



Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L8493/2010/2
Licence Holder	Rosslyn Hill Mining Pty Ltd
ACN	075 523 661
File Number	2012/006880-1
Premises	Paroo Station Mine Mining leases M53/502, M53/503, M53/504, M53/1002 and miscellaneous leases L53/106, L53/107, L53/108 and L53/149 WILUNA WA 6646 As defined by the Premises map attached to the Revised Licence
Date of Report	30 April 2021
Decision	Revised licence granted

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**A/MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES**

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

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1. Decision summary

Licence L8493/2010/2 is held by Rosslyn Hill Mining Pty Ltd (the Licence Holder) for the Paroo Station Mine (the Premises), located at Wiluna.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the groundwater monitoring bore network and groundwater monitoring regime at the Premises while the operations remain under care and maintenance. As a result of this assessment, Revised Licence L8493/2010/2 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises.

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 Application summary

On 4 March 2021, the Licence Holder submitted an application to the department to amend Licence L8493/2010/2 (L8943) under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). Tailings storage facility (TSF1 and TSF2) authorised under existing licence L8493 is designed to accept tailings from the lead processing operations on the Premises. Licence L8493 specifies conditions regarding ambient groundwater quality monitoring and a limit for standing water levels for groundwater monitoring bores associated with TSF1 and TSF2.

The Premises is currently under care and maintenance and the last deposition of tailings occurred in 2015. The Licence Holder has advised that one of the groundwater monitoring bores (TDMB 006) associated with TSF1 and TSF2 has recently collapsed resulting in the Licence Holder being unable to gather ambient groundwater quality monitoring data from the bore as required by conditions of licence L8493. In 2020, monitoring bores MTM 001 and TDMB 001 had collapsed resulting in an amendment to Licence L8493, which was granted on 24 November 2020. This application has the same risk assessment and hence licence amendment conditions.

The Licence Holder has requested exemption from ambient groundwater monitoring requirements associated with these collapsed bores until such time that the premises operations are ready to recommence again in the future.

No changes to other aspects of the existing Licence relating to Category 5, 85 and 89 operations have been requested by the Licence Holder.

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 2017).

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
Leachate	Seepage from deposited tailings in TSF1 and TSF2	Seepage to soil and groundwater	<p>The Licence Holder proposes that the lack of groundwater monitoring data on account of the two collapsed bores will not compromise the overall management of potential groundwater impacts associated with TSF1 and TSF2 based on following grounds:</p> <ul style="list-style-type: none"> • The TSFs are located within semi-arid climatic region with very low annual average rainfall; • No tailings deposition has occurred since 2015 and the premises is currently under care and maintenance; and • No exceedances of specified groundwater monitoring limits have occurred since commencement of care and maintenance period in 2015. <p>The following licence conditions are targeted at managing the potential groundwater contamination risk associated with tailings deposition in TSF1 and TSF2.</p> <ul style="list-style-type: none"> • Condition 19 requires the Licence Holder to undertake ambient groundwater monitoring at specified groundwater monitoring bores. Despite the bores MTM 001, TDBM 001 and TDMB 006 being non-operational, the Licence Holder has committed to continuing ambient groundwater monitoring from other bores as required by licence L8493; • The Licence Holder has committed to reinstalling/ replacing the collapsed bores MTM 001, TDMB001 and TDMB 006 prior to the Premises commencing operations, • Condition 19 of licence L8493 specifies standing water limit of 1m below ground level (mbgl) for groundwater monitoring bores associated with TSF1 and TSF2. The limit will continue to apply during the care and maintenance period. A limit of 0.1mg/L for lead concentration in ambient groundwater will also continue to apply; and, • A groundwater recovery plan shall be prepared in the event of specified limit exceedances as required by condition 20 of current licence.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2017), 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 documents environmental receptors that may be impacted as a result of emission and discharges from the Premises (*Guideline: Environmental Siting* (DWER 2016)) as relevant to the scope of this amendment application. Wiluna town site is located 30km west of the Premises.

Table 2: Sensitive receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Groundwater	<p>Seepage to groundwater from the TSF is considered significant given the shallow nature of the water table surrounding the TSF. Monitoring data shows a response in groundwater levels to operation of the TSF as well as from rainfall events.</p> <p>Annual Environmental Report (AER 2019 and 2020) indicates depth to groundwater ranges between 1.79mbgl (MTM 001), 6.3mbgl (TDMB 001) and 1.95mbgl (TDMB 006). Other groundwater analyte concentrations for specified contaminants are consistent with previous years monitoring results.</p> <p>No exceedances of specified limits have been observed and as such the trend is likely to continue during the care and maintenance period.</p>

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2017) 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 in-complete 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 L8493/2010/2 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 care and maintenance

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Operation								
Seepage of contaminants from tailings deposited in TSF1 and TSF2	Seepage containing heavy metals and metalloids (including thallium and lead)	Direct discharge to land resulting in contamination of groundwater	Groundwater levels at the premises range between 3-6mbgl. Four active stock monitoring bores exist within 10km radius of the Premises.	Lack of groundwater monitoring data from the three collapsed bores (MTM 001, TDMB 001 and TDMB 006) will not alter the emissions risk profile associated with TSF1 and TSF2 operations during the care and maintenance period. See Table 2 for further details.	<p>Care and maintenance period:</p> <p><i>C = Minor</i></p> <p><i>L = Rare</i></p> <p>Low Risk</p> <p>Normal operation:</p> <p><i>C = Moderate</i></p> <p><i>L = Possible</i></p> <p>Medium Risk</p> <p><i>(As documented in the risk assessment for normal operations. See Decision Document dated 28 November 2013)</i></p>	Y	<p>Existing Condition 32 addresses notification to the CEO a minimum of 3 months prior to recommencement of mining operations.</p> <p>Existing condition 19 amended: to grant exemption from monitoring at three collapsed bores during care and maintenance period.</p> <p>Existing conditions: 22 and 23 adequately address the installation of replacement monitoring bores.</p>	<p>Emissions and discharges risk associated with seepage from TSF1 and TSF2 will likely change once operations recommence and tailings deposition begins.</p> <p>Previous monitoring data showed that standing water levels at the Premises responded to TSF operation and significant rainfall events.</p> <p>Given the presence and proximity of stock water bores, which may be impacted on account of active deposition of tailings once operations commence, it is important to ensure that the Licence Holder reinstates the collapsed groundwater monitoring bores prior to recommencing operations.</p>

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2017).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **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
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal (8 April 2021)	DMIRS replied on 9 April 2021 and provided no comments on the proposal.	Not applicable.
Licence Holder was provided with draft amendment on 21 April 2021	Licence Holder replied on 29 April 2021 with no comments and requested to waive further consultation.	Not applicable.

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

Condition no.	Proposed amendments
Registered business address	Updated as per application.
Licence History table	Include details of this licence amendment.
19, Table 8 - Note 3	Note 3 updated to include monitoring bore TDMB 006.
22, Table 9	Include TDMB 006 in the infrastructure column.
Schedule 1: Maps	Figure 3 revised to include the location of all three collapsed monitoring bores.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2016, *Guideline: Environmental Siting*, Joondalup, Western Australia.
3. DWER 2017, *Guideline: Risk Assessments*, Joondalup, Western Australia.
4. Rosslyn Hill Mining Pty Ltd, March 2021, *Annual Environmental Report 2020*, Paroo Station Lead Mine, Wiluna WA 6646 (DWER reference DWERDT425479).
5. Rosslyn Hill Mining Pty Ltd, March 2020, *Annual Environmental Report 2019*, Paroo Station Lead Mine, Wiluna WA 6646 (DWER reference DWERDT262878).
6. Rosslyn Hill Mining Pty Ltd, *Application to amend licence L8493/2010/2 dated 4 March 2021*, Paroo Station Lead Mine, Wiluna WA 6646 (DWER reference A1992231).
7. Rosslyn Hill Mining Pty Ltd, *Licence Amendment Cover letter dated 4 March 2021*, Paroo Station Lead Mine, Wiluna WA 6646 (DWER reference A1992232).
8. Rosslyn Hill Mining Pty Ltd, *File Note dated March 2021*, Paroo Station Lead Mine, Wiluna WA 6646 (DWER reference A1992233).
9. Rosslyn Hill Mining Pty Ltd, *letter dated 29 April 2021* regarding L8493/2010/2, Paroo Station (DWER reference A2000686)

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L8493/2010/2	
		Relevant works approval number:		N/A
Date application received		4 March 2021		
Applicant and Premises details				
Applicant name/s (full legal name/s)		Rosslyn Hill Mining Pty Ltd		
Premises name		Paroo Station Mine		
Premises location		Mining leases M53/502, M53/503, M53/504, M53/1002 and miscellaneous leases L53/106, L53/107, L53/108 and L53/149 Wiluna WA 6646		
Local Government Authority		Shire of Laverton		
Application documents				
HPCM file reference number:		2012/006880-1~2		
Key application documents (additional to application form):		Application form (DWERDT423295 & DWERDT423407) including: <ul style="list-style-type: none"> - Attachment 1A – Mining tenements; - Attachment 1C – Authorisation Letter; and - Attachment 3B – File Note 		
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.		Licence amendment to replace three collapsed TSF monitoring bores MTM001, TDMB001 (addressed in November 2020 licence amendment) and TDMB006 (to be addressed by this application). Premises has been in care and maintenance since February 2015.		
Category number/s (activities that cause the premises to become prescribed premises)				
Table 1: Prescribed premises categories				
Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)		
Category 5: Processing or beneficiation of metallic or non-metallic ore	1,700,000 tonnes per annual period	No change to the assessed design capacity of these categories as a result of this licence amendment.		
Category 85: Sewage facility	35 cubic metres per day			
Category 89: Putrescible landfill site	250 tonnes per year			

Legislative context and other approvals		
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: MS 1083 EPA Report No: 1620
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Miscellaneous Mining leases and Mining tenement proven
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Not required as mining project on mining tenure
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	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 <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	East Murchison proclaimed GWA Has Regulatory Services (Water) been consulted? N/A <input checked="" type="checkbox"/> Regional office: North West
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not applicable
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Mining Act 1978</i> <i>Environmental Protection (Unauthorised discharge) Regulations 2004</i>

Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Classification: Possibly contaminated – investigation required (PC-IR) Date of classification: 16/3/2018
Amendment fee checked	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Cat 5 – 50 Units at \$6.80
Premise boundary correct mapped in Geocortex	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Boundary is accurate to tenures