Table 1.3.1, 1.3.5 and 3.3.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
3.1.5	Calibration report	As soon as practicable.	None specified

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

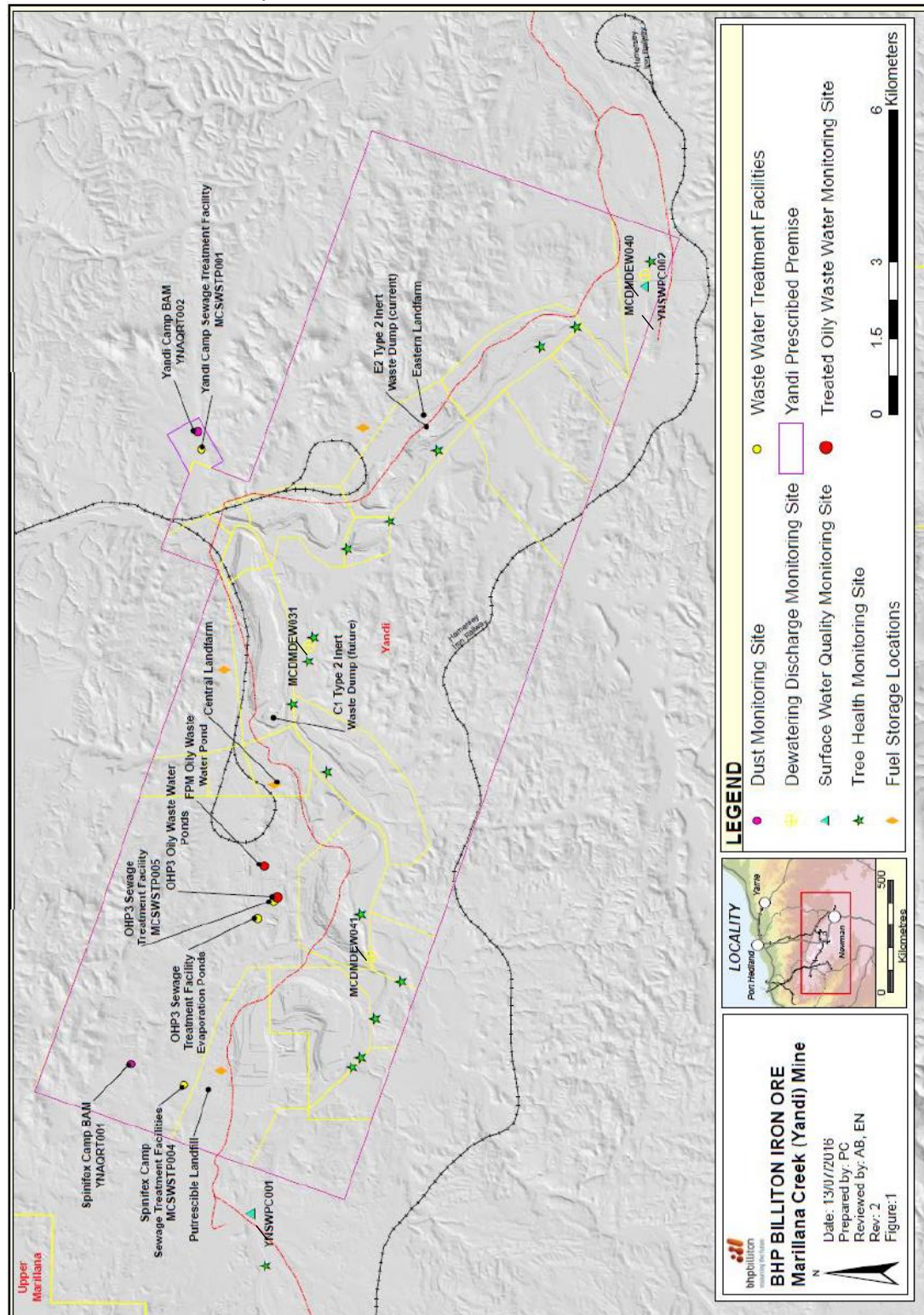
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

The Premises boundary, containment infrastructure defined in Table 1.2.4, emission points defined in Tables 2.1.1 and 2.2.1, and monitoring locations defined in Tables 3.2.1, 3.3.1 and 3.5.1 are shown in the map below.





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

Licence: L6168/1991/11
Form: N1

Licensee: BHP Billiton Iron Ore Pty Ltd
Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

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

Part A

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

Notification requirements for the breach of a limit

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

Part B

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



Name	
Post	
Signature on behalf of BHP Billiton Iron Ore Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: BHP Billiton Iron Ore Pty Ltd

Licence: L6168/1991/11

Registered office: Level 1, City Square, Brookfield Place
125-127 St Georges Terrace
PERTH WA 6000

ACN: 008 700 981

Premises address: Yandi (Marillana Creek) Iron Ore Mine
Mining Tenements M270SA, M47/292, G47/12, G47/13, G47/14, G47/15,
G47/16, G47/17, G47/18, G47/19, M47/69, M47/70 and M47/71
NEWMAN WA 6753

Issue date: Thursday, 12 November 2015

Commencement date: Tuesday, 17 November 2015

Expiry date: Friday, 16 November 2035

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Haley Brunel
Licensing Officer

Decision Document authorised by: Alana Kidd
Manager Licensing – (Resource Industries)



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1 Purpose of this Document

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

2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/> New Licence <input checked="" type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	5	87,000,000 tonnes per annual period
	6	15,000,00 tonnes per annual period
	54	773 cubic metres per day
	64	4,800 tonnes per annual period
73	3,000 cubic metres in aggregate	
Application verified	Date: N/A	
Application fee paid	Date: N/A	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	



Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input checked="" type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: 069 and 405 EPA Report No: 323 and 802
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.		

3 Executive summary of proposal and assessment

BHP Billiton Iron Ore Pty Ltd (BHPBIO) currently operates the Yandi (Marillana Creek) Iron Ore Mine (Yandi), located approximately 90 kilometres (km) north-west of Newman in the Pilbara region of Western Australia.

Mining activities at Yandi are focused upon extraction of the Marillana Formation, a channel iron deposit (CID) following the meandering paleochannels of Marillana Creek. Mining is conducted using conventional open-cut mining methods, including drill and blast, load and haul and processing through ore handling plants. Following drilling and blasting, the ore is loaded by front end loaders and hydraulic excavators into haul trucks for transport to the primary crushing areas.

Ore is transported from the primary crushing areas via conveyor to one of three of the ore handling plants where the ore goes through further crushing and screening before being placed on stockpiles. The ore is then loaded from the stockpiles into trains through two train load outs and railed to Port Hedland for shipment. Waste rock is transported to designated waste dumps, used in construction or used to backfill pits.

Mine dewatering is undertaken to mine ore below the water table. Water is extracted and used to meet local mine water demand with the surplus being discharged to Marillana Creek via two discharge points. Marillana Creek, located within the premises, is a tributary of Weeli Wolli Creek which is itself a tributary of the Fortescue River. Stream flow in the Yandi area is highly ephemeral and for most of the year the Marillana Creek and its tributaries are dry expect for occasional pools. Groundwater levels at Yandi are typically 30-40 metres (m) below ground level (mbgl).

The closest residential sites to Yandi are the Marillana and Juna Downs homesteads, located approximately 35 km from the mine site.

The Licensee has submitted an application to amend Licence L6168/1991/11, requesting the following changes:



- Update Table 1.2.1 to allow throughput for the WWTPs to be measured at the outflow to the irrigation areas;
- Minor updates to Tables 3.2.1, 3.3.1, 3.4.1 and 3.5.1;
- Addition of a new Inert Waste Type 2 disposal location to replace the existing site; and the cover requirements be amended from 'monthly' to 'as soon as practicable';
- Update the location of a 200,000 kL fuel bullet from the Central Administration area to the ANFO Facility;
- Include the discharge of treated water from the OHP3 Treated Waste Water Evaporation Ponds during rain events as an emission point on the Licence; and
- Include the discharge of treated water from the Western Fixed Plant Maintenance (FPM) Workshop pond during rain events as an emission point on the Licence.

At the time of this amendment, DER has also implemented changes to ensure that conditions are valid, enforceable and/or risk-based. Accordingly, conditions that are not valid, enforceable and/or risk based have been removed from the Licence.

DER has also considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous Licence was granted. No significant changes have occurred. DER's assessment and decision making with respect to the changes to the Licence are described in Table 4 of this document.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	Definitions	In line with recent administrative changes implemented within the Department, the definition for 'CEO' has been updated; and new definitions for 'Compliance Report' and 'Department' included in this section.	Guidance Statement <i>Setting conditions</i> (DER, October 2015)
	Conditions 1.1.5, 1.1.6, 1.2.1 and 1.2.2 (removed)	<p>Conditions that are not valid, enforceable or risk based have been removed from the Licence in accordance with the Guidance Statement <i>Setting conditions</i> (DER, October 2015), as detailed below.</p> <p>Previous condition 1.1.5 specified: "The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specifications or any relevant and effective internal management system."</p> <p>This condition is not enforceable as it is not clear or certain in that the pollution control equipment and monitoring equipment required to be operated and maintained is not specified. The requirements to achieve compliance are not clear.</p> <p>Previous condition 1.1.6 specified: "Nothing in this Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to: (a) pollution; (b) unreasonable emission;</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>(c) discharge of waste in circumstances likely to cause pollution; or</i> <i>(d) being contrary to any written law."</i></p> <p>This is not considered valid, enforceable or risk based, as it is an explanatory statement that provides clarification of the operation of the Licence.</p> <p>Previous condition 1.2.1 specified: <i>"The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system."</i></p> <p>This condition is not valid as it inconsistently regulates activities below prescribed category thresholds. DER has assessed the risk associated with spills of environmentally hazardous materials to determine if specific regulatory controls are required.</p> <p><u>Emission description</u> <i>Emission:</i> Spills of environmentally hazardous materials, including hydrocarbons, detergents and glues/paints, outside of engineered containment systems.</p> <p><i>Impact:</i> Soil contamination, impacts to groundwater and surface water quality, ecosystem disruption, depending on nature and volume of material released to the environment.</p> <p><i>Controls:</i> The Licensee has developed the Marillana Creek (Yandi) Mine Environmental Management Plan (EMP) to meet the requirements of Ministerial Statement (MS) 679. The EMP includes provisions relating to the management of dangerous goods and hazardous materials, such as fuels, lubricants, detergents, explosives and paints.</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>The Licensee has implemented management measures on site, including the requirement to storage environmentally hazardous materials in bunded areas, in accordance with relevant Australian Standards. Regular inspections are also carried out; and incidents are investigated after the event.</p> <p>All staff receive spill response training and daily inspections of workshops, hazardous materials storage areas, bunding and containment infrastructure is conducted by supervisory personnel in operational areas.</p> <p>It is the responsibility of the Licensee to ensure compliance with other legislative requirements, including Australian Standard 1940-2004 – The storage and handling of flammable and combustible liquids, which specifies that clean up action needs to be initiated immediately following a leak or spill.</p> <p>Groundwater at Yandi is typically 30-40 metres below ground level. Groundwater at this depth is unlikely to be impacted by minor spills of environmentally hazardous materials outside of containment areas.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk rating:</i> Low</p> <p><u>Regulatory Controls:</u> The risk associated with spills outside of engineered containment systems is low, therefore no further regulatory controls are being applied to the Licence at this time.</p> <p>The general provisions of the <i>Environmental Protection Act 1986</i> with respect to the causing of pollution and environmental harm apply, as does subsidiary</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>legislation including the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p> <p><u>Residual Risk:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk rating:</i> Low</p> <p>Previous condition 1.2.2 specified: "The Licensee shall: (a) implement all practical measures to prevent stormwater run-of becoming contaminated by the activities on the Premises; and (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharge from the Premises.¹ Note 1: The <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> make it an offence to discharge certain materials into the environment"</p> <p>This condition is not enforceable as it is not sufficiently clear or certain what stormwater infrastructure is required to be constructed and maintained, or if any specific management actions are required. DER has assessed the risk associated with the discharge of potentially contaminated stormwater to determine if any further regulatory controls are required.</p> <p><u>Emission description</u> <i>Emission:</i> Discharge of potentially contaminated stormwater from operational areas to the environment.</p> <p><i>Impact:</i> Impacts to groundwater and surface water quality, ecosystem disruption.</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Controls:</i> The Licensee has developed the <i>Marillana Creek (Yandi) Mine Environmental Management Plan (EMP)</i> and the <i>Marillana Creek (Yandi) Mine – Surface Water and Groundwater Management Plan (SWGMP)</i> to satisfy the requirements of MS 679.</p> <p>The SWGMP outlines stormwater management measures implemented on site to prevent stormwater becoming contaminated, and to appropriately treat potentially contaminated stormwater prior to discharge.</p> <p>The following measures have been implemented at the premises:</p> <ul style="list-style-type: none">• treatment of potentially contaminated run-off from areas of likely hydrocarbon and/or solvent contamination prior to discharge;• sediment basins, vegetated buffer strips installed and maintained at all potential off-site stormwater discharge points;• stormwater is directed away from landfill;• stormwater from the ore processing plant sites collected by a drainage network, incorporating bunds and sediment traps. <p>Groundwater at Yandi is typically 30-40 metres below ground level. Groundwater at this depth is unlikely to be impacted from the infiltration of stormwater.</p> <p>Stream flow in the mine area is highly ephemeral, and for most of the year the creeks are dry except for occasional pools.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Rare</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Risk rating: Low</i></p> <p><u>Regulatory Controls:</u> Appropriate stormwater management is implemented under the SWGMP, required under MS 679.</p> <p>Stormwater management infrastructure will be inspected during DER's compliance inspections; and the procedures and infrastructure in place to manage stormwater will be evaluated.</p> <p>The general provisions of the <i>Environmental Protection Act 1986</i> with respect to the causing of pollution and environmental harm apply, as does subsidiary legislation including the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p> <p>Due to the low risk and the management practices implemented on site, no further regulatory controls are required.</p> <p><u>Residual Risk:</u> <i>Consequence: Minor</i> <i>Likelihood: Rare</i> <i>Risk rating: Low</i></p>	
Premises operation	Conditions 1.2.1, 1.2.3 and 1.2.4 (previously conditions 1.3.1, 1.3.3 and 1.3.4)	<p>Sewage waste acceptance The waste acceptance specifications in Table 1.2.1 have been updated to allow the quantity limit for sewage to be measured at the treated effluent emission points for the WWTPs.</p> <p>Type 2 Inert Waste landfill The existing Inert Waste Type 2 landfill is reaching capacity and a new site</p>	<p>Landfill Waste Classification and Waste Definitions 1996 (as amended)</p> <p><i>Environmental Protection Regulations 1987</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>for disposal of Type 2 inert waste is required. The Licensee is proposing to locate the new Inert Waste Type 2 landfill at the Central 1 In-Pit Overburden Storage Area, and will operate the facility in accordance with the existing conditions of Licence L6168/1991/11 relating to the disposal of Inert Waste Type 2.</p> <p>Existing condition 1.2.1 specifies a waste quality limit for all waste types of 4,800 tonnes per annum. Condition 1.2.3 specifies that tyres and used conveyor belts shall only be buried in the areas located within the prescribed premises boundary shown in Schedule 1. The relevant map in Schedule 1 of the Licence has been updated to show the new inert landfill location. Condition 1.2.3 also specifies that the separation distance between the base of landfills and the highest groundwater level shall not be less than 2 metres.</p> <p>At the time of this amendment the tyre disposal specifications in Table 1.2.2 have been removed as provisions for the disposal of tyres are specified in the <i>Environmental Protection Regulations 1987</i>.</p> <p>At the request of the Licensee, condition 1.2.4 has been updated to change the cover requirements for Type 2 Inert Waste from 'Monthly' to 'As soon as practicable after deposit'. The Licensee has advised that rubber is dumped at infrequent periods and as such, cover may not be required on a monthly basis. Regular inspections of the Inert Waste Type 2 dump will be undertaken to identify if covering of waste is required.</p> <p>Bulk storage of chemicals A 200,000 kL fuel bullet has been relocated from Central Administration to the ANFO facility to support ongoing blasting operations. The map in Schedule 1 has been updated with the new location of the fuel bullet.</p>	Application supporting documentation



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Emissions to land including monitoring	Conditions 2.2.1 and 3.3.1	<p>The Licensee has requested that two additional emissions points for the contingency discharge of treated wastewater during high rainfall events be included on the Licence. DER's assessment and decision making is detailed below.</p> <p><u>Emission description</u> <i>Emission:</i> Contingency discharge of treated oily water from the FPM Oily Wastewater Treatment Facility ponds during high rainfall events. Treated wastewater potentially contains elevated concentrations of total recoverable hydrocarbons (TRH), metals, metalloids and/or non-metals.</p> <p><i>Impact:</i> Potential degradation of surface water and groundwater quality, ecosystem disruption.</p> <p><i>Controls:</i> The discharge of treated wastewater is a contingency measure, anticipated to occur following high rainfall events. Wastewater will therefore be diluted when discharged.</p> <p>Discharge from the pond is directed to a sump which is located on a historical waste dump. The receiving environment is highly disturbed; vegetation is unlikely to be impacted.</p> <p>Groundwater is approximately 70 metres below ground level (mbgl) and the discharge location is approximately 700 metres (m) from a minor tributary of Marillana Creek.</p> <p>Monitoring of the treated wastewater in the FPM ponds indicate that concentrations of total recoverable hydrocarbons is less than 15 mg/L.</p> <p>Discharge events will be infrequent, and not expected to impact on sensitive receptors due to the distance to groundwater and the closest creek line.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i></p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i></p> <p>Application supporting documentation</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk rating:</i> Low</p> <p><u>Regulatory Controls:</u> The risk associated with the contingency discharge of treated wastewater from the FPM ponds has been assessed as low. No regulatory controls will be applied to the Licence.</p> <p>The general provisions of the <i>Environmental Protection Act 1986</i> with respect to the causing of pollution and environmental harm apply, as does subsidiary legislation including the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p> <p><u>Residual Risk:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk rating:</i> Low</p> <p><u>Emission description</u> <i>Emission:</i> Discharge of treated wastewater from the OPH3 Sewage Treatment Facility Evaporation Ponds during high rainfall events.</p> <p><i>Impact:</i> Degradation of surface water and groundwater quality, ecosystem disruption. Groundwater is located approximately 60 mbgl and the discharge location is approximately 2.5 km from Marillana Creek.</p> <p><i>Controls:</i> The discharge of treated wastewater is a contingency measure, anticipated to occur following high rainfall events. Wastewater will therefore</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>be diluted when discharged.</p> <p>Treated water is discharged via a 3 metre long, fully armoured, overflow to a partially cleared area comprising of low-lying spinifex scrub.</p> <p>Monitoring results presented in the 2014/2015 Annual Environmental Report for Licence L6168/1991/11 indicate that wastewater is being treated effectively and unlikely to impact on the receiving environment.</p> <p>Discharge events will be infrequent, and not expected to impact on sensitive receptors due to the anticipated quality of discharge water and distance to sensitive receptors (groundwater and Marillana Creek).</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk rating:</i> Low</p> <p><u>Regulatory Controls:</u> The risk associated with the contingency discharge of treated wastewater from the OPH3 Sewage Treatment Facility has been assessed as low. No regulatory controls will be applied to the Licence.</p> <p>The general provisions of the <i>Environmental Protection Act 1986</i> with respect to the causing of pollution and environmental harm apply, as does subsidiary legislation including the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p> <p>The Licensee will be required to report monitoring results from the sewage treatment facility to DER via the AER for assessment. If water quality is found to be unacceptable, regulatory controls related to the contingency</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>discharge may be considered.</p> <p><u>Residual Risk:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk rating:</i> Low</p>	
Monitoring general	<p>Condition 3.1.3 (removed)</p> <p>Conditions 3.2.1 and 3.3.1</p>	<p>Previous condition 3.1.3 specified: <i>"The Licensee shall record production or throughput data and any other process parameters relevant to any non-continuous monitoring undertaken."</i></p> <p>In accordance with the Guidance Statement <i>Setting conditions</i> (DER, October 2015), this conditions has been removed from the Licence. It is not considered enforceable as it does not clearly state the outcome that must be achieved or what parameters they are required to record.</p> <p>Minor updates have been made to the monitoring requirements for emissions to surface water and land, specified in Tables 3.2.1 and 3.3.1. Units for flow rate have been restricted to cubic metres per day, with an averaging period of quarterly as opposed to monthly.</p>	Guidance Statement <i>Setting conditions</i> (DER, October 2015)
Monitoring of inputs and outputs	Condition 3.4.1	The input and output monitoring requirements in Table 3.4.1 has been updated; annual records of total waste arriving at the landfill facility will be reported in the AER.	Application supporting documentation
Ambient quality monitoring	Condition 3.5.1	Condition 3.5.1 has been revised to update the monitoring point references for ambient surface water monitoring locations. The Licensee has implemented a standardised naming convention for sample points and requested the monitoring point references be updated accordingly.	Application supporting documentation
Information	Condition 4.1.2 (removed)	<p>Previous condition 4.1.2 specified: <i>"The Licensee shall ensure that:</i></p>	Guidance Statement <i>Setting conditions</i> (DER,



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
	Condition 4.1.2	<p>(a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the License or copies thereof; and</p> <p>(b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing."</p> <p>In accordance with the Guidance Statements <i>Setting conditions</i> (DER, October 2015), condition 4.1.2 has been removed from the Licence as it is not considered enforceable as the requirements for compliance are not clear.</p> <p>Condition 4.1.2, relating to the annual compliance report, has been updated to reflect administrative changes within the department. Table 4.2.1 has also been updated to reflect the removal of the compliance report template from the Licence. The Licensee will be required to access the form on DER's website.</p>	October 2015)
	Condition 4.2.2 (revised)	<p>Condition 4.2.2 has been revised to reflect the removal of condition 3.1.3 from the Licence.</p>	
Licence Duration	-	In accordance with DER's Licence Duration Guidance Statement, finalised in November 2014, this Licence has been issued for a period of 20 years.	DER Guidance Statement, <i>Licence Duration</i> (November, 2014)



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
18/08/2016	Proponent sent a copy of draft instrument	Minor change to monitoring requirements, replace Chlorine with Chloride	Updated.



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High