



Application for Licence

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

Licence Number	L9439/2024/1
Applicant	BHP Iron Ore Pty Ltd
ACN	008 700 981
File number	DER2024/000209
Premises	Quarry 6 Inert Landfill Legal description Crown Lease I123595 Quarry 6 (Sand Hill)- Windell Location 48 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
2.3 Potential Contaminated site	2
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	7
References	7
Appendix 1: Application validation summary	8

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 L9439/2024/1 (L9439) 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 for the operation of a Class I inert landfill at the premises. The premises is approximately 60 km north of Newman.

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 L9439. 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 L9439.

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 6.

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 6 is no longer being used for the supply of construction and ballast materials. BHP is proposing to utilise the existing Quarry 6 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 6 has a calculated mined out volume of 261,700m³.

Inert waste will be disposed of at Quarry 6 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 meets the Class I landfill waste acceptance specifications as outlined in the *Landfill Waste Classification and Waste Definitions, 1996*. Once filled to ground level the facility will be capped and rehabilitated.

As Quarry 6 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.

2.3 Potential Contaminated site

The application advises there are two potentially contaminated sites within, and one adjacent to, the proposed Prescribed Premises. These sites are associated with historical activities at Quarry 6 and include former landfills, which potentially contain asbestos materials. BHP currently has no plans to disturb these sites, however, if necessary, asbestos material may be relocated to the Quarry 6 landfill. Prior to the relocation of any asbestos materials BHP will undertake an investigation to identify the extent of the asbestos materials. Any relocated asbestos materials will be disposed of in a separate area of the landfill by a competent person in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)], Australian Standard 2601 – The Demolition of Structures, and the *Environmental Protection (Controlled Waste) Regulations 2004*. Any asbestos material disposed of to the landfill will be from existing sites within the proposed Prescribed Premises, i.e. no asbestos materials will be brought into the Prescribed Premises.

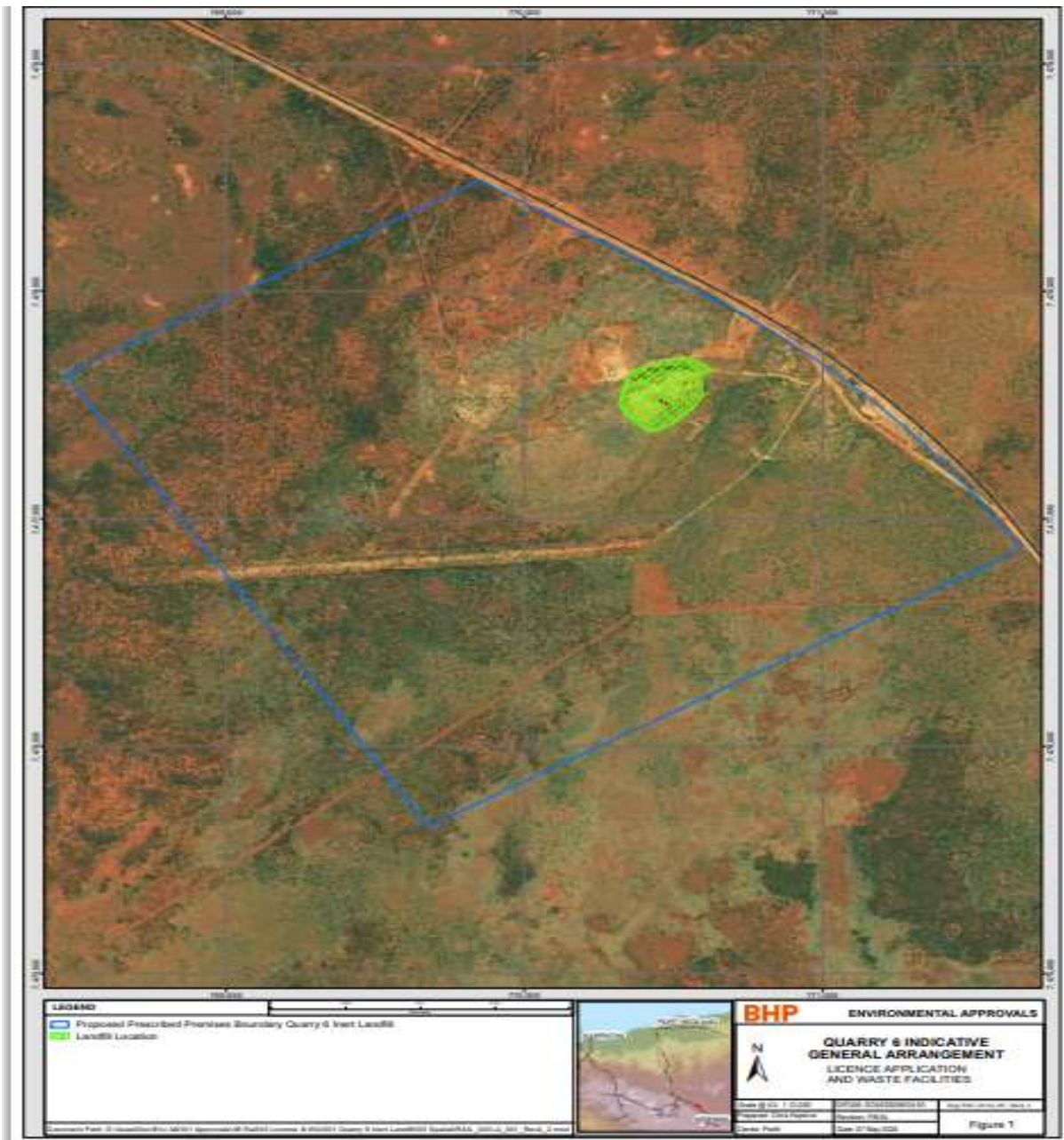


Figure 1: Premises overview

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).
Asbestos fibres	Disturbance of existing Asbestos Contaminated Material (ACM)	Air / windborne pathway	Any asbestos containing materials identified within the Prescribed Premises which requires relocation will be disposed of in a separate area of the landfill by a competent person in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)], Australian Standard 2601 – The Demolition of Structures, and the <i>Environmental Protection (Controlled Waste) Regulations 2004</i> . Controlled wastes, as defined by the <i>Environmental Protection (Controlled Wastes) Regulations 2004</i> , will be properly handled and stored prior to removal from the site by a licensed waste removal contractor. If required, disturbed ACM will be disposed to the landfill.

Emission	Sources	Potential pathways	Proposed controls
			Siting location.
Leachate	Disposal of inert waste	Seepage to soil and groundwater	<p>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>.</p> <p>No putrescible, hazardous wastes (including asbestos) or Controlled wastes will be disposed of at the facility.</p> <p>Depth to groundwater.</p>
Contaminated Stormwater		Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	<p>The quarry has been cut back into the surrounding hillside which has the effect of capturing surface water runoff.</p> <p>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>.</p> <p>No putrescible, hazardous wastes (including asbestos) or Controlled wastes will be disposed of at the facility.</p>

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
Homesteads	Marillana 30km north west Roy Hill 38km north east
Environmental receptors	Distance from prescribed activity
Pilbara Groundwater Area	Premises lies within
Underlying groundwater	4mbgl
Aboriginal Heritage	The Prescribed Premises falls within the Nyiyaparli (WC 2005/6) Native Title Claim. Archaeological and ethnographic surveys of the Prescribed Premises have been undertaken by

	BHP. There are four heritage sites within the Prescribed Premises
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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 L9439 that accompanies this decision report authorises emissions associated with the operation of the premises i.e.

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 Removal / deep burial of asbestos waste	Dust	Air / windborne pathway causing impacts to health and amenity	Homesteads Marillana 30km northwest Roy Hill 38km northeast	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		Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	N/A
	Asbestos fibres	Air / windborne pathway causing impacts to health and amenity		Refer to Section 3.1	C = Severe L = Rare High Risk	N	Condition 1, 2, 3, 4 and 7	The Delegated Officer considers the addition of standard asbestos management conditions mitigates the risk of asbestos fibers. Note – no ACM is to be accepted onto the Premises. There may be some existing ACM at the premises that may require disposal via deep burial. Hence the inclusion of conditions 3 and 4 to manage ACM.
	Leachate	Seepage into soils and groundwater	Groundwater 4mbgl	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 1, 2, 3 and 4	N/A
	Sediment laden stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	No watercourses flow through or occur adjacent to the Premises.	Refer to Section 3.1	C = Slight L = Rare Low Risk	Y	Condition 5	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 advised of proposal on 22/05/2024	Shire of East Pilbara did not respond.	N/A
Department of Mines, Energy, Industry Regulation and Safety (DEMIRS) advised of proposal 22/05/2024	DMIRS replied on 31 May 2024 advising that they had reviewed the relevant information as directed in the referral letter and could confirm that the department had no further comments to provide.	Noted
Karla Nyiyaparli Aboriginal Corporation (KNAC) advised of proposal on 22/05/2024	KNAC did not respond.	Noted
Applicant was provided with draft documents on 15 July 2024	The Applicant responded on 30 July 2024 advising BHP has no comments and is happy to waive the remainder of the comment period.	Noted

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 6			
Premises location	Crown Lease I123595 Quarry 6 (Sand Hill)- Windell 48			
Local Government Authority	Shire of East Pilbara			
Application documents				
HPCM file reference number:	DER2024/000209			
Key application documents (additional to application form):	Application Form Supporting Document			
Scope of application/assessment				
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 6.</p> <p>No works approval required as there are no construction works for the existing quarry void.</p>			

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

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 checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input checked="" 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 checked="" 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.
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.

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
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: N/A Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: N/A
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: 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 checked="" type="checkbox"/>
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"/>	<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 type="checkbox"/> No <input checked="" type="checkbox"/>	Applicant has advised that there are two potentially contaminated sites within, and one adjacent to, the Prescribed Premises. These sites are associated with historical activities at Quarry 6 and include former landfills, which potentially contain asbestos materials. BHP currently has no plans to disturb these sites, however, if necessary, asbestos material may be relocated to the Quarry 6 landfill.