Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L8688/2012/1

Licence Holder Hamersley HMS Pty Ltd

ACN 115 004 129

File Number DER2014/000622-1

Premises Hope Downs 4 Mine

Part of AM70/282, L47/399, and Part of L47/702

NEWMAN WA 6753

As defined by the Premises map attached to the Revised

Licence.

Date of Report 4/03/2022

Decision Revised licence granted

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1. Decision summary

Licence L8688/2012/1 is held by Hamersley HMS Pty Ltd (Licence Holder) for the Hope Downs 4 Mine (the Premises), located at Part of AM70/282, L47/399, and Part of L47/702 Newman.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L8688/2012/1 (Revised Licence) has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Part IV of the EP Act

2.2.1 Background

The Hope Downs 4 Iron Ore proposal was referred to the Environmental Protection Authority (EPA) under Section 38 of the *Environmental Protection Act 1986* (EP Act) in January 2010 and was assessed at the level of Public Environmental Review (PER). The EPA released its Report and Recommendations (EPA Report 1374) in December 2010.

2.2.2 Ministerial Statement

The proposed storage of waste fines within an above ground tailings storage facility (TSF) was subject to assessment by the EPA. The EPA determined (EPA Report 1374) that groundwater and surface water quality could potentially be impacted from contamination from the paddock TSF.

The EPA concluded that the proposal could be managed to meet the EPA's environmental objectives for groundwater and surface water provided conditions are imposed requiring the Proponent to ensure that any discharge of water (runoff/seepage) from TSFs is monitored and managed (if necessary) to ensure that surface and groundwater quality are maintained.

Ministerial Statement (MS) 854, which was published on 1 February 2011, includes conditions relevant to the management of the proposed facilities. Condition 7 of MS 854 (Water Quality) requires the Proponent to:

Condition 7-1: ensure that run off and/or seepage from the tailings storage facility does not lead to the quality of surface water or groundwater within or adjacent to the proposal area exceeding the trigger values for a slightly to moderately disturbed ecosystem provided in the Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand (2000), *Australian Water Quality Guidelines for Fresh and Marine Waters* and its updates, taking into consideration natural background water quality of the receiving environment.

Condition 7-2: monitor the quality of surface water and groundwater upstream and downstream of the tailings storage facility to ensure that the requirements of condition 7-1 are met.

Reference to the TSF in the original MS 854 relates to an above ground paddock style facility. The Licence Holder applied on 17 September 2020 for a Section 45C to have MS 854 amended to include the construction, commissioning and operation of a new in-pit TSF (Kalgan 2, Kalgan 3 and Kalgan 4) in Area 3 and increase the dewatering rate by 3 GL/annum for the abstraction

of recirculation water as a result of seepage from the in-pit storage of tailings. MS 854 was amended on 2 October 2020 via a section 45C (assessed as insignificant) to include the new in-pit TSF and the increase in dewatering amount. Figure 1 below depicts the locations of the TSFs at the Premises as described in MS 854.

The requirements of MS 854 Condition 7-1 and 7-2 stated above now also apply to the new inpit TSF.

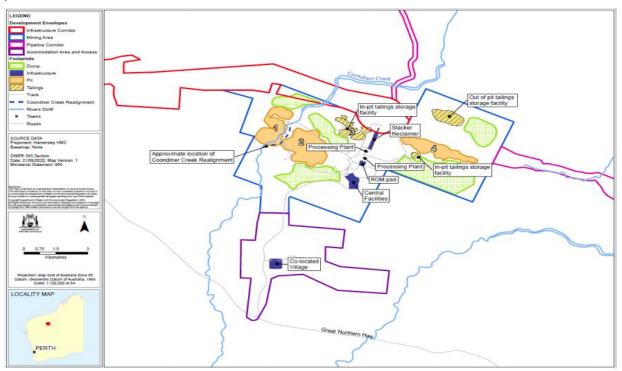


Figure 1: Location of TSFs - MS 854

The Licence Holder is currently working with the EPA to address water quality impacts from the TSFs at the Premises and to include the new in-pit TSF in the monitoring program. The Environmental Management Plan (EMP) (or equivalent) is currently being developed and has yet to be reviewed and approved by the EPA.

Based on this, Part V will regulate the ambient groundwater quality monitoring for the new in-pit TSF (Kalgan Pit 2 and Kalgan Pit 3) under this licence until such a time as the EMP is approved by the EPA.

2.3 Application summary

The Licence Holder mines and processes iron ore at the Premises. Waste fines material generated from ore processing is currently deposited into existing above ground waste fines storage facilities (WFSF) and an existing in-pit WFSF in the previously mined Desert Satellite Pit (DSP) WFSF. However, the existing WFSFs are nearing capacity and additional waste fines storage capacity is required for the remaining life of mine.

Works Approval W6403/2020/1 (W6403) was issued to the Licence Holder on 23 October 2020 for the construction of infrastructure for Area 3 WFSF (Kalgan Pit 2, Kalgan Pit 3 and Kalgan Pit 4) for the storage of waste fines. Only Kalgan Pits 2 and 3 have been constructed and commissioned under W6403. Kalgan Pit 4 is yet to be mined and therefore will not be included under this licence amendment.

On 15 February 2021, the Licence Holder submitted an application (RTIO 2021) to the department to amend Licence L8688/2012/1 under section 59 and 59B of the EP Act. The following amendments are being sought.

2.3.1 Operation of the Area 3 WFSF

Operation of the Area 3 WFSF (Kalgan Pit 2 and Kalgan Pit 3) following the completion of Time Limited Operations (TLO) approved under W6403.

Waste fines are deposited into Kalgan Pit 2 and Kalgan Pit 3 via dual outlets as shown in Figure 2 below (Kal 2 Pit and Kal 3 Pit).

The Licence Holder submitted an Environmental Compliance Report on 12 November 2020 in accordance with conditions 5 and 6 of W6403 for the construction of infrastructure for the Kal 2 and Kal 3 Pits. The department considered on 7 December 2020 the construction of the Kal 2 and Kal 3 Pits was compliant with conditions of W6403.

Commissioning commenced on the 17 November 2020 following the submission of the Environmental Compliance Report with the Licence Holder submitting an Environmental Commissioning Report on 18 December 2020 in accordance with conditions 11 and 12 of W6403. The discharge of waste fines to the Kal 2 and Kal 3 Pits commenced on 21 December 2020, with the discharge continuing under Time Limited Operation conditions in W6403 until this licence is amended.

A network of groundwater monitoring bores have been installed at the Kal 2 and Kal 3 pits with the Licence Holder submitting construction compliance reports in accordance with condition 3 of W6403. The Licence Holder has completed baseline sampling in accordance with condition 4 of W6403 prior to discharge of tailings into the pits commencing, with the results being presented to the department. Monitoring from the groundwater monitoring bores continues during TLO as required by conditions 18 and 19 of W6403.

Impacts on groundwater and surface water from seepage and/or run-off from the new in-pit WFSF, will be regulated by conditions of MS 854 once the relevant EMP is updated and data established (refer to section 2.2.2). The requirement to monitor potential longer-term impacts from seepage and/or runoff at the Area 3 WFSF is required on the licence and will facilitate the EPA understanding of tailings and closure requirements. The Area 3 WFSF will also remain on the licence as an authorised discharge point for tailings deposition.

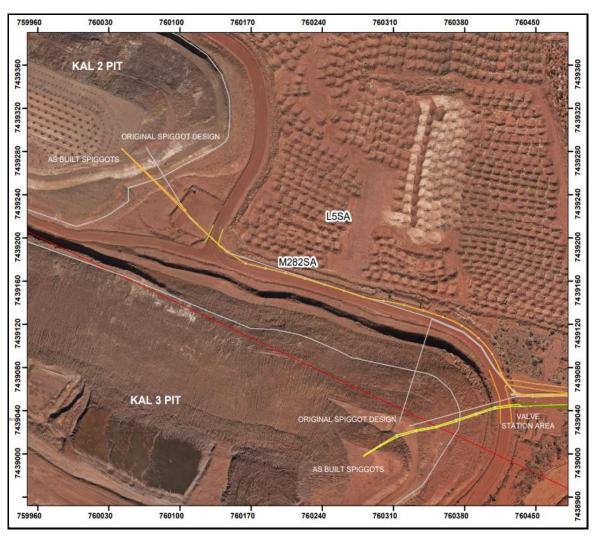


Figure 2: Discharge outlets to Kal 2 and Kal 3 pits

2.3.2 Column leach testing

The Licence Holder originally proposed that the requirement under W6403 condition 21 to undertake 13 weeks of column leach testing and reporting be instead addressed under this amended licence.

The purpose for the test work at the time of issuing W6403 was to better understand the tailings material, the potential impacts from placing that tailings material into the Area 3 WFSF and to establish appropriate ambient groundwater monitoring requirements over the longer term.

The Licence Holder has now stated (RTIO 2022b) that "Testing is currently underway and is expected to be completed within the coming weeks." "We request to have this condition removed from L8688 as the requirement to undertake the testing is conditioned within W6403/2020/1, which expires 25/10/2025. We confirm our original request in the licence application to include this condition was an error, as inclusion would duplicate the condition on the active works approval and revised licence. We intend to submit the results of the testing imminently, well ahead of the works approval expiry date."

2.3.3 Replacement groundwater monitoring bores at the WFSFs

The Licence Holder has reported some of the groundwater monitoring bores at the existing WFSFs are either reporting as dry or have been destroyed during everyday operations. The Licence Holder has requested to substitute these groundwater monitoring bores with existing groundwater monitoring bores. The proposed replacement groundwater monitoring bores are

located within close proximity to the groundwater monitoring bores requiring replacement and have shown to provide suitable groundwater monitoring data. The replacement groundwater monitoring bores are detailed below:

- New bore MB20HD40004 to replace MB13EA0001 which is no longer operational.
- New bore MB11HD4021 to replace WB11HD4003 which has been abandoned.
 - On 24 February 2022 (RTIO 2022a), it was requested that MB11HD4021 be replaced with WB11HD4002. It is stated that "WB11HD4002 is screened in the same aquifer as the original replacement bore WB11HD4003" and "WB11HD4002 will provide a more suitable representation of groundwater conditions".
- New bore WB14HD4011 to replace RC10EA236 which is reporting as dry.
- New bore WB14HD4016 to replace MB14HD4022 which is reporting as dry.

The Licence Holder also identified groundwater monitoring bore EBORE1 was incorrectly labelled. The correct name is ERBORE1.

On 24 February 2022, the Licence Holder also requested that MB14HD4023 be removed from the licence as it has been decommissioned and currently dry and "no samples can be taken from the bore due to dewatering at the nearby home pit."

The groundwater monitoring bore map has been updated to reflect these changes.

2.3.4 Other amendments

Removal of the requirement to monitor vibrating wire piezometer (VMP) HM18HD40002. This VMP will soon be lost to mining as the pit expands.

The requirement to monitor vibrating wire piezometer HM18HD40002 (VMP) is a condition of W6403 and therefore the Works Approval Holder would need to apply to have W6403 amended or report this as part of compliance. The VMP is not regulated through conditions of the Licence and therefore does not affect the decision in issuing the Revised Licence.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk* assessments (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 1 below.

Table 1 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
			Baseline groundwater monitoring has been undertaken prior to commissioning and TLO commencing.
			Monitoring to assess groundwater and pond water levels and quality, identify potential seepage, compare with baseline conditions, compare with model predictions and ensure that the deposition of waste fines to Area 3 WFSF does not result in significant decline in groundwater quality.
Seepage	Waste fines materials	Seepage to groundwater or surface water as a result of deposition of waste fines	There is no decant system in place. The Licence Holder (RTIO 2022b) states that "The decant system is not intended to be the primary control to limit decant pond depth, rather this is managed operationally by the adopted deposition strategy which involves cycling of tailings discharge between Kalgan Pits 2 & 3 to maximise evaporation, increase dry density of the deposited tailings and limit depth of the supernatant pond. Slurry and water levels are visually inspected on a daily basis and measured weekly through survey of the pits to ensure appropriate management. If the decant pond depth is consistently higher than expected under normal operating conditions (ie not due to significant rain event) then review of the need to install a decant system will be undertaken."
	Overtopping of the WFSF resulting in the release of waste fine or water	Waste fines or water released to surrounding soils and surface water	The final waste fines surface will be below surrounding ground level such that any failure (with potential loss of waste fines containment) is not expected to release to the surrounding environment. Adequate capacity within facility to contain
Overtopping			all storm events (including Probable Maximum Flood (PMF)) without risk of overtopping to the surrounding environment.
			Monitoring of waste fines volumes, water content in waste fines and rates of deposition will be undertaken.

Emission	Sources	Potential pathways	Proposed controls
Waste fines spill	Delivery pipeline failure releasing waste fines during operation	Waste fines released to natural surface water	The waste fines delivery pipelines include flow meters / telemetry to detect any issues and are contained within a bunded corridor reporting to containment ponds for the purposes of containing any spills or leaks caused by pipeline failure. Visual inspections of the integrity of the facility and discharge pipelines will be undertaken to detect any issues.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Closest residential premises: Township of Newman	Approximately 30 km to the south of the Prescribed Premises.
	Screened out as receptor due to distance.
Marillana Pastoral Lease (P072910)	Approximately 12 km to the north east of the Prescribed Premises.
	Screened out as a receptor due to distance.
Environmental receptors	Distance from prescribed activity
Public Drinking Water Source Area (PDWSA)	Beneficial use of groundwater at the Premises is limited. The nearest PDWSA; Newman PDSWA is located within the Premises but more than 9 km south east of the Area 3 WFSF.
	Screened out as this receptor for this assessment.
Surface water	The Kal 2 and Kal 3 pits are located approximately 700 m east of Coondiner Creek (Figure 3).
Riparian vegetation	Riparian communities of Kalgan Creek, which represent communities considered to be of elevated local conservation significance, have been recorded within the Premises. The nearest riparian communities to the Kal 2 and Kal 3 pits have been recorded more than 7.5 km to the east.
	The Kal 2 and Kal 3 pits are located within pre-

	disturbed areas (in previously mined pits within the Area 3 mining area). None of the riparian communities or Priority flora species considered to be of elevated local conservation significance were recorded or are expected to occur within or near the proposed facility.
	Screened out as a receptor due to distance.
Groundwater	The pre-mining groundwater level was measured at approximately 20 mbgl. Current readings from monitoring bores close to Kal 2 and Kal 3 show groundwater level has declined to 65 mbgl due to dewatering at the Premises.
Threatened/ Priority Flora	There are no Threatened Flora located within or near the Premises, however several Priority Flora species have been recorded within the Premises.
Threatened/Priority Fauna	Five species of elevated conservation significance have been recorded or are considered likely to occur within the Premises:
	The Kal 2 and Kal 3 pits are located within predisturbed areas (in previously mined pits within the Area 3 mining area). None of the species of elevated conservation significance were recorded or are expected to occur within or near the facilities. Therefore, the Kal 2 and Kal 3 pits are not expected to have any impact on any population, alter the conservation status or threaten the continued existence of any conservation significant fauna species at a local or regional scale.
	Screened out as a receptor due to distance.

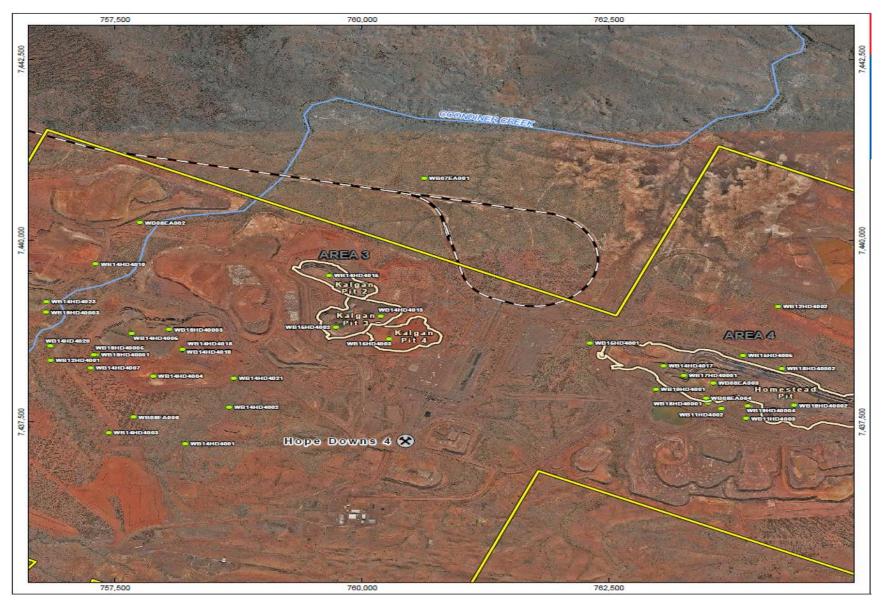


Figure 3: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The Revised Licence L8688/2012/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 3. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event	Risk Event							Justification for
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	sufficient?	Conditions ² of licence	additional regulatory controls
Operation of the Area 3 Wi	FSF (Kalgan Pit	2 and Kalgan Pit 3 or	nly)					
Deposition of slurry into pit voids	Overtopping of the WFSF resulting in the release of waste fine or water	Risk of structural failure leading to physical damage or smothering of vegetation by tailings. Soil contamination with the possible addition of ions and metals. Water quality contamination and impacts	Priority flora Local terrestrial ecosystems	Refer to Section 3.1	C = Moderate L = Rare Medium Risk	N	Condition 2 Condition 4	DWER does not consider monitoring alone, as a control and notes there is no decant removal. The Licence Holder will be required to undertake an inspection regime for the following: • Facility integrity inspections; • Freeboard level and capacity available; and • Supernatant pond level and location. Grounds: Visual inspection of the Area 3 WFSF will ensure the freeboard of the WFSF and decant pond levels are maintained.
	Seepage of waste fines	Seepage entering groundwater and flowing down gradient with potentially the following impacts: • water quality adversely affecting	Dewatering abstraction bores which are then discharged to the creek Freshwater ecosystems	Refer to Section 3.1	C = Moderate L = Rare Medium Risk	N	Condition 5 Condition 10	The Licence Holder has no decant removal system in place. The Licence Holder will be required to undertake and report on an annual water balance for the

Risk Event					Risk rating ¹	Licence		Justification for
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	additional regulatory controls
		aquatic fauna in the Kalgan Creek discharge point; Groundwater mounding; and Groundwater contamination	Groundwater dependent ecosystems					Area 3 WFSF.
	Pipeline failure releasing waste fines	Overland flow contaminating surrounding soils and surface waters	Local drainage channels (ephemeral creek systems). Local terrestrial ecosystems	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 3	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Shire of East Pilbara advised of proposal 1 April 2021	None received.	N/A
Licence Holder was provided with draft amendment on 17 September 2021	Comments received 8 October 2021. Refer to Appendix 1	Refer to Appendix 1
Licence Holder was provided with draft amendment on 1 February 2022	Comments received on 24 February 2022 and 2 March 2022. Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 5: Summary of licence amendments

Existing condition	Condition summary	Revised licence condition	Conversion notes
Schedule 2: General Description, Table 8	Prescribed premises category description	N/A	Removed from Schedule 2 and moved to the front of the licence as per current licence template
N/A	Licence history	N/A	Included under this licence amendment
N/A	Explanatory Notes	N/A	Removed as per current licence template
Table 1	Definitions	Table 10	The table of Definitions has been updated and moved to after the Licence Condition in line with the current licence template
Interpretation	Interpretation	Interpretation	Updated as per current licence template

Existing condition	Condition summary	Revised licence condition	Conversion notes
Condition 1, Table 2	Emissions	Condition 6, Table 4	Previous conditions 1 and 3 removed New condition 6 added which
Condition 3			specifies these as 'authorised discharge points'
			Kalgan Pit 2 and Kalgan Pit 3 also included
Condition 2, Table 3	Infrastructure and equipment	Condition 2, Table 2	Table updated to include 'infrastructure location'
Condition 6			Inclusion of a freeboard requirement for Kalgan Pit 2 and Kalgan Pit 3
			Inclusion of Kalgan Pit 2 and Kalgan Pit 3 for the pipeline requirements
Condition 3	Waste fines discharge	Condition 6, Table 4	Previous condition 3 removed and now covered under condition 6
Condition 4, Table 4	Monitoring	Condition 10, Table 8	Previous condition 4 has been removed and is now covered under condition 10. The Table has also been updated to include ambient groundwater monitoring requirements for Kalgan Pit 2 and Kalgan Pit 3
			Changes have also been made to WFSF and DSP WFSF monitoring bores as requested by the Licence Holder under this licence amendment
Condition 5	Reporting	Condition 13, Table 9	Previous condition 5 has been removed and this reporting requirement is now included under condition 13
Condition 6	Infrastructure and equipment	Condition 2, Table 2	Previous condition 6 has been removed and this condition is now located within condition 2, Table 2 for the WFSF supernatant water requirement
Condition 7	Infrastructure and equipment	Condition 3	Previous condition 7 is now condition 3
Condition 8	Reporting	Condition 13, Table 9	Previous condition 8 has been removed and this reporting requirement is now included under condition 13
Condition 9	Treated wastewater irrigation	Condition 6, Table 4	Previous condition 9 has been removed and this condition is now located within condition 6, Table 4
Condition 10	Treated wastewater irrigation	Condition 7, Table 5	Previous condition 10 has been removed and this condition is now located within condition 7, Table 5 for emission and discharge limits
Condition 11	Monitoring	Condition 9, Table 7	Previous condition 11 has been removed and is now covered under

Existing condition	Condition summary	Revised licence condition	Conversion notes
			condition 9. The Table has been updated to remove the limits which are now covered under condition 7
Condition 12	Reporting	Condition 13, Table 9	Previous condition 12 has been removed and this reporting requirement is now included under condition 13
Condition 13	Waste disposal restrictions	Condition 8, Table 6	Previous condition 13 is now condition 8, Table 6
Condition 14	Information	Condition 14	Previous condition 14 has been updated as per current licence template
Condition 15	Information	Condition 11	Previous condition 15 has been updated as per current licence template
Condition 16	Information	Condition 12	Previous condition 16 has been updated as per current licence template
Condition 17	Information	N/A	Previous condition 17 has been removed
N/A	N/A	Condition 1	Inclusion of new condition 1 – premises production or design capacity limits
N/A	N/A	Condition 4	Inclusion of a new condition 4 - inspection of infrastructure for the Area 3 WFSF
N/A	N/A	Condition 5	Inclusion of a new condition 5 - annual water balance for the Area 3 WFSF
N/A	N/A	Condition 15	Inclusion of a new condition 15 as per the current licence template
Schedule 1: Maps	Premises map Figure 1		Previous Premises map has been removed and updated to include the Area 3 WFSF
Schedule 1: Maps	Groundwater Monitoring Sites Figure 4		Previous Groundwater Monitoring Sites map has been removed and updated to reflect condition 10, Table 8 – WFSF groundwater monitoring
Schedule 2: Table 9	Infrastructure and equipment	Schedule 3, Table 12	Updated to show where the infrastructure is located on Maps and include Kalgan Pit 2 and Kalgan Pit 3

References

- 1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.
- 4. DWER 2019, Guideline: Industry Regulation Guide to Licensing, Perth, Western Australia.
- 5. DWER 2019, Guideline: Decision Making, Perth, Western Australia.
- 6. Ministerial Statement 854, Hope Downs 4 Iron Ore Project (s46), Hamersley Hope Management Services Pty Ltd, 2 October 2020.
- 7. Rio Tinto (RTIO) 2021, Licence amendment application for Hope Downs 4 L8688/2012/1, Dated 15 February 2021.
- 8. RTIO 2022a, RE: [External] APPLICANT NOTIFICATION L8872/2014/1 NOTICE OF PROPOSED AMENDMENT TO LICENCE L8688/2012/1, dated 24 February 2022.
- 9. RTIO 2022b, RE: [External] APPLICANT NOTIFICATION L8872/2014/1 NOTICE OF PROPOSED AMENDMENT TO LICENCE L8688/2012/1, dated 2 March 2022.

Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response						
Comments received 8 October	Comments received 8 October 2021							
2	The Licence Holder notes the limit of 2,088,000 tonnes per annum of discharge of tailings to Kalgan Pit 2 and Kalgan Pit 3 and understands this is based on the anticipated maximum volume stated in Works Approval. The Licence Holder requests the term "maximum" be amended to "approximately", as a multitude of factors such as thickener type, thickener density, tailings grain size etc can influence the density of tailings, and hence the weight deposited in the storage facility.	Following discussions with the Licence Holder on 18/10/21 (DWER record A2054730), the department has decided a maximum annual discharge amount of tailings material to the Kalgan Pit 2 and Kalgan Pit 3 will not be applied (added) to the Licence. This decision was based upon the Licence already allows for a combined total of up to 16,500,000 tpa of tailings material to be deposited into various in pit facilities at the Premises, there will not be an increase in the total amount of tailings deposited at the Premises, and maximum individual tailings amounts are not applied to each existing in pit facility.						
4	The Licence Holder notes that the monitoring bores for the Kalgan 2 & 3 Pits are not included in Table 4 of L868/2012/1, rather are proposed to be monitored under Ministerial Statement 854 Condition 7. The Licence Holder believes that the monitoring of the Kalgan Pit 2 & 3 bore network would be more efficiently managed under the L8688, as whilst this approach will result in duplication of conditions across Part IV & V of the EP Act in the short term, it will ultimately be the most efficient mechanism to ensure regulatory compliance.	Supported Following consultation between the Licence Holder and the department (Part IV and V) it was decided that groundwater monitoring requirements for Kalgan Pit 2 and Kalgan Pit 3 would be captured under this licence amendment, until such a time as the EMP regulated under Part IV is approved (refer also to section 2.2.2). Based on the above the draft licence will be re-sent to the Licence Holder for another 21-day comment period.						
Schedule 2	Capacity for category 5 incorrectly stated as 6,500,000 tonnes per annum instead of 16,500,000 tonnes per annum.	Supported Corrected to 16,500,000 tonnes per annum.						

Condition	Summary of Licence Holder's comment	Department's response				
Comments received 24 February 2022 (RTIO 2022a) and 2 March 2022 (RTIO 2022b)						
1	The Licence Holder requests that reference to Kalgan Pit 2 and Kalgan	Supported				
	Pit 3 be referred to as Area 3 WFSF.	The Licence has been updated, noting that the definition for Area 3 WFSF is "refers to Kalgan Pit 2 and Kalgan Pit 3 only".				
5	The Licence Holder requests that condition 5 be removed from the	Supported				
	licence.	This requirement has been removed from the licence.				
	This licence condition has been carried over from W6403 and relates to leach testing of two samples for Area 3 WFSF. The Licence Holder is requesting its removal as the leach testing should be considered a once off requirement of the works approval.	The Licence Holder has advised that "Testing is currently underway and is expected to be completed within the coming weeks." "We request to have this condition removed from L8688 as the requirement to undertake the testing is conditioned within W6403/2020/1, which expires 25/10/2025. We confirm our original request in the licence application to include this condition was an error, as inclusion would duplicate the condition on the active works approval and revised licence. We intend to submit the results of the testing imminently, well ahead of the works approval expiry date."				
10	The Licence Holder has requested the following:	Supported				
	 that monitoring bore MB11HD4021 be replaced with WB11HD4002 on the basis that WB11HD4002 is screened at the same aquifer as the original replacement bore WB11HD4003 (MB11HD4021 was to replace WB11HD4003 under this amendment). 	The WFSF groundwater monitoring table and associated Figure has been updated to reflect the changes made.				
	 that MB14HD4023 be removed from the licence as it has been decommissioned and is dry. The Licence Holder has stated that "no samples can be taken from the bore due to dewatering at the nearby homestead pit. Groundwater is currently ~40m below the base of the DSP pit, with dewatering planned at Homestead pit until at least 2027." 					

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMM	ARY				
Application type					
	X	Current licence number:	L8688/2012/1	88/2012/1	
Amendment to licence		Relevant works approval number:	W6403/2020/1	N/A	
Date application received	•	15 February 2021		•	
Applicant and Premises details					
Applicant name/s (full legal name/s)		Hamersley HMS Pty Ltd			
Premises name		Hope Downs 4 Mine			
Premises location		Part of AM70/282, L47/399, and Part of L47/702			
Local Government Authority		Shire of East Pilbara			
Application documents		,			
HPCM file reference number:		DWERDT414346			
Key application documents (addition application form):	Cover letter, Application form and Maps				
Scope of application/assessment					
Summary of proposed activities or changes to existing operations.		Operation of Kal 2 and Kal 3 in pit TSFs Monitoring bores replacement Removal of vibrating piezometer from monitoring list Include leach test required under W6403 in the licence			
Category number/s (activities that category number number) number/s (activities that category number number) number numbe		e premises to become	prescribed premises	5)	
Prescribed premises category and description	Assessed production or desig capacity			Proposed changes to the production or design capacity (amendments only)	
Category 5: Process or	6. 16,500,000 tonnes per annual period		per No changes pro	No changes proposed	
beneficiation of metallic or non- metallic ore			expected volum	2.088 mtpa waste fines deposition expected volumes for each year of life of Kal 2 and Kal 3	
Category 6: Mine dewatering	N/A – Regulated under Ministerial Statement 854 (20 GL/year).				
Category 12: Screening etc. of material	10,000 period	0,000 tonnes per ann	ual N/A		
Category 54: Sewage facility	372 cu	bic metres per day N/A			
Category 64: Class II putrescible 1,000 to		tonnes per annual pei	riod N/A	N/A	

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes □ No ⊠	Referral decision No: Managed under Part V ⊠ Assessed under Part IV □
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ⊠ No □	Ministerial statement No: MS854 EPA Report No: 1738
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □ No ⊠	Reference No: XX
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠ No □	Other evidence ⊠ State Agreement Act Reissued 11/07/2017
Has the applicant obtained all relevant planning approvals?	Yes □ No □ N/A ⊠	If N/A explain why? State Agreement Act
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes □ No ⊠	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □ No ⊠	No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes □ No ⊠	Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ⊠ No □	Name: Pilbara Surface and groundwater area Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes ☒ No ☐ N/A ☐ Regional office: North West
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	N/A
Is the Premises subject to any other Acts or subsidiary regulations (e.g. Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx)	Yes ⊠ No □	Iron Ore (Hope Downs) Agreement Act 1992
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	N/A

Is the Premises subject to any EPP requirements?	Yes □ No ⊠	N/A	
Is the Premises a known or suspected contaminated site under the Contaminated Sites Act 2003?	Yes □ No ⊠	N/A	