

Licence Number	L4385/1988/12
Licence Holder	Pilbara Iron Company (Services) Pty Ltd
ACN	107 210 248
Registered business address	Level 22 Central Park, 152-158 St Georges Terrace PERTH WA 6000
Date of amendment	15 December 2016
Prescribed Premises	Category 5 – Processing or beneficiation of metallic or non-metallic ore; Category 12 – Screening etc. of material; Category 85 – Sewage facility
Premises	Channar Iron Ore Mine Mining tenement M265SA ROCKLEA WA 6751

Amendment

The Chief Executive Officer (CEO) of the Department of Environment Regulation (DER) has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Date Signed: 15 December 2016

Alana Kidd

Manager Licensing – Resource Industries

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

Amendment Notice

This notice is issued under section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B (9) of the EP Act.

A detailed risk review of the licence will occur in the near future, following the issue of this Amendment Notice under DER's risk-based regulatory framework. Once finalised, this amendment will be included in the revised licence. Changes to the conditions imposed under this Amendment Notice may occur as part of the review.

Amendment Description

On 29 August 2016 Pilbara Iron Company (Services) Pty Ltd (Licensee) submitted an application to the Department of Environment Regulation (DER) for an amendment to the Channar Iron Ore Mine Licence L4385/1988/12.

This Amendment Notice is the result of the Licensee initiated amendment. The Licensee has requested the following amendments:

- 1. Administrative changes to conditions 1, 2, 7 and Licence definitions;
- 2. Removal of Category 73 Bulk storage of chemicals; and
- 3. Addition of Category 12 Screening etc. of material.

1. Administrative changes to conditions 1, 2, 7 and definitions

The Licensee has requested the following minor administrative changes:

- Condition 1 and 2 change to the reporting period dates;
- Condition 7 change to the unit of measurement for metal contaminants and a change of parameter from Total Petroleum Hydrocarbons to Total Recoverable Hydrocarbons; and
- Change to the definition of 'quarterly'.

Decision

The following minor administrative changes have been made:

- The submission date for both the Annual Environmental Report (AER) and Annual Audit Compliance Report (AACR) has been amended to 30 April each year to be consistent with all other operational licences held by the Licensee;
- The unit of µg/L has been removed from condition 7;
- Total Petroleum Hydrocarbons has been changed to Total Recoverable Hydrocarbons in condition 7; and
- The definition of quarterly has been updated to allow samples to be taken in the 4 inclusive periods of Q1 1 January to 31 March, Q2 1 April to 30 June, Q3 1 July to 30 September and Q4 1 October to 30 November) rather than specific months, providing the Licensee with operational flexibility.

2. Removal of Category 73 – Bulk storage of chemicals

The Licensee has requested the removal of Category 73 – Bulk storage of chemicals as the site holds minor amounts of bulk chemicals which no longer meets the 1000 m³ in aggregate prescribed threshold. The Annual Environmental Report submitted for the 2015 annual period

reports actual total volume of chemicals to be 510 m³.

Decision

Category 73 has been removed from the licence.

3. Addition of Category 12 – Screening etc. of material

The location of a mobile crushing plant at Channar Iron Ore Mine has previously been approved under Works Approval W5541/2013/1 within Category 5 – Processing and beneficiation of metallic and non-metallic ore.

The management actions submitted with the works approval application have been superseded by those included in the *Mobile Crushing and Screening Management Plan* (*RTIO-HSE-0235877* (Version 3 - 2015)).

The management plan outlines management actions associated with dust, stormwater and drainage, and hydrocarbon and chemical storage as summarised below:

- Dust controls:
 - Spraying the feed stockpiles with water prior to screening;
 - o Water carts to spray work areas, roads and stockpiles; and
 - Use of belt sprays if fitted.
- Stormwater management and drainage:
 - o Plant will be located at least 50 m from permanent water bodies; and
 - Mobile plant is contained at each premises to ensure there is no contaminated run-off (with the use of sumps and stormwater diversions around plant). Any contaminated run-off collected in the sumps is removed via truck to a suitably licensed facility.
- Hydrocarbon and chemical storage:
 - Stored within low permeability compounds that:
 - "be graded or include a sump to allow recovery of liquid;
 - be chemically resistant to the substances stored;
 - include valves, pumps and meters associated with transfer operations wherever practical. Otherwise the equipment shall be adequately protected (e.g. bollards) and contained in an area designed to permit recovery of chemicals released following accidents or vandalism;
 - be designed such that jetting from any storage vessel or fitting will be captured within the bunded area (Australian Standard 1940-2004 Section 5.8.3 (h));
 - be designed such that chemicals which may react dangerously if they come into contact, are in separate bunds in the same compound or in different compounds; and
 - be controlled such that the capacity of the bund is maintained at all times (e.g. regular inspection and pumping of trapped uncontaminated rain water)".
 - Refueling and servicing will require the use of drip trays and absorbent matting; and
 - Internal procedures for managing spills.

The management plan also states that mobile plants will be located in previously cleared areas where possible.

The design capacity of the mobile plant assessed under Works Approval W5541/2013/1 is 6.57 million tonnes per annum (Mtpa). The Licensee has requested the design capacity of Category 12 to be 10 Mtpa.

Location, environmental siting and potential receptors

Table 1 below lists the relevant human receptors in the vicinity of the prescribed premises.

Residential and Sensitive Premises	Distance from Prescribed Premises Boundary		
Paraburdoo town	More than 10 km to the north-west		

Table 2 below lists the relevant environmental receptors in the vicinity of the prescribed premises.

Environmental receptor	Distance from Prescribed Premises Boundary
Minor, non-perennial creeks (tributaries of Turee Creek and Stoney Creek)	Onsite
Paraburdoo P1 Water Reserve	More than 3 km to the north

Risk assessment

Tables 3 and 4 below apply a risk assessment to the potential emissions which may arise from the amendment application. Both tables identify whether these emissions present a material risk requiring regulatory controls.

Risk Assessment

Table 3. Risk assessment for construction of the mobile crushing and screening plant

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Material Risk	Reasoning
rce	Category 12: Construction of mobile	Construction of mobile crushing and screening plant	Dust: Release of particulate matter from construction activities and vehicular movement	Paraburdoo town	Air: Transport through air then transfer through respiratory system	Human health impacts – respiratory illness	No	The Delegated Officer considers the distance to human receptors to be too great for health impacts to occur. In addition, construction activities will be of short-term duration. Paraburdoo town is five times the recommended separation distance.
Source	crushing and screening plant		Noise and vibration: Associated with construction activities and vehicular movement	Paraburdoo town	Air of other physical medium: Vibration of particles	Human health/amenity impacts	No	The Delegated Officer considers the distance to human receptors to be too great for health impact to occur. In addition, construction activities will be of short-term duration. Paraburdoo town is five times the recommended separation distance.

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			Operation of crushing and screening plant	Dust: Release of particulate matter from operation of crushing and screening plant, movement of stockpiled material and vehicular movement	Paraburdoo town	Air: Transport through air then transfer through respiratory system	Human health impacts – respiratory illness	No	The Delegated Officer considers the distance to human receptors to be too great for health impacts to occur. Paraburdoo town is five times the recommended separation distance.
	Source	Category 12: Operation of mobile crushing and screening plant		Noise and vibration: Associated with operation of crushing and screening plant and vehicular movement	Paraburdoo town	Air of other physical medium: Vibration of particles	Human health/amenity impacts	No	The Delegated Officer considers the distance to human receptors to be too great for health impacts to occur. Paraburdoo town is five times the recommended separation distance.
				Waste: Associated with spills and leaks from fuel storage areas	Surface water systems, surrounding soils and underlying groundwater	Direct discharge to soil. Land: Run-off to surface water systems, percolation through soils to groundwater	Surface water quality and ecological systems; groundwater quality degradation.	No	The Premises is not located with a drinking water area and the surface water systems located on the Premises are minor and non- perennial Given the proponent controls outlined in the <i>Mobile Crushing and Screening</i> <i>Management Plan (RTIO-HSE-0235877</i> the Delegated Officer has determined the likelihood of impact to be unlikely and the consequence to be insignificant . The risk rating is therefore low .

Table 4. Risk assessment for the operation of the mobile crushing and screening plant

			Waste: Associated with sediment laden stormwater generated through the screening of target material	Surface water systems	Land: Run-off to surface water systems	Surface water quality and ecological systems	No	The Premises is not located with a drinking water area and the surface water systems located on the Premises are minor and non- perennial Given the proponent controls outlined in the <i>Mobile Crushing and Screening Management Plan (RTIO-HSE-0235877</i> the Delegated Officer has determined the likelihood of impact to be <i>unlikely</i> and the consequence to be <i>insignificant.</i> The risk rating is therefore <i>low</i> .
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Decision

The Delegated Officer has determined that the key emissions associated with the mobilisation and operation of the mobile crushing and screening plant are noise and dust. The key emissions during operation are noise, dust and wastewater.

The Delegated Officer considers that the risks associated with these emissions are low due to distances to sensitive receptors and the Licensee's controls. No additional conditions are required on the licence, other than the addition of prescribed Category 12 – Screening etc. of material.

Amendment History

Instrument	Issued	Amendment
L4385/1988/12	26/05/2011	Licence re-issue
L4385/1988/12	15/12/2016	Amendment Notice 1: Minor administrative change; removal of Category 73 – Bulk storage of chemicals; and addition of Category 12 - Screening etc. of material

Amendment

- 1. The Licence is amended by the deletion of *Category* 73 *Bulk storage of chemicals*.
- 2. The Licence is amended by the addition of *Category 12 Screening etc. of material* with a production or design capacity of *10 Mtpa*.
- 3. Condition 1 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

ANNUAL ENVIRONMENTAL REPORT

- The Licensee shall provide <u>to</u> the <u>CEO</u> <u>Director</u>, by <u>30 April</u> <u>31 March in</u> each year, a copy of an Annual Environmental Report containing <u>monitoring results</u> and data collected as required by any condition of this licence during the period <u>1 January the previous year</u> and ending on <u>31 December</u> in that year.
- 4. Condition 2 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

ANNUAL AUDIT COMPLIANCE REPORT

- 2. The Licensee shall by <u>30 April</u> 31 August in each year, provide to the <u>CEO</u> Director an Annual Audit Compliance Report in the form in Attachment 1 to this licence, signed and certified in the manner required by Section C of the form, indicating the extent to which the licensee has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the premises, <u>during the period 1 January and ending on 31 December in that year</u>.
- 5. The definitions of the Licence are amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

"Annual Audit 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;

"Department" means the department established under s.35 of the Public Sector Management Act 1994 and designated as responsible for the administration of Division 3 Part V of the Environmental Protection Act 1986;

"Quarterly" means February, May, August and November <u>the 4 inclusive period from</u> <u>1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October</u> <u>to 31 December in the same year;</u>

6. Table 2 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

Column1	Column 2	Column 3
Monitoring sites (Attachment 3)	Sampling Frequency	Parameters to be measured
Channar Sedimentation Pond discharge point	Quarterly	pH (pH units) ¹ Total Dissolved Solids (mg/L) Total Suspended Solids (mg/L) Total Petroleum Hydrocarbons <u>Total Recoverable</u> <u>Hydrocarbons (mg/L)</u> Chemical Oxygen Demand (mg/L) Surfactants (mg/L) Metals (mg/L) (µg/L) - Pb, Cu, Fe, Mn, Mo, Zn, As, Hg, Cd and Cr.
Channar WWTP	Quarterly	Biochemical Oxygen Demand <u>(mg/L)</u> Total Suspended Solids <u>(mg/L)</u> pH <u>(pH units)¹</u> Total Nitrogen <u>(mg/L)</u> Total Phosphorus <u>(mg/L)</u> Thermo-tolerant coliforms <u>(cfu/100 mL)</u> pall be reported in milligrams per litre (mg/L).

 Table 2: Water monitoring schedule

All results, with the exception of pH, shall be reported in milligrams per litre (mg/L). Note 1: In-field non-NATA accredited analysis permitted.

- 7. The Licence is amended by the insertion of the following condition (9):
 - 9 The Licensee shall only operate the Mobile Crushing and Screening Plant in accordance with the Iron Ore (WA) Mobile Crushing and Screening Management Plan (RTIO-HSE-0235877).

Appendix 1: Key Documents/References

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	Document Title	Availability
1	Guidance Statement: Regulatory Principles. (DER, 2015)	https://www.der.wa.gov.au
2	Guidance Statement: Setting conditions (DER, 2015	
3	Guidance Statement: Licence duration (DER, 2016)	
4	Guidance Statement: <i>Decision Making Licensing and</i> works approvals (DER, 2016)	
5	Licence amendment supporting documentation received 29 August 2016:	DER record A1155438
	Channar licence amendment application form; and	
	Licence amendment supporting documentation.PDF	
7	Additional information received 26 October 2016:	DER record A1185440
	 Information on location of receptors; 	
	 Information on current works approval for mobile 	
	crushing and screening plant; and	
	Mobile Crushing and Screening Plant Management Plan (RTIO-HSE-0235877 - Version 3 (2015))	
8	Additional information on wastewater treatment plant design capacity received 27 October 2016	DER record A1186517
9	DER notification of proposed amendment sent 24 November 2016	DER record A1155438
10	RTIO comments on draft 21 day amendment notice received 6 December 2016	DER record A1337792

Appendix 2: Summary of Licence Holder Comments

Comments received	Environmental risk	DER consideration of risk
Addition of Category 12 short description on page 1 of the Notice	Nil risk – administrative change	The Delegated Officers has considered and agreed to the change. The reference to the category 12 short description has been included on page 1 of this Notice