



Application for Licence

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

Licence Number	L9438/2024/1
Applicant	BHP Iron Ore Pty Ltd
ACN	008 700 981
File number	DER2024/000210
Premises	Quarry 1 Inert Landfill Legal description Miscellaneous Licence L45/190 Miscellaneous Licence L45/132 Crown Lease Forrest 140 Quarry 1(MNJV) (MNSA) Lot 140 on Deposited Plan 48922 Certificate of Title Volume 3140 Folio 541 As defined by the coordinates in Schedule 1 of the licence. As defined by the premises maps attached to the issued licence.
Date of report	31 July 2024
Decision	Licence granted

Grace Heydon – A/Manager Waste Industries

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

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Application summary and overview of premises	1
3. Risk assessment	3
3.1 Source-pathways and receptors	3
3.1.1 Emissions and controls	3
3.1.2 Receptors	4
3.2 Risk ratings	5
4. Consultation	7
5. Conclusion	8
References	8
Appendix 1: Application validation summary	9

1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the operation of the premises. As a result of this assessment, Licence L9438/2024/1 (L9438) has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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 and overview of premises

On 9 May 2024, the applicant submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is to seek a licence relating to Category 63 Class I inert landfill at the premises. The premises is approximately 25 km south of Port Hedland and 12 km south of South Hedland.

The premises relates to the Category 63 and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9438. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in licence L9438.

The Applicant, BHP Iron Ore Pty Ltd (BHP), regularly undertakes rail maintenance programs involving the replacement of concrete rail sleepers and rail ballast. BHP is proposing to dispose of inert rail waste from maintenance programs within the existing Quarry 1.

BHP currently has eight quarries situated along the Port Hedland to Newman main rail line that have been used for the construction of the main line railway network since the 1960s. Quarry 1 is no longer being used for the supply of construction and ballast materials. BHP is proposing to utilise the existing Quarry 1 void for the disposal of inert waste from ongoing rail maintenance.

The waste will comprise of inert waste rock ballast, old concrete sleepers and other associated inert material. Quarry 1 has a calculated mined out volume of 183,000m³.

Inert waste will be disposed of at Quarry 1 on an intermittent basis (dependent on activities in the area). This means that for a number of years the quarry may receive little to no waste, while in others it could receive up to 150,000 tonnes of inert waste. Based on this BHP is seeking to licence the facility to receive a maximum Production and Design Capacity (P&DC) of 150,000 tonnes per annual period of inert waste.

Before disposal, waste ballast will be tested for contaminants and will only be disposed into the landfill if it is classified as inert as defined in accordance with the *Landfill Waste Classification and Waste Definitions, 1996*. Once filled to ground level the facility will be capped and rehabilitated.

As Quarry 1 is an existing void (Borrow Pit) there is no construction works required for the disposal of the inert waste. Therefore, no Works Approval is required prior to operations and the application for a Licence by the applicant is appropriate. Figure 1 below provides an overview of the proposed premises.



Figure 1: Premises overview

Licence: L9438/2024/1

IR-T13 Decision report template (short) v3.0 (May 2021)

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 decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Operation			
Dust	Disposal of inert waste material and associated vehicle movements.	Air / windborne pathway	Disposal activities will be intermittent. Siting location. Due to size of Quarry – vehicle speed will be restricted.
Noise			Disposal activities will be intermittent. Siting location. All onsite machinery fitted with mufflers. <i>Compliance with Environmental Protection (Noise) Regulations 1997</i> (Noise Regs).
Leachate	Disposal of inert waste	Seepage to soil and groundwater	Before disposal, waste ballast will be tested for contaminants and will only be disposed of into the landfill if it is classified as inert as defined in accordance with the <i>Landfill Waste Classification and Waste Definitions, 1996</i> . No putrescible, hazardous wastes (including asbestos) or Controlled wastes will be disposed of at the facility. Depth to groundwater.
Contaminated Stormwater		Overland runoff potentially causing ecosystem disturbance or impacting surface water	The quarry has been cut back into the surrounding hillside which has the effect of capturing surface water runoff. Before disposal, waste ballast will be tested for contaminants and will only be disposed of into the landfill if it is classified as inert as defined in accordance with the <i>Landfill Waste</i>

Emission	Sources	Potential pathways	Proposed controls
		quality	<i>Classification and Waste Definitions, 1996.</i> No putrescible, hazardous wastes (including asbestos) or Controlled wastes will be disposed of at the facility.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors 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
South Hedland	12km north
FMG Bullen Hill Camp	8.7km west
Environmental receptors	Distance from prescribed activity
Pilbara Groundwater Area,	Proclaimed under the Rights in Water and Irrigation Act 1914 (RIWI Act) (DoW, 2009a). There are no public drinking water source areas within or adjacent to the Application Area.
Underlying groundwater	The water table is generally within 5 to 10 metres of the surface in the granitic areas but may be quite deep below the greenstone hills.
Surface Water	The site is located on the watershed between the catchment of the Turner River to west and the Beebingarra Creek to the east. A non-perennial creekline which runs from north to south approximately 1.8 km to the west of the Premises is discontinuous to the north, which indicates that the quarry is located within the area between the two main surface water systems.
<i>Environmental Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	Biologic (2014) identified two fauna habitats within the Prescribed Premises: 1. Artificial Northern Quoll Habitat: Artificial habitats are habitats that have been altered by human activity that are known to support Northern Quoll. 2. Sand Plain: These are relatively deep sandy soils supporting dense spinifex grasslands and sparse low shrubs. This habitat transitions into patches of Mulga in places. <i>Macrotis lagotis</i> (Greater Bilby) (Vulnerable)

	EPBC Act; Schedule 3 BC Act) and <i>Macroderma gigas</i> (Ghost Bat) (Vulnerable EPBC Act; Schedule 3 BC Act).
Aboriginal Heritage	There is one heritage site within the proposed Prescribed Premises. In the event that a heritage site is identified and needs to be disturbed as part of the Project, BHP will consult with the Kariyarra People to obtain the relevant Section 18 approval.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source 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 applicant 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 applicant'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 applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Licence L9438 that accompanies this decision report authorises emissions associated with the operation of the premises.

The conditions in the issued licence, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 1: Risk assessment of potential emissions and discharges from the premises during operation

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Operation								
Disposal of inert waste material Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	FMG Bullen Hill Camp 8.7km west	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	N/A
	Noise	Air / windborne pathway causing impacts to health and amenity	FMG Bullen Hill Camp 8.7km west	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	N/A
	Leachate	Seepage into soils and groundwater	Groundwater 5-10mbgl	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 1, 2, 3, 4 and 5	N/A
	Sediment laden stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Non-perennial creek line which runs from north to south approximately 1.8 km to the west	Refer to Section 3.1	C = Slight L = Unlikely Low 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 applicant 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
Application advertised on the department's website on 27/05/2024	None received	N/A
Local Government Authority (Town of Port Hedland / Town) advised of proposal on 22/05/2024	<p>The Town requested an extension to Comment to 18 June 2024 and a subsequent extension request was granted until 1 July 2024.</p> <p>DWER responded to the Town's first letter of comments on 9 July to answer the Town's questions.</p> <p>The Town provided final comment on 23 July 2024 stating, <i>'After considering the additional information received from DWER on 9 July 2024 and the Applicant on 15 July, the Town has no objection to the proposal.'</i></p>	Noted.
Department of Mines, Energy, Industry Regulation and Safety (DEMIRS) advised of proposal 22/05/2024	<p>DEMIRS replied on 31 May 2024 with the following comments:</p> <ul style="list-style-type: none"> • The supporting documentation states that the Northern Quoll has been recorded from the Prescribed Premises including the proposed landfill location. However, it is then stated that the inert landfill is unlikely to impact Northern Quoll as the landfill area does not contain suitable habitat. Based on the known occurrence of Northern Quoll in the area, the risk posed to Northern Quoll should be appropriately managed to ensure impacts are minimised to an acceptable level. If the impact to Northern Quoll cannot be avoided, then other locations should be considered for the waste. • DEMIRS reminds the proponent of their obligations under the Mining Act 1978 to seek any relevant and required approvals under that act for activities that are not currently approved. 	<p>DWER notes DEMIRS advice regarding the Applicants obligations under the Mining Act 1978. It is the responsibility of the Applicant to ensure all relevant approvals are in place prior to commencing operations.</p> <p>Advice regarding the Northern Quoll is outlined in the response to the draft Decision Report and Licence from the Applicant below.</p>
Kariyarra Aboriginal Corporation (KAC) advised of proposal on 22/05/2024	KAC did not respond.	Noted

<p>Applicant was provided with draft documents on 23 July 2024.</p> <p>DWER requested clarification on Northern Quoll status at the Premises and management actions if present at the Premises.</p>	<p>The Applicant responded on 30 July 2024 providing a response to the Northern Quoll query from DWER and the query from DEMIRS as outlined in Table 4.</p> <p><i>In response to the query around Northern Quoll management in the Decision Report, BHP manages Northern Quolls along the Newman to Port Hedland Rail Line (including Quarry 1) in accordance with BHP's Northern Quoll Management Plan (attached) which is required under Condition 14 of the Rail Strategic NVCP CPS 7009/3. Any activities within Quarry 1 will comply with the requirements of the plan to prevent any impacts of Northern Quolls</i></p> <p>The Applicant also advised they have no comments on the draft Decision Report and Licence and happy to waive the remainder of the comment period.</p>	<p>Noted.</p>
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5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

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.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
Application type				
Works approval	<input type="checkbox"/>			
Licence	<input checked="" type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input type="checkbox"/>	Current works approval number:		
Amendment to licence	<input type="checkbox"/>	Current licence number:		
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received	9 May 2024			
Applicant and premises details				
Applicant name/s (full legal name/s)	BHP Iron Ore Pty Ltd			
Premises name	Quarry 1			
Premises location	Miscellaneous Licence L45/190 Miscellaneous Licence L45/132 Crown Lease Forrest 140 Quarry 1 Lot 140 on Deposited Plan 48922 Volume 3140 Folio 541			
Local Government Authority	Town of Port Hedland			
Application documents				
HPCM file reference number:	DER2024/000210			
Key application documents (additional to application form):	Application Form Supporting Document			
Scope of application/assessment				

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)

Summary of proposed activities or changes to existing operations.	<p>Licence</p> <p>Operation of Category 63 inert landfill.</p> <p>BHP regularly undertakes rail maintenance programs involving the replacement of concrete rail sleepers and rail ballast. BHP is proposing to dispose of inert rail waste from maintenance programs within the existing Quarry 1.</p> <p>No works approval required as there are no construction works for the existing quarry void.</p>
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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 63: Class I Inert landfill	150,000 tonnes per annual period	N/A

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 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 type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input checked="" type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Approval: Expiry date: If N/A explain why?
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CPS No: CPS 7009/3 No clearing is proposed – clearing may be required for access tracks
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 type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
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"/>	Application reference No: Licence/permit 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: Swan Avon / Mid-West Gascoyne / Kwinana Peel / North West / South West / Goldfields / South Coast
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Note: If the proposed activity is not listed as a compatible land use with the PDWSA please consult with the relevant regional office (Regulatory Services - Water) and Water Source Protection (Science and Planning).
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)	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"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>If Yes include details here.</p> <p>Classification: N/A / possibly contaminated – investigation required (PC-IR) / not contaminated – unrestricted use (NC-UU) / contaminated – restricted use (C-RU) / remediated for restricted use (RRU) / contaminated – remediation required (C-RR) / decontaminated (Decon)</p> <p>Date of classification: N/A</p>