



Decision Document

Environmental Protection Act 1986, Part V

Proponent: **Hamersley HMS Pty Ltd**

Licence: **L8117/2006/8**

Registered office: Level 22, Central Park
152-158 St Georges Terrace
PERTH WA 6000

ACN: 115 004 129

Premises address: Hope Downs 1 Iron Ore Mine
Part of Mining Lease AM70/282 and L47/378
NEWMAN WA 6753

Issue date: Thursday, 14 November 2013

Commencement date: Wednesday, 27 November 2013

Expiry date: Monday, 26 November 2018

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by: Sonya Poor
Licensing Officer

Decision Document authorised by: Alana Kidd
Delegated Officer



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1 Purpose of this Document

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



2 Administrative summary

Administrative details			
Application type	Works Approval <input type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>		
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity	
	5	32,000,000 tonnes per annual period	
	6	40,150,000 tonnes per annual period	
	12	10,000,000 tonnes per annual period	
	54	585 cubic metres per day	
	64	5,000 tonnes per annual period	
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: 584 and 893 EPA Report No: 1024 and 1424	
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

Hamersley HMS Pty Ltd (the Licensee) currently operates the Hope Downs 1 Iron Ore Mine (HD1) for category 5, 6, 54 and 64 activities within Schedule 1 of the *Environmental Protection Regulations 1987*. HD1 is located in the Pilbara region, approximately 75 kilometres (km) north-west of Newman within mining lease AM70/282 and L47/378. HD1 is in the vicinity of the Yandicoogina mine, operated by Rio Tinto Iron Ore (RTIO), Mining Area C and Marillana Creek (Yandi) mines, operated by BHP Billiton Iron Ore Pty Ltd (BHPBIO).

The Licensee requires the use of a mobile crushing and screening plant (the plant) to primarily produce stemming for blasting purposes and material for construction/maintenance activities. The plant may also be used to trial varying sized saleable ore. This trial will not result in an increase to the category 5 design capacity of 32 million tonnes per annum (Mtpa), but will help sustain production and improve efficiencies of the existing operation.

The maximum design capacity of the plant is 3,030,000 tonnes per annum (tpa). HHMS have requested that category 12 be included onto the licence with a design capacity of 10 Mtpa in case multiple plants are required onsite simultaneously in the future. The plants will be managed in accordance with the *Iron Ore (WA) Mobile Crushing and Screening Management Plan*, Rio Tinto, 2015 (RTIO-HSE-0235877) and licence conditions.

The following changes have been made to the licence during this amendment:

- Inclusion of category 12;
- Administrative changes;
- Inclusion of condition 1 for the mobile crushing and screening plant;
- Removal of previous conditions 1, 2, 6, 7, 8, 13, 14, 15, 16, 17, 27 and 28; and
- Removal of the landfarm map (previously Attachment 7).

Where conditions have been added or removed from the existing licence these have been justified in Section 4.



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	N/A.	Previous conditions 15 and 16 relating to the storage of environmentally hazardous materials have been removed. Storage of these substances is adequately regulated by the <i>Dangerous Goods Safety Act 2004</i> and associated Regulations. Previous conditions 8 and 17 have been removed and can be sufficiently regulated under the <i>Environmental Protection Act 1986</i> (the Act) and the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> .	General provisions of the <i>Environmental Protection Act 1986</i> . <i>Dangerous Goods Safety Act 2004</i> .
Premises operation	Licence condition 1.	Category 12 has been added to the licence. The maximum design capacity of the plant is 3,030,000 tpa. A design capacity for category 12 of 10 Mtpa has been included onto the licence to allow for multiple plants to operate onsite simultaneously in the future. The Licensee must ensure that the combined design capacity of all category 12 mobile plants onsite at the same time is restricted to 10 Mtpa. Condition 1 has been added to the licence. The mobile plants are to be managed in accordance with the <i>Iron Ore (WA) Mobile Crushing and Screening Management Plan</i> , Rio Tinto, 2015 (RTIO-HSE-0235877) and licence conditions. Previous conditions 27 and 28 for the soil bioremediation facilities have been removed as this is a secondary activity, which does not contribute to the nature and type of emission for any of the prescribed activities.	General provisions of the <i>Environmental Protection Act 1986</i> . <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> . Hope Downs 1 Iron Ore Mine –



DECISION TABLE

Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
			licence amendment to allow the use of a mobile crushing and screening plant, Rio Tinto, 6 May 2015.
Emissions to land including monitoring	Licence condition 4.	DER's assessment and decision making are detailed in Appendix A.	General provisions of the <i>Environmental Protection Act</i> 1986.
Fugitive emissions	N/A.	Previous conditions 1 and 2 have been removed. Fugitive emissions of dust are considered a low risk given the location of the Premises (approximately 75 km from Newman) and the accommodation villages are situated at suitable distances from the mine operations. Fugitive emissions can be sufficiently regulated under section 49 of the Act. Given the excess water onsite, dust suppression is continuous and adequate. This has also been noted on numerous site inspections.	General provisions of the <i>Environmental Protection Act</i> 1986.
Information	N/A.	Previous conditions 13 and 14 have been removed. These conditions can be adequately regulated by Part IV requirements under Ministerial Statements 584 and 893.	Ministerial Statements 584 and 893.

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
18/06/2015	Proponent sent a copy of draft instrument (amendment)	Minor comments received	Licence re-drafted
15/09/2015	Proponent sent a copy of draft instrument (version 2.9)	Comments received	Licence converted back to original format
26/11/2015	Proponent sent a copy of draft instrument (original format)	No comments received	N/A



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



Appendix A

Emissions to land including monitoring

Emission Description

Emission: Effluent from each of the HD1 wastewater treatment plants (WWTPs), which discharges to land via irrigation sprayfields (Site Administration Building WWTP – 1.11 hectares (ha); South Village WWTP1 and WWTP2 (same irrigation sprayfield) – 4.53 ha; and North Village WWTP1 and WWTP2 (same irrigation sprayfield) – 3.13 ha).

Impact: Effluent discharged as irrigation to land has the potential to result in degraded or waterlogged land, with soil or groundwater contamination arising where the effluent is either saline, turbid, nutrient enriched, and/or contaminated with metals. HD1 is located within the southern half of the Weeli Wolli Creek catchment, which drains northward into the area of the Fortescue River Basin known as the Fortescue Marsh, approximately 65 km from HD1. The Hope North deposit is located approximately 6.5 km south-west of Weeli Wolli Springs. The spring is a permanent water feature that is supported by groundwater discharge. The surface flow associated with the spring disappears within about 4-5 km due to seepage and evaporation.

Controls: The irrigation sprayfield areas are fenced and signed to restrict personnel from accessing the area. Site management is carried out as per the site Environmental Management Plan and includes regular inspections, weed management and servicing. Pooling of irrigated treated wastewater and surface runoff is unlikely due to vegetation uptake and the high evaporation rate experienced in the region (approximately 3 metres (m) per year). The irrigation sprayfields are located approximately 60 – 105 m above groundwater level and are located away from surface water bodies to mitigate any risk associated with high rainfall events.

Risk Assessment

The Licensee's Annual Environmental Report for the 2014 reporting period noted that there were three exceedances of the water quality targets during the reporting period. Monitoring results demonstrate that the Total Nitrogen target of 50 mg/L was exceeded on two occasions and the Total Phosphorus target of 12 mg/L was exceeded once. There were no target exceedances recorded during quarter 4 of the 2014 annual period, which indicates that sufficient controls were applied to improve the quality of the effluent discharged.

Consequence: Minor

Likelihood: Unlikely

Risk Rating: Moderate

Regulatory Controls

Condition 4 requires the Licensee to monitor the WWTPs water quality on a quarterly basis and report these results in the Annual Environmental Report. This condition has been updated to ensure the Licensee provides an assessment and comparison against previous years' data.

Previous conditions 6 and 7 have been removed. The targets for the WWTPs water quality have been removed, determined by the WWTPs treatment performance and the Licensee's management of the facilities. The WWTPs and associated irrigation sprayfield areas will also be subject to regular compliance inspections to ensure they are being managed appropriately.

Residual Risk

Consequence: Minor

Likelihood: Rare

Risk Rating: Low