Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Licence

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

Licence Number	L9411/2023/1
Applicant	Wonmunna Iron Ore Pty Ltd
ACN	169 151 777
File number	DWERVT14025
Premises	Wonmunna Iron Ore Project Great Northern Highway, Shire of East Pilbara Mining Tenement M47/1424 NEWMAN WA 6753 As defined by the maps in Schedule 1 of the Licence
Date of report	21 December 2023
Decision	Licence granted

Sonya Poor

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

Table of Contents

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 L9411/2023/1 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 and overview of premises

On 14 September 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 seeking a licence relating to the continued operations of categories 5 and 54 from Works Approval W6358/2020/1, ore processing and discharge to land of treated sewage mixed with Reverse Osmosis (RO) brine. The premises is approximately 70 km west-northwest of Newman.

The proposed activities are being sought:

- Include the entire tenement area for the prescribed premises boundary (only part of the tenement was approved for the Works Approval (W6358/2020/1);
- Continued operation of Ore Handling Plant (OHP);
- Operation of Mobile Crushing Plant (MCP) to supplement ore feed from the OHP, increasing Category 5 throughput from 10 Mtpa to 13.5 Mtpa;
- Continued operation of Stage 1 Wastewater Treatment Plant WWTP (with RO plant), and associated irrigation;
- Use of RO brine for dust suppression; and
- Construction of Stage 2 WWTP.

Further request from the Time Limited Operations Report, include the following:

- TDS limit for the WWTP increased from 1,000 mg/L to 1,500 mg/L.

The premises relates to the categories and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9411/2023/1. 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, 2020a) are outlined in licence L9411/2023/1.

2.2.2 OHP

The applicant operates the OHP with AIF facility and include a MCP to supplement ore feed from the OHP. The AIF at the OHP comprises of two tertiary crushers, two apron feeders, two screens and two belt feeders which produce product output to 100% fines from the same ore feed.

Increase in capacity

The proposed MCP will have a production capacity of 3.5 Mtpa. This will increase the existing Category 5 production capacity of 10 Mtpa to 13.5 Mtpa. The MCP will be used in various locations within the prescribed premises boundary, providing they are already disturbed.

2.2.3 WWTP Stage 1

The applicant proposes to continue to operate WWTP Stage 1 and associated Irrigation Sprayfield (installed under Works Approval W6358/2020/1), for the processing of domestic sewage from the accommodation camp's sewer system and disposal of that effluent to land. The WWTP Stage 1 is a Low Risk Sequencing Batch Reactor (SBR) unit which is comprised of the systems shown in Table 1. The SBR has a treatment capacity of 50 m^3/day, sufficient to support a 200-person sized camp.

The operation of WWTP Stage 1 on the licence means the temporary WWTP constructed under Works Approval W6358/2020/1 has now been replaced and will not be transferred to the licence.

Table 1: SBR WWTP components

Component x 2 for the stages (Stage 1 and Stage 2)
External 50 m^3 balance tank
Balance pump
Sequencing Batch Reactor tank with heavy duty submersible aerators and a floating decant weir
Decant pump
Sludge pump
Recirculation pump with online chlorine dosing system and analyser
Ammonium chloride dosing system
Sucrose dosing system
Internal irrigation tank that is connected to Stage 1
50m^3 sludge tank
Control panel
Audible and visual pump fault alarm
Irrigation pump
Discharge flow meter
Treated wastewater pipeline
RO plant

2.2.4 WWTP Stage 2

The applicant proposes to construct WWTP Stage 2 under the Licence. WWTP Stage 2 proposes to have a treatment capacity of 50 m^3/day as per WWTP Stage 1, resulting in a combined capacity of 100 m^3/day when all components are operational. This capacity is sufficient to support a 350-person camp.

WWTP Stage 2 is to be comprised of the same systems as WWTP Stage 1, however, will have a larger 30 m^3 per day RO plant to provide the accommodation camp's future potable water needs (refer to Table 1).

Both RO plants will produce wastewater volumes below the Category 85B threshold of 0.5 GL/year in both Stages 1 and 2.

2.2.5 Reverse Osmosis Units

Discharge to land (Irrigation Sprayfield)

RO brine is produced as a by-product from the on-site treatment of raw water sourced from PB03. Before the RO brine may to be disposed to land, it is sent to the final WWTP irrigation tank where it is diluted with treated effluent. The mixture is sampled and a limit of 1,500 mg/L of TDS is applied prior to the treated effluent and RO brine discharging to a minimum 1.2 ha native vegetation Irrigation Sprayfield.

Results of the monitoring of the treated effluent and RO brine mixture taken during the TLO period are shown in Table 2. Water containing a TDS of up to 1,500 mg/L is considered suitable for irrigation (Water and Rivers Commission, 2000).

The vegetation in the Irrigation Sprayfield is visually monitored and the applicant has stated that there has been no noticeable deterioration to vegetation condition or evidence of vegetation stress.

Table 2: Treated wastewater quality by the end of TLO

Parameter	Target Concentration	Average TLO concentration (2021-2022)	Maximum recorded value during TLO (2021-2022)
Biochemical oxygen demand (BOD)	<20 mg/L	10 mg/L	23 mg/L
TSS	<30 mg/L	7 mg/L	26 mg/L
TDS	<1000 mg/L	956 mg/L	1,300 mg/L
TN	<30 mg/L	6 mg/L	16 mg/L
TP	<8 mg/L	5 mg/L	12 mg/L
E. coli	<1000 cfu/100 ml	440 cfu /100 mL	24,000 cfu /100 mL
pH	6.5 to 8.5	6.5 – 8.5	9.5
Residual chlorine	0.2 to 2.0 mg/L	0.2-2.0 mg/L	~2.5 mg/L

Use of RO brine in dust suppression

Water carts (or similar equipment) are proposed to collect surplus RO brine directly from the RO plants which will be used for dust suppression.

The RO brine may be applied to disturbed operational areas in a rate and manner so that applied at a rate that avoids runoff into the receiving environment such as native vegetation.

2.3 Compliance with works approval

The applicant was granted Works Approval W6358/2020/1 on 24 July 2020 for the construction, commissioning and time-limited operations of the premises. The categories were for 5 and 85. Category 5 was authorised for 5 million tonnes per annum via an OHP. Category 85 was for 30 m^2 per day via a temporary WWTP discharge to land via an Irrigation Sprayfield.

The Works Approval was amended five times for the following:

- 21 October 2020: Transfer the works approval from Australian Aboriginal Mining Corporation Pty Ltd to Wonmunna Iron Ore Pty Ltd, project name change and use of an alternative Ore Handling Plant (OHP) which includes a lump stacker;
- 29 April 2021: Increase Category 5 capacity from 5 million tonnes per annum (Mtpa) to 10 Mtpa and add a lump re-screening facility to the ore processing plant;
- 18 May 2021: Increase production capacity from 30 m^3 per day to 100 m^3 per day; Change Category 85 to Category 54; Construction of stage 1 and 2 WWTP;

- 23/11/2021: Construction of an AIF facility to maintain ore production on site; and
- 17 May 2023: to extend the works approval expiry to 26 December 2023.

All items except for the WWTP Stage 2 were constructed and commissioned as appropriate under Works Approval W6358/2020/1. WWTP Stage 2 is proposed to be constructed on the Licence (L9411/2023/1).

2.4 Other approvals

2.4.1 Mining Act 1978

The Mining Proposal (MP) and Mine Closure Plan (revision 3) was approved under Registration ID 53252 on 30 March 2015, authorising the extraction of high grade iron ore from the three Marra Mamba deposits (Ascot, 2015).

Mining Proposal Addendum (Rev 2) was approved under Registration ID 82535 allowing for minor amendments to the site layout including a new site layout for ancillary mine site infrastructure (AAMC & Preston, 2019).

An increase in Processing Capacity was approved under Registration ID 95918 on 23 March 2021 from 5 Mtpa up to a maximum of 10 Mtpa (Mineral Resources, 2021). The increase in capacity was achieved via mining multiple pit stages concurrently and increasing the OHP crushing and screening capacity through installation of a lump re-screening facility (Mineral Resources, 2021).

The Wonmunna Operations Below Water Table MP revision 2.1 was approved under Registration ID 113603 on September 2022, for the increase in processing capacity of the OHP to a maximum throughput of 13.5 Mtpa and to be consistent with the Above Water Table MP (REGID: 103347) (Mineral Resources, 2022a, 2022b).

Surface Water Management Plan

Conditions 8 and 20 of the MP required the development and execution of a Surface Water Management Plan (SWMP) (DMIRS, 2023). The controls and recommendations made by the SWMP may be implemented as controls in the Licence.

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, 2020a).

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 3 below. Table 3 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 3: Proposed applicant controls

Sources	Emission	Potential pathways	Proposed controls
Construction			
Stage 2 WWTP	Dust	Air / windborne pathway	• Dust suppression via watercarts using RO brine will be undertaken in disturbed, operational areas only, and in a manner that does not cause damage to surrounding native vegetation or runoff to the receiving environment. • Inspections and incident reporting system maintained to assist in managing environmental incidents, such as excessive dust events.
	Sediment laden stormwater following storm events	Overland run-off	From the Surface Water Management Plan (A2Q & Soil Water Consultants, 2015): • Install diversions bunds/drains to divert "clean water" around mining areas and infrastructure to maintain continuity of surface flow systems, only local direct rainfall-runoff (stormwater) will be required to be managed within each of the identified site domains; • Capture runoff from cleared areas with drains or bunding, and direct it to sediment traps; • Site planning has avoided construction of landforms within or near watercourses, wherever possible; and • Implementation of an Exclusion Zone, centred on the Weeli Wolli Creek, will prevent impacts on sensitive receptors adjacent to the creek.
Operation			
OHP Ore stockpiling (Stockpiles): *Fines product stockpiling*	Dust	Air / windborne pathway	• OHP not near waterways or adjacent to or within the Weeli-Wolli Exclusion Zone, but maintain a separation distance of at least 480 m; • Sprinklers on crushers and used where visible dust emissions are observed; • Monitoring of wind and operational conditions, additional water will be applied in preparation; • Water trucks to manage dust emissions at the ore stockpile area, hardstand areas and bare areas; and • Inspections and incident reporting system maintained to assist in managing environmental incidents, such as excessive dust events. From the Tenement conditions (condition 14): • The lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities (DMIRS, 2023).
OHP Stockpiles	Sediment laden stormwater following storm events	Overland run-off	From the SWMP (A2Q & Soil Water Consultants, 2015): • Install diversions bunds/drains to divert "clean water" around mining areas and infrastructure to maintain continuity of surface flow systems, only local direct rainfall-runoff (stormwater) will be required to be managed within each of the identified

Sources	Emission	Potential pathways	Proposed controls
			site domains; • Capture runoff from cleared areas with drains or bunding, and direct it to sediment traps; • Avoid construction of landforms within or near watercourses, wherever possible; and • Implement Exclusion Zone, centred on the Weeli Wolli Creek, will prevent impacts on sensitive receptors adjacent to the creek.
Stage 1 WWTP	Untreated	Leaks/spills causing overland run-off / infiltration	• Diversion bunds on the WWTP periphery directing surface water flows towards a 300 m^2 flow through sediment basin (located within the Irrigation Sprayfield (A2Q & Soil Water Consultants, 2015)) designed to achieve a 1 in 5 year rainfall event and directing clean stormwater around the footprint accommodation camp; • 50 m^3 WWTP balance tanks contingency storage capacity for up to 1 day of normal flow if discharge is suspended while any problems are fixed; • All storage components impermeable, and tanks installed on a compacted and stabilised earthen pad; • Sludge removed as controlled waste by an adequately licenced waste contractor and volumes monitored on a weekly basis; • Pipelines monitored; • The WWTP units fitted with alarms to warn of high-water levels in the tank or if a pump failure occurs. The units can be isolated and shut down if required; • Spillages of hydrocarbon, raw sewage, treated effluent or RO brine occurring as a result of incident or equipment failures will be addressed and reported through the incident reporting procedure; and • Wastes segregated from other wastes and collected for offsite disposal by a licensed waste contractor.
Operation of existing RO plant and increase mixing with effluent from 15 m^3/day to 40 m^3/day.	Moderately salty water (<1500 mg/L TDS)	Leaks/spills causing overland run-off / infiltration	• Diversion bunds on the WWTP periphery directing surface water flows towards a 300m^2 flow through sediment basin (located within the Irrigation Sprayfield (A2Q & Soil Water Consultants, 2015)) designed to achieve a 1 in 5 year rainfall event and directing clean stormwater around the footprint accommodation camp; • 50 m^3 WWTP balance tanks contingency storage capacity for up to 1 day of normal flow if discharge is suspended while any problems are fixed; • All storage components impermeable, and tanks installed on a compacted and stabilised earthen pad; • Pipelines monitored; and • Spillages of hydrocarbon, raw sewage, treated effluent or RO brine occurring as a result of incident or equipment failures will be addressed and reported through the incident reporting procedure.

Sources	Emission	Potential pathways	Proposed controls
Irrigation spray field	Treated effluent	Direct discharge via irrigation	• Appropriately sized spray field to irrigate volumes of treated effluent and RO brine mix generated for discharge according to application rates; • Diversion where possible of RO brine from the irrigation spray field and diluted for use as dust suppression on operational areas via watercarts; • Spray field irrigation rate and distribution controlled to prevent ponding or runoff, and designed to contain run-off, spray drift, soil erosion or other discharge within the boundary of the designated irrigation area; • Irrigation not to occur during significant rainfall events to prevent potential discharges to surface water flows; • A flow meter installed to record the volume of treated wastewater discharged to the irrigation area; • WWTP effluent discharge and combined RO brine volumes managed to allow the mixture to infiltrate or evaporate and prevent surface ponding or runoff from the irrigation area; and • Pipelines monitored.
Dust suppression using RO brine via watercart	Undiluted brine	Direct discharge and overland run-off and aerosolised when sprayed	• Dust suppression via watercarts using RO brine will be undertaken in disturbed, operational areas only, and in a manner that does not cause damage to surrounding native vegetation or runoff to the receiving environment. From the Tenement conditions (condition 15): • Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles (DMIRS, 2023).

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 4 and Figure 1 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 4: Sensitive human and environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Aboriginal Heritage	Three Aboriginal Heritage areas are within 2 km of the proposed activities. The following two are not a site but shared data and contain artifact scatter: • ASC14-003 is located 400 m north east of the spray Irrigation Sprayfield; and • ASC14-004 is located 600 m south east of the OHP **Screened out as the areas are not "sites".** The following is a site: • Forgotten Pool along Weeli Wolli Creek is 1.5 km south east of the OHP. **Screened out in relation to dust emissions from the OHP operation are not expected to impact Aboriginal Heritage Sites, due to the separation distance of 480m or greater.**
PEC	Weeli Wolli Spring 26.5 km north west from Prescribed Premises Boundary. **Screened out due to distance beyond 10 km from proposed Category 5 and 54 activities and no clearing is proposed.**
Priority fauna species	Five conservation significant species were recorded within the Premises boundary, including one migratory species. The conservation significant species recorded were: • Western Pebble-mound Mouse (*Pseudomys chapmani*; Priority 4, DPaW) • Australian Bustard (*Ardeotis australis*; Priority 4, DPaW) • Bush Stone-curlew (*Burhinus grallarius*, Priority 4, DPaW) • Rainbow Bee-eater (*Merops ornatus*; Migratory, EPBC; Schedule 3, WC Act) • Star Finch (*Neochmia ruficauda subclarescens*; Priority 4, DPAW). The Waste Rock Dump has been constructed over the nearest recorded Western Pebble-mound Mouse mounds since the Fauna Survey (Pheonix, 2014). The nearest remaining mounds are at least 800 m away and all other significant fauna records at least 1.2 km south east and south west and some species are associated with Weeli Wolli Creek. **Western pebble-mound mouse ruled as fauna can move**

Environmental receptors	Distance from prescribed activity
	away from dust and noise disturbances and pebbles from their mounds condense water, so they have their own water source (NCRIS, n.d.). **For other fauna OHP operational noise is not expected to impact conservation significant fauna which may occur at Weeli Wolli creek, etc, due to the separation distance of 480m or greater.**
Conservation significant flora	The following conservation significant flora species were recorded outside of the Premises boundary (G&G Environmental, 2011): • *Acacia subtiliformis* (P3) • *Aristida lazaridis* (P2) • *Oxalis sp. Pilbara* (M.E.) • *Trudgen* (P2) • *Seringia exastia* (CR). **Screened out due to distance more than 2 km from proposed Category 5 and 54 activities and no clearing is proposed.**
Invertebrates and Subterranean fauna	Located beyond the Premises boundary. **Screened out due to distance more than 2 km from proposed Category 5 and 54 activities and no clearing is proposed.**
Weeli Wolli Creek	Weeli Wolli Creek is approximately 1 km east and south east from the OHP designated area. **Screened out in relation to dust emissions from the OHP operation. Dust is not expected to water quality at Weeli Wolli creek, due to the separation distance of 480m or greater.**
Riparian vegetation	Weeli Wolli creek - 480m to the east of the OHP and ROM pad footprint. **Screened out in relation to dust emissions from the OHP operation. Dust is not expected to impact riparian vegetation at Weeli Wolli creek, due to the separation distance of 480m or greater.**
Minor surface water drainage lines	Small drainage lines run approximately 15 m to the east and west of the Irrigation Sprayfield boundary. The OHP is 480 m east of a minor creek line (which passes east of the Irrigation Sprayfield).
Native vegetation	In areas surrounding the OHP footprint.
Groundwater	Groundwater quality fresh to marginal 450 – 650 mg/L, the average approximately 530 mg/L. Groundwater standing water level is between 40 and 60 mbgl. **Screened out a receptor due to depth (being more than 20 mbgl) (AQ2, 2022).**

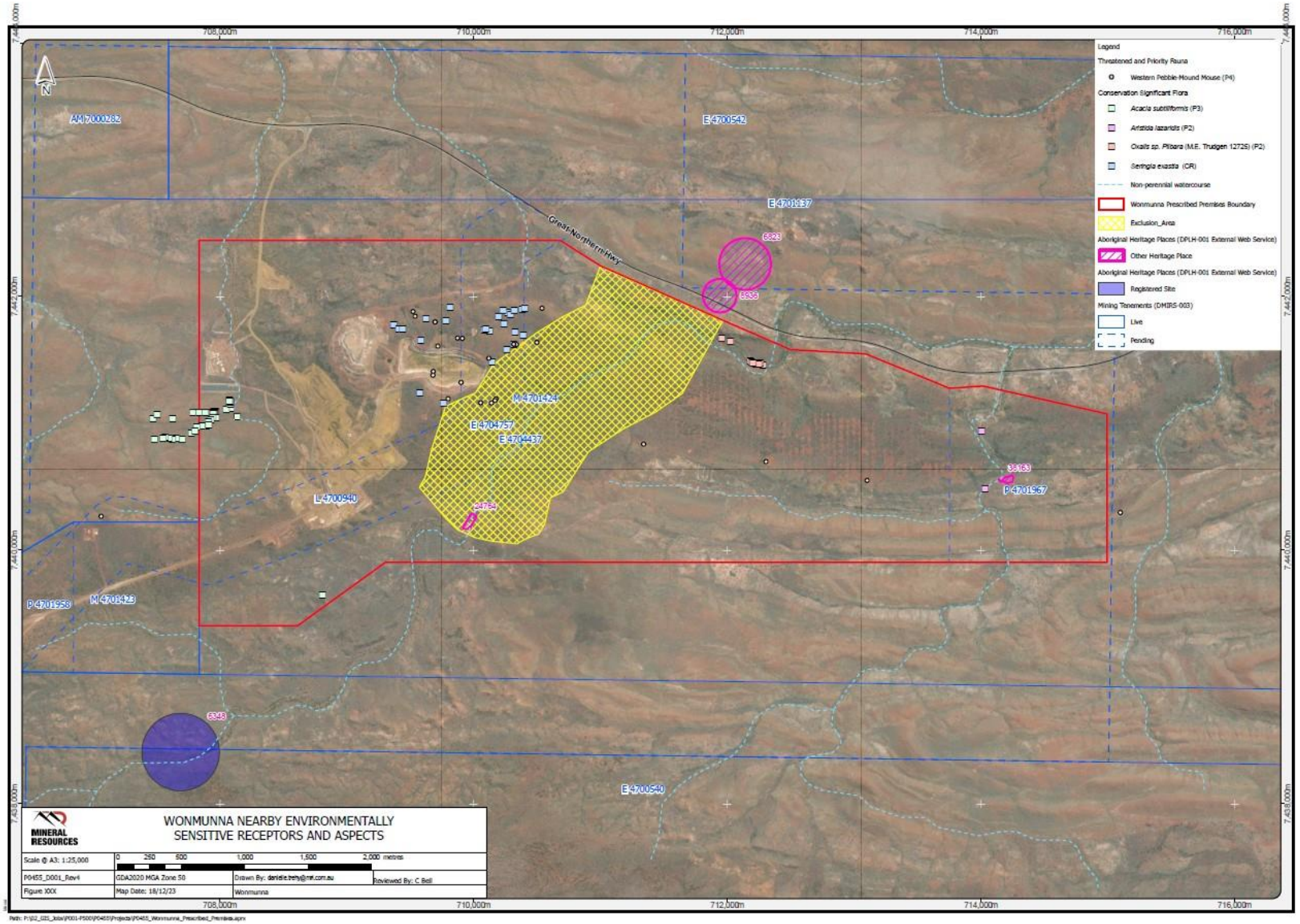

Figure 1: Distance to sensitive receptors

Licence: L9411/2023/1

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER, 2020a) 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 5.

Licence L9411/2023/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e., Category 5 and 54 activities.

The conditions in the issued licence, as outlined in Table 5 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 5: Risk assessment of potential emissions and discharges from the premises during construction and 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**				
Construction								
WWTP Stage 2 and Irrigation Sprayfield Stage 2	Dust	Air / windborne pathway causing impacts to health and amenity	Surface water drainage lines Native vegetation	Refer to Section 3.1	C = Slight L = Rare **Low Risk**	Y	N/A	N/A
	Sediment laden stormwater following storm events	Overland run-off	Surface water drainage lines Native vegetation		C = Slight L = Rare **Low Risk**	Y	Condition 1, Table 1 Installation requirements Requires diversion bunding	N/A
Operation								
OHP Ore stockpiling: *Fines product stockpiling*	Dust	Air / windborne pathway causing impacts to health and amenity	Surface water drainage lines Native vegetation	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	Condition 3, Table 2 Infrastructure and equipment requirements Requires operation and maintenance of sprinklers, shields, covers etc.	N/A
	Sediment laden stormwater following storm events	Overland run-off	Surface water drainage lines. Native vegetation Weeli Wolli Creek Riparian vegetation Forgotten Pool	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 3, Table 2 Infrastructure and equipment requirements Requires diversion bunding, sediment traps etc.	N/A
Stage 1 and 2 WWTP	Untreated effluent	Leaks/spills /overtopping causing overland run-off / infiltration	Surface water drainage lines Native vegetation	Refer to Section 3.1	C = Moderate L = Rare **Medium Risk**	Y	Condition 3, Table 2 Infrastructure and equipment requirements Requires maintaining WWTPs in good working order and inspections	N/A
	Treated effluent	Leaks/spills	Surface water	Refer to	C = Minor	Y	Condition 3, Table 2 Infrastructure and	N/A

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**				
	and RO brine	/overtopping causing overland run-off / infiltration	drainage lines Native vegetation	Section 3.1	L = Unlikely **Medium Risk**		equipment requirements Requires treated effluent targets Condition 4, Table 3 Emission and discharge limits Requires TDS limit to Irrigation Sprayfield	
Stage 1 and 2 Irrigation Sprayfield	Treated effluent and RO brine	Direct discharge via irrigation and overland run-off	Surface water drainage lines Native Vegetation	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 3, Table 2 Infrastructure and equipment requirements Requires maintenance of Irrigation Sprayfield and inspections Condition 4, Table 3 Emission and discharge limits Requires TDS limit to Irrigation Sprayfield Condition 5, Table 4 Authorised discharge points Condition 7, Table 5 Emissions and discharges monitoring Requires monitoring of treated effluent and RO brine mixture	N/A
Dust suppression using RO brine via watercart	Wastewater with elevated TDS	Direct discharge and overland run-off and aerosolised when sprayed	Surface water drainage lines Native Vegetation Weeli Wolli Creek Riparian vegetation	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	N	Condition 3, Table 2 Infrastructure and equipment requirements Condition 5, Table 4 Authorised discharge points **Condition 6: dust suppression using RO brine is only applied to disturbed areas**	**Due to the distance to sensitive receptors, particularly the Weeli Wooli Creek Exclusion Zone, restriction of dust suppression to disturbed areas has been imposed** **Groundwater quality is also classed as fresh to marginal** **This water will not be discharged to vegetation, instead**

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				
								to disturbed areas, avoiding vegetation, therefore, undiluted brine should be suitable. **Groundwater standing water level is between 40 and 60 mbgl so dust suppression water is unlikely to infiltrate**

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER, 2020a).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

Table 6: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 6 November 2023	None received.	N/A
Shire of East Pilbara advised of proposal 6 November 2023	None received.	N/A
The Department of Health (DoH) advised of proposal 6 November 2023	DoH replied on 21 November 2023 stating that the proposal is required to comply with the requirements of the Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations, 1974. DoH has no objection to the proposal, subject to ensuring that along with increased production and associated personnel the existing onsite wastewater treatment system and disposal area including brine wastewater are sized appropriately in line with DoH requirements. DoH advised if the system/s require upgrading, an Application to Construct or Install an Apparatus for the Treatment of Sewage is required to be submitted to the local government for each wastewater system.	Agreed.
The Department of Planning, Lands and Heritage (DPLH) advised of proposal 10 November 2023	DPLH replied on 06 December 2023 confirming that a portion of the area intersects with an Aboriginal Heritage Place and the proposed licence is within the Nyiyaparli Native Title Determination Area. Any proposed activities which intersect with Aboriginal heritage will require approval under the *Aboriginal Heritage Act 1972*.	See applicant's response in Appendix 1.
Karlka Nyiyaparli Aboriginal Corporation RNTBC advised of proposal 10 November 2023	None received.	N/A
Licence Holder was provided with draft documents on 7 December 2023	The Licence Holder provided comment on 13 and 18 December 2023. Refer to Appendix 1	Refer to Appendix 1.

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.

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2. AQ2 Pty Ltd (A2Q) 2022, *H2 Hydrogeological Assessment Groundwater Abstraction for Mine Dewatering and Water Supply,* Page 13, February 2022, Perth, Western Australia.
3. Ascot Resources (Ascot) 2015, *Mining Proposal Wonmunna Iron Ore Project (53252)*, Version 1 Revision 3, Subiaco, Western Australia.
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25. National Research Infrastructure for Australia (NCRIS) (n.d.), *Pseudomys chapmani Kitchener,* 1980 (Ngadji), Atlas of Living Australia. Accessed 23 October 2023. *https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/7237e4e0-8398-4f89-a5db-06a7b8e3c073*
26. Pheonix Environmental Services 2014, *Level 2 vertebrate fauna survey for the Wonmunna Iron Ore Project*, page 31, July 2014, Balcatta, Western Australia.
27. Pheonix Environmental Services 2014, *Level 2 short-range endemic invertebrate fauna survey for the Wonmunna Iron Ore Project*, page 29 and 30, October 2014, Balcatta, Western Australia.
28. Pheonix Environmental Services 2014, *Troglofauna survey for the Wonmunna Iron Ore Project*, page 33, October 2014, Balcatta, Western Australia.
29. Snooks & Co 2002, *Style Manual for Authors*, 6th Edn, John Wiley & Sons Australia Ltd, Brisbane.
30. Water and Rivers Commission 2000, *Water facts 15 Salinity*, Government of Western Australia, Perth, Western Australia.
31. Wonmunna Iron Ore Pty Ltd (Wonmunna) 2023a, *Application Form: Licence*, 6 September 2023, Osbourne Park, Western Australia.
32. Wonmunna Iron Ore Pty Ltd (Wonmunna) 2023b, *Licence Application Supporting Document*, 6 September 2023, Osbourne Park, 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		
Section 2.2	The comment "it should be noted that the "Proposed Landfill" on the updated prescribed premises boundary is not authorised under this licence, approvals will need to be sought for this" is not relevant as the revised Premises Map does not show a Proposed Landfill area. Remove comment.	Agreed. Removed.
Section 2.2.2	The comment "The siting of the proposed MCP is at the OHP area" is not correct. The Mobile Crushing Plant will not be in a fixed location and is intended to be able to operate in any disturbed areas within the premises boundary, with the exception of the exclusion zone. Remove comment. Replace with "The MCP will be used in various locations within the prescribed premises boundary, providing they are already disturbed", or equivalent.	Updated wording.
Section 2.2.4	The reference to there being three RO plants is incorrect. There is one 15m^3/day RO plant as part of Stage 1 and one 30m^3/day RO plant as part of Stage 2. Amend references to reflect two, not three RO plants.	Amended wording to "will have a larger 30 m^3 per day RO plant".
Section 2.2.5	The reference to the irrigation area being 1.2 ha in size is not technically correct. The Works Approval application was for an area at least 1.2 ha in size. In reality, the current irrigation area is just over 1.7 ha. The reference to the irrigation area being 1.2 ha in size is not technically correct. The Works Approval application was for an area at least 1.2 ha in size. In reality, the current irrigation area is just over 1.7 ha.	Included the word "minimum".

Condition	Summary of applicant's comment	Department's response
Section 2.2.5 – Use of RO Brine in dust suppression	The comment "Water carts (or similar equipment) are proposed to collect surplus RO brine directly from the RO plants and diluted with groundwater which has been sourced from one of the operating turkey's nests prior to being used for dust suppression" requires amendment to capture flexibility sought through the comments on the licence conditions. Change to "Water carts may collect RO brine for use in dust suppression activities on disturbed operational areas".	Removed dilution requirements and limits for dust suppression.
Section 2.4.1	An additional sentence should be added to this section to reflect an additional update to the Mining Proposal which was approved on 19 December 2022. Replace date with "30 March 2015".	Date corrected.
Section 2.4.1	An additional sentence should be added to this section to reflect an additional update to the Mining Proposal which was approved on 19 December 2022. Add the following sentence: "An additional update to the Mining Proposal to extend the North Marra Mamba (west) deposit to further beyond the approved depth was approved under Registration ID 115466 on 19 December 2022."	The requested sentence is not relevant to this licence assessment as an update of the mining depth in the Mining Proposal does not impact mine infrastructure or throughput of any the prescribed premises categories under this licence.
Table 3 and Table 6 – throughout	Please amend controls section for dust suppression with consideration to comments made on the licence – i.e.: – RO Brine may be diluted with groundwater where practical prior to use on disturbed operational areas for dust suppression, but add the control that MinRes will manage dust suppression activities with RO Brine to ensure that native vegetation is not impacted. – References to the 300m2 flow-through basin being connected to the irrigation area, this was only relevant for the WWTP. – References to TDS limit and monitoring for RO brine used in dust suppression. It is understood that the justification for these additional controls relates to the Weeli Wolli Creek Exclusion zone being a sensitive receptor; however, it should be recognised that the exclusion zone is itself a management tool and comprises a 1 km wide zone of protection for riparian vegetation associated with the tributaries within.	Updated control wording for dust suppression to make the same is the first paragraph in the last row for operational dust suppression and included "via water cart". Removed reference to the irrigation sprayfield for the basin. Removed dilution requirements and limits for dust suppression.

Condition	Summary of applicant's comment	Department's response
	Amend as appropriate following review of feedback on licence.	
Decision Report Table 7 (Consultation) – DPLH	DWER comment: "DPLH replied on 06 December 2023 confirming that a portion of the area intersects with an Aboriginal Heritage Place and the proposed licence is within the Nyiyaparli Native Title Determination Area. Any proposed activities which intersect with Aboriginal heritage will require approval under the Aboriginal Heritage Act 1972." Applicant response: The applicant is aware of DPLH Lodged Place: 24764 and DPLH Lodged Place: 38163, confirmed by the ACHIS, situated within with Part V prescribed premises boundary. The applicant understand its obligations under the Aboriginal Heritage Act 1972 and reiterate there is no proposed new ground clearing or disturbance included in the application for L9411/2023/1, additionally, no activities subject to the licence are proposed to occur in the locations of known heritage places or sites. The applicant engage and consult with Karlka Nyiyaparli Aboriginal Corporation and conduct heritage surveys with the Nyiyaparli traditional owners. Heritage management protection strategies are adopted on ground at all the applicant operational mine sites.	Noted.
Licence		
1, Table 1	MinRes recommends DWER consider removing some of the prescriptive details of infrastructure components, and replace them with 'WWTP Stage 2' to allow for flexibility and continuous improvement. This would allow for design improvements during commissioning to optimise plant performance and meet emission and discharge targets. In accordance with DWER's Guidance Statement: Risk Assessments, activities which carry low or medium risk to the environment may not require conditions, or can be regulated with outcome-based conditions only. MinRes considers the construction of the WWTP Stage 2 with alarm systems, and to treat waste to meet target concentrations provides adequate outcome-based protection for the environment.	Added to compliance reporting condition part (d) in Table 7, to allow flexibility in construction items provided they do not increase risk public health, public amenity or the environment and to provide reasoning to the department.

Condition	Summary of applicant's comment	Department's response
	It is likely that the irrigation tanks will be connected in Stage 2. The effluent will be directed to the sprayfield via an irrigation tank (where it has been mixed with RO brine), not direct to the sprayfield in a pipeline from the plant. Wording changes are intended to meet the outcome of effluent being directed to the sprayfield (i.e. precluding it from being discharged anywhere else). Additional details on how this is achieved do not offer additional environmental protection	Updated wording.
	MinRes requests the prescriptive detail of the fence is removed from infrastructure and equipment as it does not offer environmental protection. It also constrains MinRes from constructing more secure fencing than this standard which is accepted by the Department of Health. Perimeter fence and safety signage is listed as an installation requirement in any case.	The department has removed reference to the wording "1200 mm high two strand". Perimeter fencing around the spray irrigation field will still be required.
	Suggested changes to provide some flexibility to make improvements or changes to specific irrigation infrastructure with a focus on the desired environmental outcome. This is considered to align with DWER's Guidance Statement: Risk Assessments	Added condition 2 and compliance reporting condition part (d) in Table 7, to allow flexibility in construction items provided they do not increase risk. Removed prescriptive sprinkler and valves and included suggested wording to minimise pooling and runoff.
	Stage 2 only comprises one RO Plant with a 30m^3/day capacity, not two plants. Suggestion to amend Table and relevant subsequent conditions to reflect a singular RO Plant for Stage 2.	Updated.
4, Table 3 9, Table 6	It is noted that this TDS limit is more achievable for RO brine than the 1500 in the Word version; however, monitoring the water quality from the water cart is practically very difficult to do safely and we would still request removal of the limit to be consistent with the majority of other Part V licences and an outcome-based condition for avoiding damage to native vegetation being applied instead. Suggestion to remove limit and amend licence to include outcome-based condition that ensures damage to native vegetation is avoided when undertaking dust suppression activities with RO brine.	Removed dilution requirements and limits for dust suppression.

Condition	Summary of applicant's comment	Department's response
4, Table 2	The irrigation tanks will be interconnected in Stage 2.	Updated wording.
	To avoid duplication, MinRes suggests the commissioning requirements reference Condition 9, Table 6 (or the equivalent following any re-numbering), which are the same as those listed in Condition 4, Table 3. In reality there will not be separate commissioning and operational monitoring, the outcome is that the treated effluent + RO from infrastructure constructed will have to comply with the operational limits and monitoring requirements.	Removed commissioning requirements as not required on licences.
	MinRes could not identify any aspects of the commissioning process for the RO Plant which would have direct relevance to environmental risk, noting that the quality of effluent/brine waste being discharged to the irrigation field is already comprehensively regulated by the operational section of the licence. The brine is the waste, not the product, and as such it does not have a defined quality range or specification which can be linked to the commissioning process.	Removed commissioning requirements as not required on licences.
5	If comments above are supported, Condition 4 and Table 3 will not be required. If the comments above are not supported and this section needs to be retained, MinRes suggest the WWTP limit is based on an average and not a single result. There may be situations in which exceeding the limit does not automatically translate to an environmental impact, and therefore warranting a non-compliance. When results indicate proximity to or surpassing the limit, MinRes can then adjust operational and environmental management by implementing measures like increased dilution to offset excessive salt entering the irrigation area.	Removed commissioning requirements as not required on licences.
6, Table 4	MinRes requests the prescriptive monitoring location be replaced with 'Irrigation tank'. The sampling point is directly connected to the irrigation tank.	Incorrect word document sent out for comments and did not match the PDF provided, which correctly addressed the Irrigation Tank as the monitoring location. Intended wording as follows: "**Discharge points** Stage 2 WWTP Irrigation Sprayfield as depicted in Schedule 1, Figure 2.

Condition	Summary of applicant's comment	Department's response
		Monitoring locations Final Irrigation Tank containing treated effluent and RO brine"
	MinRes requests this condition is removed. As per comments above this condition is not relevant to commissioning of the RO plant. The RO plant is comprehensively captured and regulated in the operational phase of the licence.	Removed commissioning requirements as not required on licences.
9, Table 5	MinRes requests that this condition is removed as the OHP is fixed infrastructure which has been sited at least 480m away from Weeli Wolli Exclusion Zone and it will remain in this location (i.e. condition not required). The operation of the MCP at least 480m from Weeli Wolli Exclusion Zone will significantly restrict operations to an extent that the environmental risk does not necessitate. To effectively manage the environmental risk, MinRes suggest inclusion of a condition that requires the MCP operation not occur near waterways or adjacent to or within the Weeli Wolli Creek Exclusion Zone. It should be noted that the Weeli Wolli Creek Exclusion Zone inherently already incorporates a significant area buffer for heritage protection purposes.	Accepted clarification of dust suppression systems. The department misinterpreted distance from the creek line as distance from the exclusion zone. Accepted suggested text of where to not operate the MCP.
	MinRes requests that the operational requirement is amended to only include sludge as no other waste from the WWTP will be collected for offsite disposal.	Accepted wording.
	MinRes proposes a modification to the operational requirement to accurately represent the environmental risk's specific location, which is the WWTP.	Updated wording.
	Monthly inspections will be more achievable. With the requirement to maintain WWTP infrastructure in good working order at all times, and existing monitoring requirements, the risk may not necessitate a weekly inspection.	Updated to monthly.
	It is reasonable to expect some level of change in vegetation health due to wastewater irrigation. From a review of licences issued by DWER (not limited to L9349/2022/1, L9360/2022/1, L9263/2020/1, L9326/2022/1, etc.) this condition does not appear to be standard. MinRes suggests that the treated effluent parameter target concentration serves as an appropriate regulatory control to ensure that water quality meets targeted concentration and the risks to onsite impacts are managed.	Updated second bullet point to remove "no visible runoff" and replaced with "no irrigation generated runoff, spray drift or discharge outside the irrigation field" in line with standard conditions. Removal of weekly inspections of vegetation as this is not a standard condition. Replaced with the standard condition to maintain vegetation cover.

Condition	Summary of applicant's comment	Department's response
	If DWER consider that the irrigation poses a high risk and necessitates inspections, MinRes respectfully suggests that a condition for a monthly inspection to ensure that there is no evidence of excessive ponding or surface water runoff may be more reasonably achievable.	Pipeline inspections replaced with standard condition to inspect the irrigation sprayfield. Monthly inspection chosen in line with applicant's request. Inclusion of standard conditions pertaining to when no discharge is to occur, no soil erosion and no grazing by livestock.
	MinRes requests these conditions be removed, as they are commitments which relate to the WWTP (not the sprayfield). Further, irrigation is already managed to prevent ponding and pooling on the ground surface of the irrigation spray field. If DWER considers that the environmental risk is high enough to necessitate a condition for the sprayfield, MinRes suggests an outcome-based condition to ensure that sediment is prevented from exiting the sprayfield as a result of irrigation practices (however note that this effectively will not occur if surface ponding or runoff is avoided).	Moved maintenance of '"disturbed" flow paths' and moved maintenance of sediment basin up to operational requirement of WWTP and indicated by the applicant the conditions relate to the WWTP. Conditions to manage pooling etc addressed in the previous note.
	As discussed in our November meeting, MinRes considers that the overall TDS limit serves as the most effective and risk-based regulatory control to ensure that water quality meets targeted concentration before irrigation to the sprayfield and the risk of impacts are managed. The volumes from RO plants are estimates and can fluctuate based on input water quality.	Removed. Surplus brine which cannot be sent to the irrigation sprayfield may be used as dust suppression.
	MinRes requests that WWTP Stage 2 is removed from the operational requirements because the irrigation tanks will likely be interconnected in Stage 2.	Removed specification of Stage 2 WWTP.
	Wonmunna has water security challenges and dusty conditions require active management. MinRes are requesting operational flexibility to use RO brine in dust suppression activities providing it is done in a manner which does not damage vegetation. Preference will be given to mixing of brine with raw water wherever practical; however, flexibility to practice irrigation of undiluted brine is being requested, consistent with many other Part V licences we have observed in our review. MinRes considers that an appropriate outcome-based/risk-based condition which	Removed dilution requirements and limits for dust suppression.

Condition	Summary of applicant's comment	Department's response
	requires MinRes to undertake this activity in a manner that avoids impacts to vegetation will adequately regulate the risk.	
10, Table 6	MinRes has undertaken a review of licences and did not locate any licenses that define a TDS limit for dust suppression. For example, L4496/1988/11, L4612/1989/11, and L5029/1992/11 adopt a suitable outcome-based condition for the prevention of damage to vegetation without specifying limits or dilution requirements. DWER's Western Australian water in mining guideline highlights optimising water usage for dust suppression in this manner. Given the site's water security concerns, ensuring maximum flexibility is crucial to use any available water for dust suppression. DEMIRS enforces a standard tenement condition for using saline water in dust suppression, emphasising the need to take reasonable measures to prevent detrimental effects on surrounding vegetation and topsoil stockpiles. In light of the various other mechanisms in which this is already regulated, MinRes proposes that limits for dust suppression are not necessary when applied solely to disturbed areas.	Removed dilution requirements and limits for dust suppression.
11	Consistent with common practice in the industry, it may not always be practical for MinRes to dilute the RO brine prior to dust suppression activities. It also may not be necessary for environmental protection when the brine would be applied in highly disturbed areas which do not drain to the surrounding environment. Remove the word "diluted" from the condition, and add "in a manner that avoids damage to native vegetation" or equivalent.	Removed dilution requirements and limits for dust suppression.
11, Table 7	MinRes requests the removal of turkeys nest to allow for flexibility to mix raw water from other sources (i.e. standpipe) and be used for dust suppression without mixing.	As above.
12, Table 8	MinRes have proposed the use of RO brine for dust suppression as a flexible alternative, to assist with water security challenges and the need for proactive dust management. As described in previous comments, the use of brine in dust suppression is common practice in the industry and from MinRes' licence review, regulation is	As above.

Condition	Summary of applicant's comment	Department's response
	generally appropriate and outcome-focused. The imposition of monitoring conditions and limits and prescriptions on how the brine is diluted will likely make this unfeasible. MinRes is seeking the flexibility to innovate and find the best way to manage this activity while still being held to an outcome-based condition for dust suppression on already disturbed areas not to harm surrounding native vegetation	
16b	MinRes requests this period is changed to 60 days, consistent with the period in Condition 18. This change will support more streamlined approach to annual reporting.	Updated for consistency in reporting.
19	We found this wording a bit confusing, noting the condition seems to requesting a biennial report (not an annual report).	Removed the word "Annual". Changed the heading for Table 9 to "Biennial Environmental Report".
20, Table 9	This has been moved from the bottom to the top of this section to be consistent with the structure of the AER.	Updated rows.
	This has been added for clarity to be consistent with monitoring in Table 8.	Added condition a. Updated condition c.
	Capitalisation.	Corrected.
	In accordance with previous comments, MinRes proposes that monitoring and limits for dust suppression are unlikely to be necessitated by risk in accordance with DWER Guidance Statement: Risk Assessments, particularly when applied solely to disturbed areas and with the outcome-based requirement to avoid harm to vegetation.	Removed dilution requirements and limits for dust suppression.
21	Corrected a typo for the word "the".	Corrected.
21, Table 10	MinRes have proposed to remove this condition and table. Refer to earlier comments.	Removed TDS limits for dust suppression.

Condition	Summary of applicant's comment	Department's response
	Part A - Considering the proposed condition's three-month average requirement, MinRes requests a modification to amend it to within 21 days of becoming aware. This adjustment is deemed a more practical timeframe for ensuring compliance. Part B - Refer to previous comments. MinRes proposes that limits for dust suppression are not necessary when applied solely to disturbed areas.	As above.

Appendix 2: Application validation summary

<table>
<tr><th colspan="7">SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)</th></tr>
<tr><td colspan="7">Application type</td></tr>
<tr><td>Works approval</td><td>☐</td><td colspan="5"></td></tr>
<tr><td rowspan="4">Licence</td><td rowspan="4">☒</td><td>Relevant works approval number:</td><td>W6358/2020/1</td><td>None</td><td>☐</td></tr>
<tr><td colspan="3">Has the works approval been complied with?</td><td colspan="2">Yes ☒ No ☐</td></tr>
<tr><td colspan="3">Has time limited operations under the works approval demonstrated acceptable operations?</td><td colspan="2">Yes ☐ No ☐
Partially compliant ☒ – high TDS, high discharge flow volumes, no covers on conveyor, WWTP Stage 2 will be constructed under the licence.</td></tr>
<tr><td colspan="3">Environmental Compliance Report submitted?</td><td colspan="2">Yes ☒ - TLO
No ☐</td></tr>
<tr><td colspan="5">Date Report received:
Construction & Commissioning - 26/02/2021 - 4/03/2022
Time Limited Operations - 14/09/2023 (with application)</td></tr>
<tr><td>Renewal</td><td>☐</td><td>Current licence number:</td><td colspan="3"></td></tr>
<tr><td>Amendment to works approval</td><td>☐</td><td>Current works approval number:</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Amendment to licence</td><td rowspan="2">☐</td><td>Current licence number:</td><td colspan="3"></td></tr>
<tr><td>Relevant works approval number:</td><td></td><td>N/A</td><td>☐</td></tr>
<tr><td>Registration</td><td>☐</td><td>Current works approval number:</td><td></td><td>None</td><td>☐</td></tr>
<tr><td colspan="2">Date application received</td><td colspan="5">14/09/2023</td></tr>
<tr><td colspan="7">Applicant and premises details</td></tr>
<tr><td colspan="2">Applicant name/s (full legal name/s)</td><td colspan="5">Wonmunna Iron Ore Pty Ltd</td></tr>
<tr><td colspan="2">Premises name</td><td colspan="5">Wonmunna Iron Ore Pty Ltd (WIO)</td></tr>
<tr><td colspan="2">Premises location</td><td colspan="5">M47/1424</td></tr>
<tr><td colspan="2">Local Government Authority</td><td colspan="5">Shire of East Pilbara</td></tr>
<tr><td colspan="7">Application documents</td></tr>
<tr><td colspan="2">HPCM file reference number:</td><td colspan="5">DWERDT836221</td></tr>
<tr><td colspan="2">Key application documents (additional to application form):</td><td colspan="5">• Confidential Attachment - MRL Schedule of Environmental Fines
• 20230906 DWER_Licence Supporting Doc_Wonmunna</td></tr>
</table>

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

Scope of application/assessment

Summary of proposed activities or changes to existing operations.	*Licence* The application for a Licence includes the following proposed activities: • Transfer of construction of Stage 2 WWTP (not yet constructed) from works approval W6358 to licence. • Operation of works completed under W6358 • Amendment to the approved prescribed premises boundary to include the entire tenement area • Operation of ore handling plant (OHP) • inclusion of Mobile Crushing Plant (MCP) to Category 5 infrastructure to supplement ore feed, with • Increase of Category 5 throughput from 10 Mtpa to 13.5 Mtpa • Operation of Stage 1 WWTP and Reverse Osmosis (RO) plant, and associated irrigation • Increase in TDS concentration in irrigation effluent to up to 1,500 mg/L (RO plant effluent mixed with WWTP effluent) • Volume of RO plant effluent to be processed and irrigated (mixed with WWTP effluent) to increase to up to 40 m3/day • request for use of RO brine for dust suppression The department has assessed the Time Limited Operations and will re-assess dust controls.

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	**Proposed / 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.	10 Mtpa (The Ore Handling Plant (OHP))	The following have a combined actual throughput capacity of up to 13.5 Mtpa: • The Ore Handling Plant (OHP; 10 Mtpa) Mobile Crushing Plant (MCP; 3.5M tpa)
Category 54: Sewage facility	100 m^3/day (Stage 1 WWTP)	No change. Stage 2 WWTP to be constructed on the licence.

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	Yes ☐ **No ☒**	Referral decision No: **N/A** Managed under Part V ☐

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
significant proposal?		Assessed under Part IV ☐
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☐ **No ☒**	Ministerial statement No: **N/A** EPA Report No: **N/A**
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ **No ☒**	Reference No: **N/A**
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☐ No ☐	Certificate of title ☐ General lease ☐ Expiry: Mining lease / tenement ☐ Expiry: Other evidence ☐ Expiry:
Has the applicant obtained all relevant planning approvals?	**Yes ☒** No ☐	Certificate of title ☐ General lease ☐ Expiry: Mining lease / tenement ☒ Expiry: **29/04/2033** Other evidence ☐ Expiry:
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☐ No ☐ **N/A ☒**	Approval: **N/A** Expiry date: **N/A** If N/A explain why?
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes ☐ **No ☒**	CPS 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 ☐ **No ☒**	Application reference No: **N/A** Licence/permit No: **N/A** No clearing is proposed.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ☐ **No ☒**	Application reference No: **N/A** Licence/permit No: **GWL204222(2)**

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	**Yes** ☒ No ☐	Name: Pilbara Groundwater and Surface water area Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ **N/A** ☒ Regional office: Northwest
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** ☒	Name: **N/A** Priority: **N/A** Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ **N/A** ☒
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**
Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*?	Yes ☐ **No** ☒	**N/A**