Decision Report

Application for Licence

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L9418/2023/1

Applicant Wiluna Fe Pty Ltd

ACN 644 197 446

File number DER2023/000660

Premises John William Doutch Project

Ullalla Road

WILUNA WA 6646 Legal description-

Mining Tenements M 53/1078, L53/146 and part of M 53/1018

As defined by the premises maps in Schedule 1 and the

coordinates in Schedule 2 of the issued licence

Date of report 12 March 2024

Decision Licence granted

A/MANAGER RESOURCE INDUSTRIES, REGULATORY SERVICES an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Table of Contents

1.	Deci	sion summary	.1
2.	Scop	e of assessment	.1
	2.1	Regulatory framework	.1
	2.2	Application summary	.1
	2.3	Overview of premises	.1
3.	Risk	assessment	.2
	3.1	Source-pathways and receptors	.3
		3.1.1 Emissions and controls	.3
		3.1.2 Receptors	.5
	3.2	Risk ratings	.8
4.	Cons	sultation1	1
5 .	Cond	clusion1	2
Refe	erence	es1	2
		1: Summary of applicant's comments on risk assessment and draft s (if required)1	3
Арр	endix	2: Application validation summary1	4
Tabl	e 1: Pr	oposed applicant controls	.3
Tabl	e 2: Se	nsitive human and environmental receptors and distance from prescribed activity	.6
		sk assessment of potential emissions and discharges from the premises during	.9
Tabl	e 4: Co	nsultation1	11
Figu	re 1: M	obile crushing and screening plant layout	2
Figu	re 2: M	obile crushing and screening plant flow diagram.	3
Figu	re 3: D	istance to sensitive receptors	9
Figu	re 4: Di	stance to sensitive receptors (Priority flora and Aboriginal Heritage survey area)	9

1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during operation of the premises. As a result of this assessment, licence L9418/2023/1 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

On 5 October 2023, 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 the operation of a mobile crushing and screening plant to process 2.0 million tonnes per annum (Mtpa) of iron ore at the premises (John William Doutch Project (JWDP)). Layout of the crushing and screening plant is shown in Figure 1. The premises is approximately 34 km north-east of the township of Wiluna in the Goldfields region on mining tenements M 53/1078 and part of M 53/1018. The JDWP forms part of the larger Wiluna West Iron Ore Project, which comprises of eight iron ore deposits over two banded iron ore formation ridges.

The premises relates to the category 5 and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9418/2023/1. 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 L9418/2023/1.

2.3 Overview of premises

On 15 January 2021 Wiluna Fe Pty Ltd applied for a works approval under section 54 of the *Environmental Protection Act 1986* (EP Act). The application was to undertake construction works, commissioning and time limited operations of a mobile crushing and screening plant to process iron ore from the JWDP. Works approval W6493/2021/1 was granted, with conditions on 17 March 2021. Commissioning of the crushing and screening plant was completed on 30 August 2023. The crushing and screening plant has been operating under time limited operations authorized by Works Approval W6493/2021/1 since this date.

The JWDP has an expected mine life of up to four years of operations and is comprised of three stages which are identified according to the stage of open pit development, with the total ore production over the life of the mine to be 3 million tonnes.

The ore will be mined from the open pits and transported via haul trucks to the Run-of-Mine (ROM) pad and then stockpiled ready for processing. ROM stockpiles will have a maximum capacity of 30,000 tonnes for each product. Iron ore will be fed into the hopper of the primary crushing unit via a front-end loader where it will be processed through a three-stage crushing and two-stage screening plant before being conveyed to two final product stockpiles, namely lumps (between 31.5 and 6.3mm) and fines (less than 6.3mm). Any oversize ore identified to be too large to be fed through the primary crusher will be separated into an oversize stockpile and periodically processed using a rock breaker before being processed through the crushing and screening plant. Final products will be separately stockpiled and transported offsite via road

trains to Geraldton for export overseas.

The primary jaw crusher, output of the fines product stacker and output of the tertiary crusher will be equipped with water sprays to achieve a target moisture content of 5% for fine products and 3.5% for lump during the crushing and screening process. The water sprays will help to minimise dust emissions during ore processing. A mobile water truck with a water cannon and/or spray bar will be utilised to manage dust emissions on the ROM pad, and in and around the plant and product stockpile areas. The plant is proposed to be in operation 7 days per week.

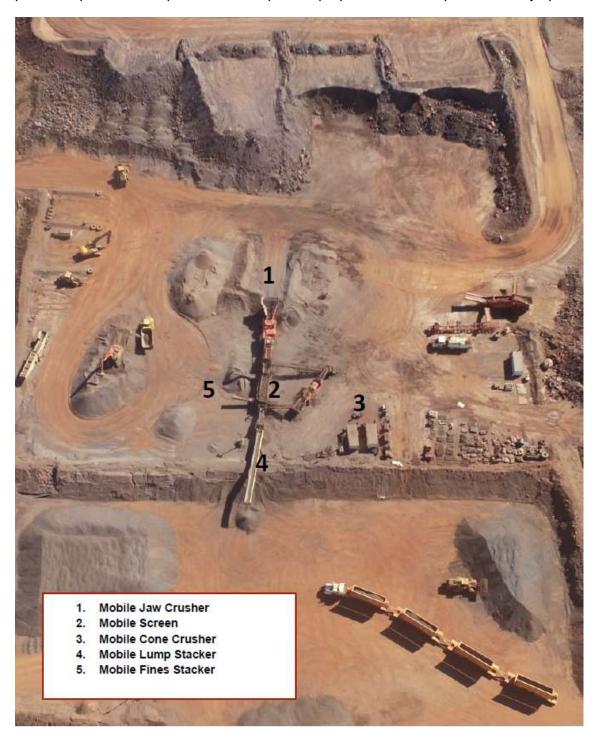


Figure 1. Mobile crushing and screening plant layout Source: Figure provided by the applicant

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	Screening, crushing, unloading and storage of material	Air/windborne pathway.	Water to be used for dust suppression is not saline. Licence to Take Water GWL202977(2). Dust suppression sprays and sprinklers to be operated at the ROM feed hopper and transfer points and on the product stockpile to control levels of fugitive dust. Dust suppression sprays and sprinklers to be operated on the product stockpiles to control levels of fugitive dust. Dust suppression sprays and sprinklers to be operated on the crusher during tipping and crushing activities. Daily visual inspection of the operational area to be conducted to identify excessive dust generation. All products (lumps and fines) to be wetted down prior to loading to haul trucks to minimise dust generation.

	Vehicle movements		Vehicle speeds restricted on all unsealed access roads and haul roads. Dust suppression via water cart must occur on unsealed access roads and haul roads. Vehicle traffic must be confined to the defined access roads and tracks on site.
Noise	Crushing and screening of ore, vehicle movements, unloading, loading and stockpiling of material during ore processing	Air/windborne pathway	Noise emissions will be minimised by ensuring the crushing and screening and all associated equipment is regularly maintained. Equipment and design to be compliant with Australian Standard noise limits.
Sediment laden stormwater	Water and sediments generated via runoff from the ROM pad, process plant and stockpiles area	Overland runoff during high rainfall events	The perimeter of the ROM pad, process plant and stockpiles area is bunded to ensure any potentially contaminated stormwater is contained. Collection sump located in the south west corner of stockpile area is pumped if required, to prevent overflowing of contaminated stormwater. Sediment basins is regularly inspected particularly following large rainfall events.

Hydrocarbon/che mical spills and breach of containment or hydrocarbon contaminated stormwater	Hydrocarbon/che mical spills or leaks from vehicle and equipment use, refueling and maintenance. Spillage, leakage and seepage of hydrocarbons and chemicals used and stored onsite. Wastewater generated containing oily water generated from washdown areas.	Overland run-off causing infiltration to soil and transport through groundwater.	All hydrocarbon storage areas will be designed and constructed in accordance with Australian Standards (AS) AS1940 Storage and Handling of Flammable and Combustible Liquids (2004) and AS1692 Steel tanks for flammable and combustible liquids. The collection sump will be regularly inspected, and if required contaminated stormwater will be pumped from the sump and transported offsite to a licensed facility. Fuel bowsers and fuel delivery inlets will be located on High-density polyethylene lined pads and/or drip trays to contain any potential spills or drips. All chemical and reagents classed as dangerous goods must be stored in accordance with the Dangerous Goods Safety Act 2004 and the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007. Spill kits must be retained on site around hydrocarbon storage areas in the event there is hydrocarbon or chemical spill on site. Waste oil is stored in a tank and removed from site for recycling by a licensed collection service. Level indicators are installed on chemical storage containers to detect any leaks when there are drops in storage levels.
	Hydrocarbon spills or leaks from workshop and washdown facility.	Overland run-off causing infiltration to soil and transport through groundwater.	Washdown bay is located on an impervious pad and constructed so that any hydrocarbon contaminated wastewater and sediment will drain towards a collection sump.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020b), 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 2020a)).

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

Human receptors	Distance from prescribed activity				
No human receptors nearby	No residential receptors located within a five kilometer buffer area. Nearest residential receptor is the Ullalla Homestead located 25 kilometers south-west of the prescribed premises.				
	Receptor screened out.				
Environmental receptors	Distance from prescribed activity				
Priority Ecological Community	Wiluna West vegetation complexes (banded ironstone formation) (Priority 1) intersects the prescribed premises boundary.				
Priority flora species	Of the 2100 records of the Priority 3 flora species <i>Sida picklesiana</i> recorded within the larger flora survey area, 23 records are located within the prescribed premises boundary. The applicant has approval to clear these individual records under Clearing Permit CPS 4006/3. Receptor screened out.				
Threatened fauna species	A record of the threatened fauna species <i>Leipoa ocellata</i> (Malleefowl) has been recorded on the Department of Biodiversity, Conservation and Attractions database approximately 937 metres north of the north west corner of the prescribed premises boundary. A targeted Malleefowl survey determined that the footprint area is not considered to be suitable for Malleefowl as it does not contain suitable habitat for this species. Although suitable habitat does not occur within the prescribed premises boundary area, the proponent is required to undertake targeted Malleefowl surveys prior to any clearing activities under CPS 4006/3.				
	Receptor screened out.				
RIWI Act Groundwater Areas	The prescribed premises boundary intersects the East Murchison Groundwater Area.				
Surface Water Lines	Several ephemeral watercourses are in close proximity to the prescribed premises boundary, with the closest being an ephemeral drainage line that runs through the center of the footprint area.				
Aboriginal Sites and Heritage Places	The prescribed premises is situated within a mapped Aboriginal Heritage Area. There is one rock shelter, archeology site (24647) which is recorded as Lodged (stored data). There is one ethnographic site (24581) which is recorded as SD (Stored Data). Works will be undertaken in accordance with a JWDP Cultural Heritage Management Plan.				
	The Native Title holders are represented by Tarlka Matuwa Piarku (Aboriginal Corporation) (TMPAC) RNTBC.				

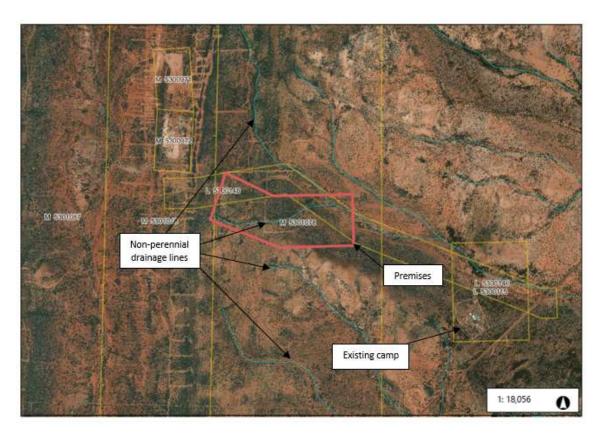


Figure 3: Distance to sensitive receptors

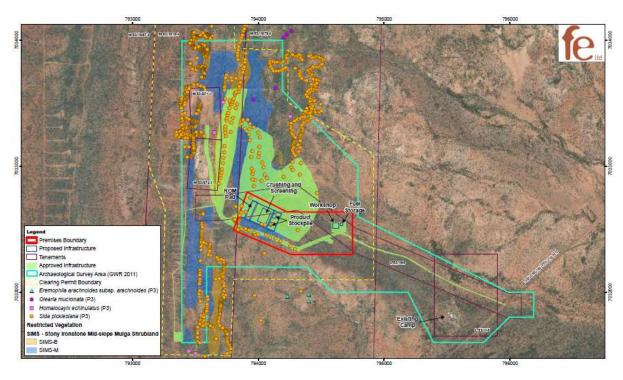


Figure 4: Distance to sensitive receptors (Priority flora and Aboriginal Heritage survey area)

Source: Image provided by applicant

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 L9418/2023/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e. crushing and screening and associated earth moving activities.

The conditions in the issued licence, as outlined in Table 3 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 events	events				Risk rating ¹				
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls	
Operation									
		ecosystem disturbance and impacts to Priority 3 and impacts to Priority 3 priority ecological community (PEC) (Priority 1) intersects the proposed		C = Minor L = Unlikely Medium Risk	Yes Condition 1 Condition 2		Offsite impacts from dust emissions during site operations may result in the degradation of adjacent TEC remnant native vegetation. The Delegated Officer determined that this risk event is unlikely to occur in most circumstances due		
Screening, crushing, unloading, loading and storage of material Vehicle movements on	Dust	Air/windborne pathway potentially causing impacts to Cultural Heritage sites	Aboriginal Heritage Sites	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Yes	Yes Condition 1 Condition 2 Controls. The applicant's infi controls (water spr conditioned within The Delegated Or any impacts of do significant sites)	to the applicant's proposed controls. The applicant's infrastructure controls (water sprays etc) are conditioned within the licence. The Delegated Officer notes that any impacts of dust on culturally significant sites will also be mitigated by existing dust controls.	
	Sediment laden stormwater	Overland runoff during high during rainfall events potentially which may cause impacts to vegetation and surface water drainage lines	Ephemeral drainage lines intersect and surround the prescribed premises boundary. The Wiluna West vegetation complexes (banded ironstone formation) PEC (priority 1) intersects the prescribed premises boundary.	Refer to section 3.1	C = Minor L = Unlikely Medium Risk	Yes	Condition 1	Low level onsite impacts and minimal off-site impacts from sediment emissions may occur during operations. The Delegated Officer considers the applicant's proposed controls for stormwater management as outlined in section 3.1 are adequate to control sediment laden water runoff and prevent the risk of stormwater contamination. The applicant's infrastructure controls are conditioned within the licence.	

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Risk events					c events				Risk rating ¹			
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	• •		Conditions ² of licence	Justification for additional regulatory controls				
Hydrocarbon spills or leaks from vehicle and equipment use, refueling or maintenance activities. Spillage, leakage and seepage of hydrocarbons and chemicals used and stored onsite.	Spills / leaks of hydrocarbons	Seepage through the soil profile to groundwater may result in the contamination of soils and the deterioration of groundwater quality. Overland runoff during rainfall events potentially causing ecosystem disturbance and impacting surface water quality.	Ephemeral drainage lines intersect and surround the prescribed premises boundary. The Wiluna West vegetation complexes (banded ironstone formation) PEC (priority 1) intersects the prescribed premises boundary.	Refer to Section 3.1	C = Minor L= Unlikely Medium Risk	Yes	Condition 1	Low level onsite impacts and minimal off-site impacts from hydrocarbon emissions may occur during operations. It is unlikely for this risk event to occur due to the applicant's proposed controls. The applicant's infrastructure controls are conditioned within the licence.				

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 11 December 2023	None received.	N/A
Shire of Wiluna advised of proposal on 11 December 2023	None received.	N/A
DPLH advised of proposal on 11 December 2023	DPLH replied on 19/12/2023 stating that the prescribed premises boundary is not within the boundary of Aboriginal Heritage Place ID 24647 (GWR-RS-106) and that section 5 of the <i>Aboriginal Heritage Act 1972</i> does not apply to ID 24581. DPLH notes that the prescribed premises is within the Tarlka Matuwa Piarku Aboriginal Corporation Determination area and acknowledges that Wiluna Fe have conducted archaeological and ethnographic Aboriginal heritage surveys and site inductions will be conducted regarding Aboriginal heritage awareness to aid in identification and preservation of any possible sites. DPLH encourages the Department to engage in ongoing consultation with TMPAC.	Noted.
Talk Matuwa Piarku (Aboriginal Corporation) RNTBC advised of proposal on 11 December 2023	Request for extension on invitation to comment period.	The Department initiated further invitation to comment after no comment was received during the 21-day consultation period as the period included the Christmas and New Year Public Holidays. A two-week extension to 23 January 2023 was subsequently granted by the Department. Following no comments being received from TMPAC, during this time, the Department enquired if comment would be made on 30 January 2024. On 31 January TMPAC replied that although they did wish to provide comment, they were unable to comment at this time. The Department followed up with

	TMPAC on 6 March. No comments
	were received.

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) 2020a, *Guideline:* Environmental Siting, Perth, Western Australia.
- 3. Department of Water and Environmental Regulation (DWER) 2020b, *Guideline: Risk Assessments*, Perth, Western Australia.

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

Condition	Summary of applicant's comment	Department's response
Decision report text	The applicant requested that mention of operating the crusher and screening plant is to occur during day time hours from Monday to Sunday be removed from the list of applicant controls in Table 1.	The Delegated Officer has reassessed the risk assessment in light of the applicant's response and is satisfied that hours of operation do not change the risk rating.
	Justification for the removal of the proposed control was that this was proposed in the works approval application and that expected throughput of 400 tonnes per annual period was not achievable in practice. In order to reach their annual production target, the plant will need to operate at night on occasion. Throughput will not be changed and generally operations will be during daytime hours with mainly maintenance performed at night.	There are no sensitive receptors to noise near the prescribed premises. Table 1 in the decision report has been updated accordingly.
Definitions	The department queried the applicant on their preference for annual reporting period to follow calendar year or financial year. The applicant responded that financial year would be preferred as it would align with their AER requirements.	Table 2. Definitions, has been updated to define annual period as a financial year.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)						
Application type						
Works approval						
		Relevant works approval number:	W6493/2021/1		None	
		Has the works approve with?	Il been complied	Yes	s⊠ No	
Licence	\boxtimes	Has time limited operations works approval demonacceptable operations?	strated	Yes	s⊠ No	□ N/A □
		Environmental Complia submitted?	ance Report	Yes	s⊠ No	
		Date report received:	19 July 2023			
Renewal		Current licence number:				
Amendment to works approval		Current works approval number:				
A		Current licence number:				
Amendment to licence		Relevant works approval number:			N/A	
Registration		Current works approval number:			None	
Date application received		5 October 2023			I	
Applicant and premises details		,				
Applicant name/s (full legal name/s)		Wiluna Fe Pty Ltd				
Premises name		Wiluna West Iron Ore I	Project			
Premises location		L53/146, M53/1078,	M53/1018			
Local Government Authority		Shire of Wiluna				
Application documents						
HPCM file reference number:		DER2023/000660				
	 Attachment 1A: Proof of Occupier Status, Mining tenement summary report (M53/1078) Attachment 1B: Current Company Extract (ASIC CAN 112 731 638) Attachment 1C: Authorisation Letter Attachment 5A: Table of Other Approvals 					
Key application documents (additional to application form):		 Attachment 5B: Approved Clearing Permit Plan Attachment 5C: Mining Proposal and Mine Closure Plan Approval Attachment 5D: Table of Stakeholder Consultation Attachment 6A: Emissions Discharges – Environmental Impacts and Risks Attachment 7: Siting and Location Attachment 8A: Flora Survey Attachment 8B: Targeted Malleefowl Survey 				

Scope of application/assessment Summary of proposed activities or changes to existing operations. Attachment 10: Proposed Fee Calculation Operation of Crushing and screening facility, run of mine and ore stockpile area at the Wiluna West Project. Workshop.

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: premises on which — metallic or non-metallic ore is crushed, ground, milled or otherwise processed;	Design capacity: 2.0 Mtpa. Estimated throughput: 1.5 Mtpa	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 □ 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: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □ No ⊠	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠ No □	Certificate of title □ General lease □ Expiry: Mining lease / tenement ⊠ Expiry: 01/02/2028 Other evidence □ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes □ No □ N/A ⊠	Approval: Expiry date: If N/A explain why? Mining Tenement; Mining Approval Registration ID 93806. 13 April 2021

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ⊠ No □	CPS No: 4006/3 – permit valid until 16/04/2026		
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □ No ⊠	Application reference No: N/A Licence/permit No: N/A No water catchment in the area		
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes ⊠ No □	Application reference No: N/A Licence/permit No: GWL 202977 – Licence valid until 24/06/2029 Up to 150 000kL/pa for dust suppression		
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes □ No ⊠	Name: N/A No waste discharged on site Type: N/A Has Regulatory Services (Water) been consulted? Yes □ No □ N/A ☒ Regional office: N/A		
Is the premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the 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 □	Mining Act 1978		
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		

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SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)			
Is the premises a known or suspected contaminated site under the Contaminated Sites Act 2003?	Yes □ No ⊠	Date of classification: N/A	