



Application for Licence Amendment

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

Licence Number	L8778/2013/1
Licence Holder	North West Quarries Pty Ltd
ACN	136 680 450
File Number	2013/003865-1
Premises	<p>Pippingarra Quarry Site</p> <p>Mining Tenement M45/258 and General Purpose Leases G45/329, G45/330, G45/47, G45/48, G45/52, G45/53, G45/54, G45/56, G45/58, G45/59, G45/60, G45/61</p> <p>PIPPINGARRA WA 6722</p> <p>As defined by the Premises map attached to the Revised Licence</p>
Date of Report	04 October 2024
Decision	Revised licence granted

A/MANAGER, RESOURCE INDUSTRIES

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

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1. Decision summary

Licence L8778/2013/1 (Licence) is held by North West Quarries Pty Ltd (Licence Holder) for the Pippingarra Quarry Site (the Premises), located at Mining Tenement M45/258 and General Purpose Leases G45/329, G45/330, G45/47, G45/48, G45/52, G45/53, G45/54, G45/56, G45/58, G45/59, G45/60, G45/61, PIPPINGARRA.

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 construction and operation of the Premises. As a result of this assessment, Revised Licence L8778/2013/1 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 Application summary

On 15 April 2024, the Licence Holder submitted an application to the department to amend the Licence under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

The Licence Holder proposes to receive at the Premises a total of up to 50,000 tonnes per annum of end of lifecycle rail ballast recovered from BHP Iron Ore Pty Ltd's Mooka and Nelson Point rail network in Port Hedland. The rail ballast will be trucked to the Premises and then unloaded into stockpiles before being downcycled through the existing mobile crushing and screening plant to produce road base material for onsite use only. The Licence Holder proposes to re-use all received rail ballast at the Premises.

The Licence Holder has an existing category 12 licence for the Premises to authorise the crushing and screening of up to 500,000 tonnes of material per annum. The Licence Holder initially applied to amend their Licence to include a Category 63 (inert landfill) to authorise the acceptance and processing of end of lifecycle rail ballast at the Premises. The description for Category 63 activities in accordance with the *Environmental Protection Regulations 1987* (EP Regulations) is the acceptance of inert waste for burial at the Premises. The department determined the acceptance of rail ballast recovered from other premises and then downcycled through crushing and screening activities does not satisfy the description of a Category 63 prescribed premises. As a result, the department requested the Licence Holder to amend their application requesting an amendment to the Licence to include a Category 61A Solid Waste Facility. A Category 61A solid waste facility is described as a premises on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.

The recovered rail ballast will be received at the Premises and then stockpiled into 1,000 tonnes lots within a 1.0 hectare cleared area within General Purpose Lease G45/47 as shown in Figure 1 below. If any recovered rail ballast is determined unsuitable for use onsite (i.e. contaminated), this material will be segregated from the clean stockpiles and identified with signage. If the contamination is too high for treatment at the Premises (i.e. materials cannot be screened out), the recovered rail ballast will be returned to the client.

Table 1: Proposed changes to the existing Licence

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
12	500,000 tonnes per annual period	No change	Not applicable
61A	New category	50,000 tonnes per annual period	Accepting 50,000 tonnes per year of solid waste (recovered rail ballast) from other premises for storage and reprocessing at the Premises triggers category 61A under Schedule 1 of the EP Regulations (1,000 tonnes or more per year)

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 construction and operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Earth works including construction of earthen bunds Vehicle movements	Air/windborne pathway	Use of water cart to wet down areas as required. No receptors present. No further assessment required.
Operation			
Dust	Unloading and storage of end of lifecycle rail ballast Transferring end of lifecycle rail ballast	Air/windborne pathway	Use of water cart to wet down areas as required. No receptors present. No further assessment required.

Emission	Sources	Potential pathways	Proposed controls
	to crushing and screening plant Vehicle movements		
Contaminated stormwater	Stored end of lifecycle rail ballast	Overland runoff to drainage lines and creek	Laydown area graded to direct stormwater flow away from stockpile areas and towards designated containment areas. Construct bunds around the end of lifecycle rail ballast stockpile area which are designed to contain stormwater runoff. Existing stormwater collection systems including drains, gutters and catch basins. Routine maintenance of erosion controls. Existing routine stormwater sampling and testing to monitor contaminate levels.
		Seepage to groundwater	Maintain separation distance from source to receptor.

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 3 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 3: Sensitive human and environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Underlying groundwater	Approximately 65 metres below ground level.
Beeingarra Creek	Approximately 2.7 km south-west of the Premises.
Minor drainage line	Approximately 1.8 km south-west of the Premises.

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 4.

The Revised Licence L8778/2013/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Category 12 and 61A activities.

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

Table 4. Risk assessment of potential emissions and discharges from the Premises during operation

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								
Unloading, loading and storage of end of lifecycle rail ballast	Hydrocarbon contaminated stormwater	Overland runoff potentially impacting surface water quality	Seasonal minor creek 1.8 km south-west	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	<p><u>Condition 1 – Infrastructure and equipment (construction)</u></p> <p>Condition 3 – Infrastructure and equipment (operation)</p> <p><u>Condition 4 – Waste acceptance.</u></p> <p><u>Condition 5 – Monitoring</u></p> <p><u>Conditions 2, 7 and 8 – Compliance Reporting</u></p> <p>Conditions 6, 9, 10 and 11 – standard recording and reporting conditions</p>	<p>Licence Holder proposed design and construction requirements, including infrastructure location, are included as new conditions in the Licence.</p> <p>Licence Holder proposed operational requirements for managing recovered rail ballast are included as conditions in the Licence.</p> <p>Type of waste authorised for acceptance at the Premises has been included as a new condition.</p> <p>New condition requiring recording the amount of waste accepted at the Premises in tonnes.</p> <p>New conditions requiring the Licence Holder undertakes auditing and reporting following the completion of infrastructure authorised under condition 1.</p>
		Seepage impacting groundwater quality	Underlying groundwater 65 m below ground level	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	<p><u>Condition 1 – Infrastructure and equipment (construction)</u></p> <p>Condition 3 – Infrastructure and equipment (operation)</p> <p><u>Condition 4 – Waste acceptance</u></p>	<p>Licence Holder proposed design and construction requirements, including infrastructure location, are included as new conditions in the Licence.</p> <p>Licence Holder proposed operational requirements for</p>

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				
							<p><u>Condition 5 – Monitoring</u></p> <p><u>Conditions 2, 7 and 8 – Compliance Reporting</u></p> <p>Conditions 6, 9, 10 and 11 – standard recording and reporting conditions</p>	<p>managing recovered rail ballast are included as conditions in the Licence.</p> <p>Type of waste authorised for acceptance at the Premises has been included as a new condition.</p> <p>New condition requiring recording the amount of waste accepted at the Premises in tonnes.</p> <p>New conditions requiring the Licence Holder undertakes auditing and reporting following the completion of infrastructure authorised under condition 1.</p>

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 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
The Licence Holder provided DWER a copy of a letter from the Town of Port Hedland to the Licence Holder dated 7/08/2024.	The Town of Port Hedland stated they had no objections to the proposal.	Noted.
Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) advised of proposal on 29/08/2024	DEMIRS comment period ended 19/09/24. No comments received.	N/A.
Licence Holder was provided with draft amendment on 02/10/2024	Comments received 04/10/2024. The Licence Holder accepted the proposed amendments and requested the revised Licence be issued as soon as possible.	Noted.

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 6 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 6: Summary of licence amendments

Condition no.	Proposed amendments
1	Inclusion of new infrastructure and equipment condition for the construction of the recovered rail ballast stockpile area.
2	Inclusion of new condition allowing operation of the infrastructure constructed under condition 1 following submission of compliance documentation.
3	Existing condition updated to include operational requirements for the recovered rail ballast stockpile area.
4	Inclusion of new condition for the type of waste that can be accepted at the Premises including maximum tonnes received and the specifications for acceptance.

Condition no.	Proposed amendments
5	Inclusion of new condition requiring the Licence Holder to monitor the amount of recovered rail ballast accepted at the Premises for stockpiling and processing.
7 & 8	Inclusion of new conditions requiring auditing and reporting is undertaken following the construction of the recovered rail ballast stockpile area.
9	Condition amended in line with current licence format.
10	Condition amended to include the requirement to record the monitoring undertaken in condition 5.
11	Definitions table updated with new definitions.
Premises map	Map updated.

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. Northwest Quarries Pty Ltd, *Department of Water and Environmental Regulation Application form for a Licence amendment*, dated 7 August 2024.
5. Northwest Quarries, *Management Plan Environmental Management (Rev No:5)*, Issue date 30/01/2024.