



Application for Licence Amendment

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

Licence Number	L5425/1989/12
Licence Holder	Iluka Resources Limited
ACN	008 675 018
File Number	INS-0001205 (APP-0028356)
Premises	<p>Narngulu Operations</p> <p>249 Goulds Road</p> <p>NARNGULU WA 6532</p> <p>Legal description -</p> <p>Lot 2 on Plan 11238, Lot 202 on Plan 59617, Lot 9 (part of) on Diagram 64009, Lot 151 on Diagram 78655, Lot 34 on Diagram 66647, Lot 33 on Diagram 62983, Lot 55 on Diagram 82363</p> <p>As defined by the coordinates in Schedule 2 of the revised licence</p>
Date of Report	18/09/2025
Decision	Revised licence granted

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1. Decision summary

Licence L5425/1989/12 is held by Iluka Resources Limited (Iluka, licence holder) for the Narngulu Operations (the premises), located at 249 Goulds Road, Narngulu WA 6532.

This amendment report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the premises. As a result of this assessment, revised licence L5425/1989/12 has been granted.

The licence template has been updated to a newer format where required and areas that are redundant have been removed. The conditions have remained as previously worded with just the changes required to action the applied for amendment.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this amendment report, the department has considered and given due regard to its regulatory framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Amendment summary

On 30 May 2025, the licence holder submitted an application to the department to amend licence L5425/1989/12 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- the construction of an additional compacted-soil stockpile pad and associated infrastructure (road, drainage) as an extension to the existing stockpile pad area;
- introduction of an additional Heavy Mineral Concentrate (HMC) feed source from Iluka's Balranald Mine;
- amend the prescribed premises boundary to more accurately reflect the current operational boundary; and
- the removal of Groundwater Monitoring Bore B65.

2.2.1 Expansion of HMC stockpile area

Iluka has proposed to expand the HMC stockpile pad to support the import of non-magnetic HMC (NHMC) from the Balranald Project at Iluka's Balranald Critical Minerals Development in New South Wales. Approximately 220,000 tonnes per annum (tpa) of NHMC material is proposed to be processed, with a potential to increase to 300,000 tpa in the future. There will be no increase in the total throughput as a result of the additional NHMC feed source. The current authorised throughput of 1,200,000 tpa authorised under licence L5425/1989/12 remains unchanged.

The expansion of the HMC stockpile pad is to accommodate an additional compacted-soil stockpile area where the Balranald NHMC will be stored and handled separately to the existing J-A and Cataby NHMC stockpiles. Construction of the stockpile area will include a perimeter earthen bund wall up to 5 meters in height around the southern and eastern sides of the stockpile area (as shown in Figure 1). Stormwater infrastructure will also be constructed as part of the stockpile expansion which includes the installation of drainage and a stormwater sump. The stockpile pad has been designed with a storage capacity of approximately 76 kilotonnes.

The construction of the earthen bunds around the stockpile will mitigate the risk of dust emissions from HMC materials as a result of strong easterly and southerly winds. Additionally,

the perimeter bund will mitigate operational noise and contain any contaminated runoff while the stockpile pad stormwater sump and pad area are being constructed. It is expected the duration of construction for the stockpile pad and associated infrastructure will be completed within five months.

Groundwater Monitoring Bore B65 will be required to be removed as it is located within the expansion area. Monitoring Bore B65 was installed in 2009 as an upgradient background location and will be replaced by two existing background bores B24 and B83 for monitoring purposes.

Leachate contamination from the new Balranald NHMC feed source was tested by Iluka in accordance with the Australian Standard Leaching Procedure (ASLP) using a representative sample. The new feed source will be put through a sulfide flotation process and loaded into a reverse osmosis plant to wash out process water prior to arriving at Narngulu Operations. The testing results recorded electrical conductivity (EC) and total dissolved solids (TDS) parameters to be low and therefore confirming that residual sodium chloride (NaCl) is removed from the product. Additionally, Iluka simulated rainfall leaching which confirmed leachate metals were not detected at concerning concentrations. As a result of this, the new product is confirmed to not have contaminated leachate and can be stored on a soil-compacted liner.

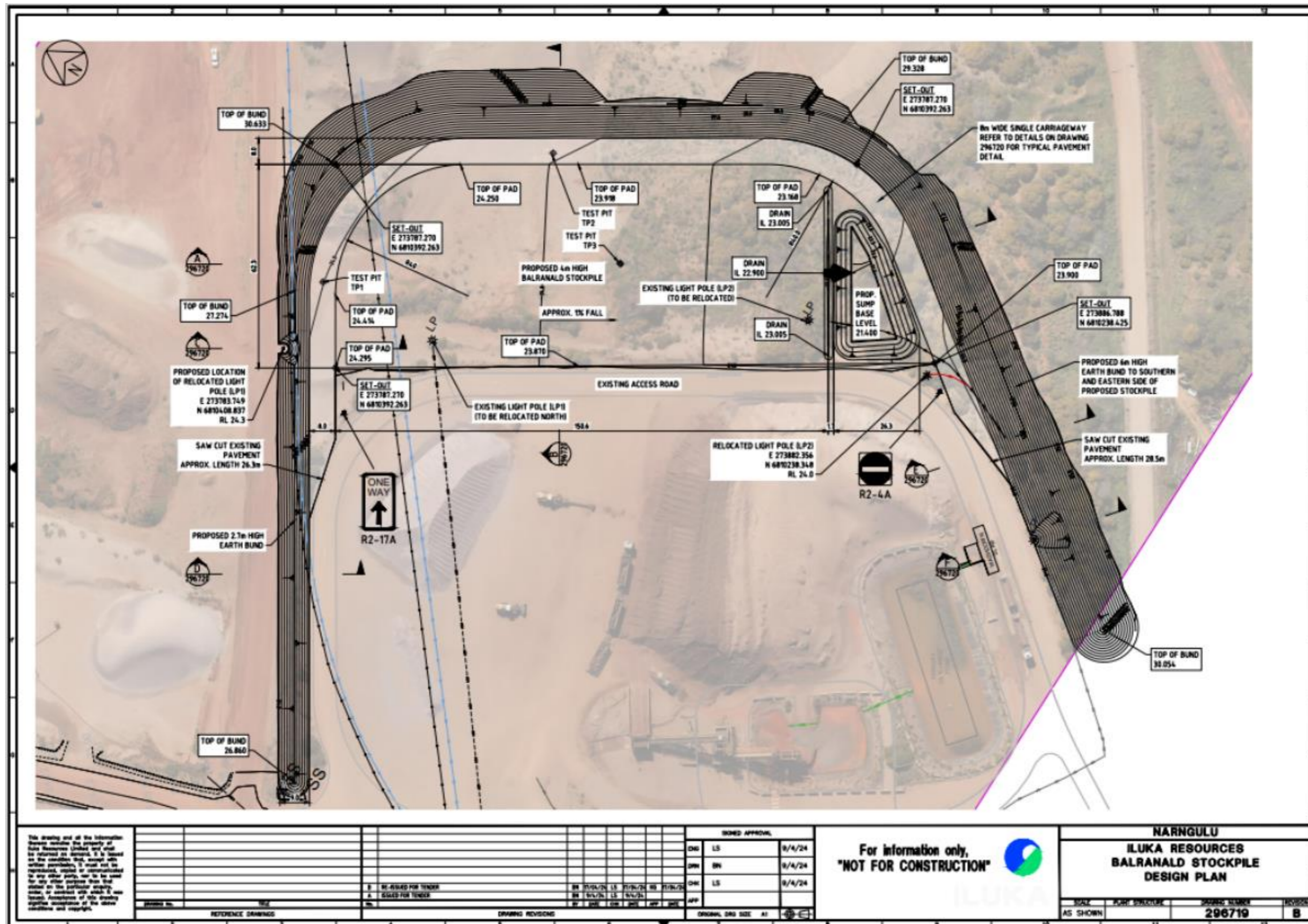


Figure 1: Stockpile pad expansion design

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2.3 Exclusions from the scope

2.3.1 Clearing of native vegetation

The proposed expansion of the HMC stockpile pad will involve the clearing of 1.98 hectares (ha) of regrowth vegetation on Lot 2 on Plan 11238, Narngulu. The licence holder intends to apply for Regulation 5, Item 1 exemption under the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*. Noting that the licence holder confirmed Iluka will be bringing in other materials to construct the HMC stockpile pad (including gravel, bitumen and road base), the proposed clearing would meet the criteria of this exemption.

2.3.2 The new NHMC feed source from Balranald Project

Stack monitoring is already performed at specified discharge points in accordance with condition 8 (Table 4) by an independent external contractor adhering to relevant United States Environment Protection Authority (USEPA) sampling and equipment methodologies. Iluka proposes to perform stack testing during processing of the first shipment of Balranald NHMC through the wash plant, followed by quarterly monitoring in line with condition 8 (Table 4) to confirm there will be no change to air emissions as a result of the amendment.

Operational and authorised emission requirements regarding the separation process have been previously assessed and are in accordance with condition 1 (Table 1) and condition 2 (Table 2) of licence L5425/1989/12. The Balranald NHMC will undergo the same existing separation process as the J-A and Cataby HMC and therefore the conditions already assessed under licence L5425/1989/12 will also apply for the new feed source from the Balranald Project. Given this, a detailed risk assessment has not been undertaken for the new NHMC feed source.

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 pathways during premises construction which have been considered in this amendment report are detailed in Table 1 below. Table 1 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls by applicant
Construction			
Dust (fugitive)	<p>Construction of HMC stockpile pad expansion and earthen perimeter bund</p> <p>Construction of stormwater infrastructure</p> <p>Use of surface mobile equipment (SME) for construction</p>	Air/windborne pathway	<p>Minimise earthworks footprint to the area required according to the design;</p> <p>Vehicles and earth moving equipment will keep to established roads;</p> <p>Dust suppression (water trucks, Gluon, control of vehicle movements, restrict speeds) will be employed during construction as required;</p> <p>Monitoring weather conditions and plan for additional use of water truck during dry and windy conditions;</p> <p>Continuation of existing dust monitoring program;</p> <p>Daily inspections for dust emissions during earthworks and roadwork activities; and</p> <p>The incident reporting system will be maintained to assist in managing environmental incidents such as excessive dust emissions.</p> <p><u>The applicable dust emission controls from the existing licence are outlined below:</u></p> <ul style="list-style-type: none"> • Condition 3: Dust general requirement to prevent generation of visible dust across the boundary of the premises; • Condition 9, Table 5: Fugitive dust controls actions/requirements; and • Condition 21: Records and reporting of complaints
Noise	Use of surface mobile equipment (SME) for construction	Air/windborne pathway	<p>Noise emissions comply with <i>Environmental Protection (Noise) Regulations 1997</i>;</p> <p>Equipment and vehicles will be inspected and maintained to ensure they are operating efficiently and within manufacturers' requirements;</p> <p>Earthmoving occurs during day shift (6am to 6pm) only to eliminate the risk of noise migrating off site at night; and</p> <p>Incident reporting system maintained on site during construction.</p>

Emission	Sources	Potential pathways	Proposed controls by applicant
Contaminated stormwater	Runoff from Infrastructure (roads, HMC, stockpile pad area)	Site drainage Direct discharge to land	<p>Design of the drainage infrastructure is based on modelling to have adequate capacity to contain all stormwater runoff from the pad area;</p> <p>Perimeter earthen bund established during construction to contain stormwater within the immediate area;</p> <p>Earthworks cease or relocate if periods of heavy rainfall are expected;</p> <p>Portable pumps on hand as a contingency measure to pump stormwater to areas within the plant such as other established stormwater sumps;</p> <p>Monitoring weather conditions to prepare for forecasted periods of rainfall using the BoM weather forecast; and</p> <p>Regular inspections of the construction area before, during and after periods of rainfall.</p>
Operation			
Dust (fugitive)	<p>Unloading, loading and stockpiling of NHMC material</p> <p>Vehicle movements on unsealed surfaces</p>	Air/windborne pathway	<p>Minimise stockpile height to be below height of earthen perimeter bund;</p> <p>Earthen bund up to 5 m around the eastern and southern perimeter of stockpile pad (stabilised with vegetation);</p> <p>Inspections for dust emissions during operation;</p> <p>Vehicles and earth moving equipment will keep to established roads;</p> <p>Monitoring weather conditions and plan for additional use of water cart during dry and windy conditions;</p> <p>Continuation of existing dust monitoring program – including water trucks, dusts suppression sprays and Gluon where required; and</p> <p>The incident reporting system maintained on site to assist in managing environmental incidents such as excessive dust emissions.</p> <p><u>The applicable dust emission controls from the existing licence during operation are outlined below:</u></p> <ul style="list-style-type: none"> • Condition 3: Dust general

Emission	Sources	Potential pathways	Proposed controls by applicant
			<p>requirement to prevent generation of visible dust across the boundary of the premises.</p> <ul style="list-style-type: none"> Condition 5: Use appropriate dust suppression techniques to prevent visible dust lift-off of stockpiles. Condition 7: Air quality emissions monitoring. Condition 9: Implementation of fugitive dust controls.
Contaminated/sediment laden stormwater	Stockpiling of NHMC material	Overland and stockpile runoff during high rainfall events	<p>The stockpile pad is sloped to allow for the collection of stormwater within a sump;</p> <p>Design of the drainage infrastructure is based on modelling to have adequate capacity to contain all stormwater runoff from the pad area;</p> <p>Perimeter earthen bund established during construction to contain stormwater around the stockpile area and ensure potentially contaminated water does not mix with uncontaminated water;</p> <p>Earthworks cease or relocate if periods of heavy rainfall are expected;</p> <p>Portable pumps on hand as a contingency measure to pump stormwater to areas within the plant;</p> <p>Monitoring weather conditions to prepare for forecasted periods of rainfall; and</p> <p>Regular inspections of the operational area before, during and after periods of rainfall.</p> <p><u>The applicable contaminated stormwater emission controls from the existing licence during operation are outlined below:</u></p> <ul style="list-style-type: none"> Condition 10: Ensure that any discharge of contaminated water from the premises, other than directly to sewer or septic systems shall be via fuel/oil traps and silt traps. Condition 15: Waste management: Maintenance of stormwater infrastructure to

Emission	Sources	Potential pathways	Proposed controls by applicant
			<p>enable recovery of spillage.</p> <ul style="list-style-type: none"> Condition 16: Waste management: Collection of any spillages/waste material and ensure material is either used in on-site processes or stored in a bunded area prior to disposal by export off-site. Condition 18 (Table 7): Monitoring of groundwater bores and at stormwater dam locations.
Noise	<p>Unloading, loading and stockpiling of Balranald NHMC material</p> <p>Vehicle movements on unsealed surfaces</p>	Air/windborne pathway	<p>Noise emissions comply with <i>Environmental Protection (Noise) Regulations 1997</i>;</p> <p>Equipment and vehicles will be inspected and maintained to ensure they are operating efficiently and within manufacturers' requirements;</p> <p>Construction of an earthen perimeter bund around the HMC stockpile storage area; and</p> <p>Maintain incident reporting system.</p>
Leachate	Stockpiling of Balranald NHMC material	Seepage through storage pad	<p>Pad to be maintained with a compacted natural soil liner (minimum 90% modified maximum dry density to a depth of 300mm);</p> <p>Perimeter earthen bund established around the stockpile area for leachate containment; and</p> <p>Leachate results from the Balranald NHMC indicate no exceedance of the long-term trigger values (LTV) and short-term trigger values (STV) for Irrigation and Livestock Drinking Water (ANZECC 2018).</p>

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the delegated officer has excluded employees, visitors and contractors of the licence holders 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
(Rural) Residential premises	<p>The closest residential premises is approximately 600m south-east of the south-eastern border of the expanded stockpile pad.</p> <p>Residential distances from nearest boundary of expanded stockpile;</p> <p>Resident (R)1: ~600m southeast</p> <p>R2: ~600m east</p> <p>R3: ~900m southeast</p> <p>R4: ~1km south</p>
Environmental receptors	Distance from prescribed activity
<p>Groundwater –</p> <p>Arrowsmith groundwater area</p> <p>Brackish salinity levels ~5,600mg/L to 10,000mg/L</p>	~18mbgl of stockpile expansion

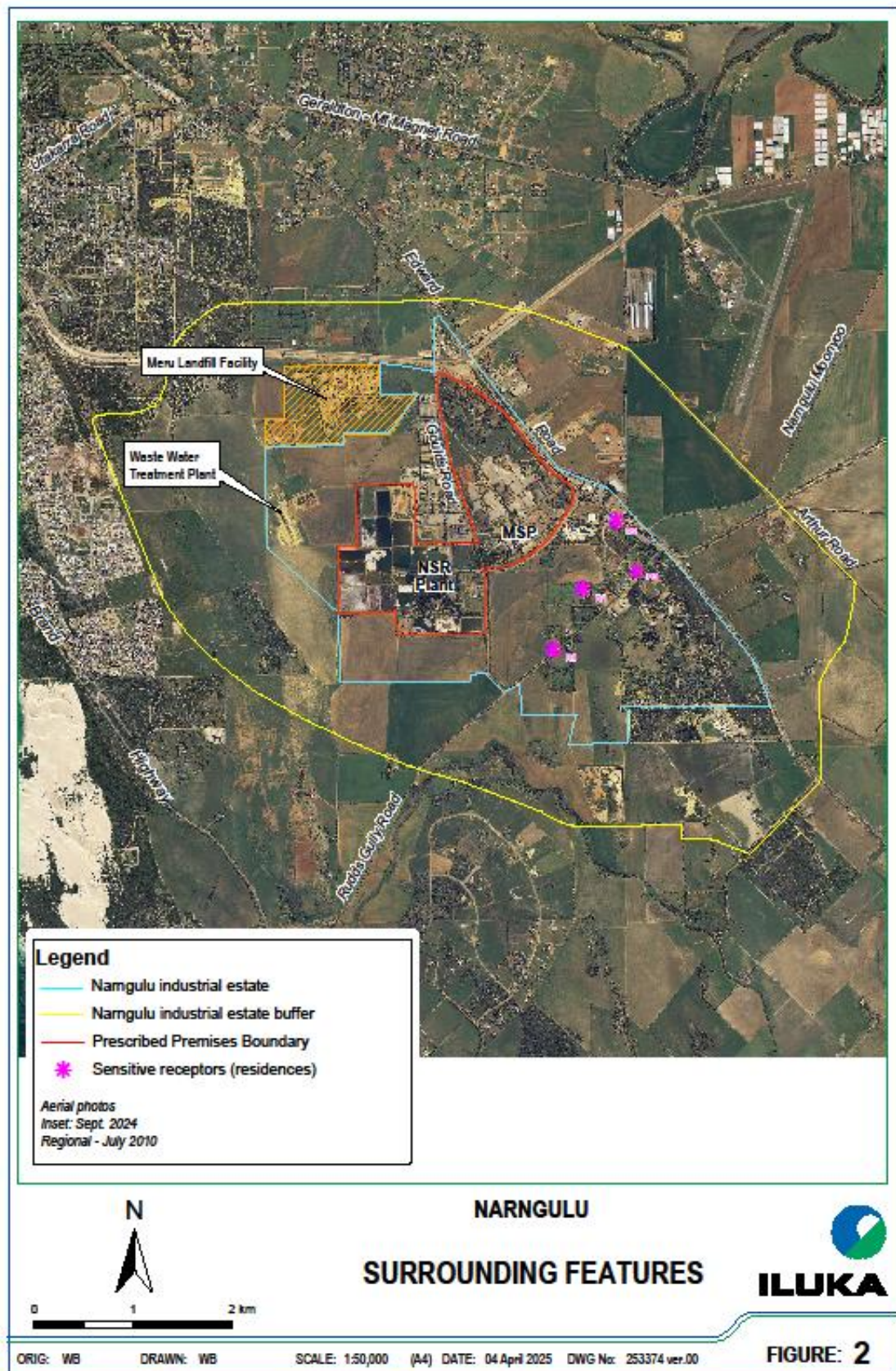


Figure 2: Distance to sensitive receptors

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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the licence holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the licence holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the licence holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3. The revised licence L5425/1989/12 that accompanies this amendment report authorises emissions associated with the operation of the premises i.e. Category 8: Mineral sands mining and processing activities.

The conditions in the revised licence 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 construction and operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
Construction								
Construction of HMC stockpile pad expansion and earthen perimeter bund Construction of stormwater infrastructure Use of surface Mobile Equipment (SME) for construction	Dust (fugitive)	Air/windborne pathway causing impacts to health and amenity	Residential premises (closest being R1 600m from stockpile pad)	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1 (Table 1): has been amended to include the construction requirements of the stockpile pad Existing condition 3: dust general requirement: prevention of dust crossing premises boundary Existing condition 21: records and reporting of complaints	The dust controls outlined on the existing licence are considered to be adequate for the management of dust emissions during construction
	Noise	Air/windborne pathway causing impacts to health and amenity	Residential premises (closest being R1 600m from stockpile pad)	Refer to Section 3.1	C = Minor L = Possible Medium Risk	Y	Condition 1 (Table 1): has been amended to include the construction requirements of the stockpile pad and perimeter bund Existing condition 21: records and reporting of complaints	It is expected that the receptors will not be significantly impacted by noise emissions noting the short-term duration of the works and that construction/site works will be conducted during daytime hours. <i>The Environmental Protection (Noise) Regulations 1997</i> (EP Noise Regulations) apply.
	Contaminated stormwater/sediment laden runoff	Direct discharge to land potentially causing groundwater contamination	Groundwater, soil	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 (Table 1): has been amended to include the construction requirements of the perimeter bund Existing condition 10:	Minimal sediment emissions are expected on site during construction activities (stormwater runoff during rainfall events).

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
							discharges of contaminated water	It is unlikely for sediment emissions to have a significant impact on offsite native vegetation due to the applicant's proposed controls. Therefore, no additional regulatory controls are required.
Operation								
Unloading, loading and stockpiling of Balranald NHMC material Vehicle movements on unsealed surfaces	Dust (fugitive)	Air/windborne pathway causing impacts to health and amenity	Residential premises (closest being R1 600m from stockpile pad)	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1 (Table 1): has been amended to include the construction requirements of the stockpile pad Condition 3: general dust requirement: prevention of dust crossing premises boundary Condition 5: dust general requirements: use appropriate dust suppression techniques Condition 7 (Table 3): air quality and emissions monitoring Condition 9: dust suppressant controls and actions/requirements Condition 21: records and reports of complaints	The Delegated Officer has taken into consideration the installation of the earthen bund around the stockpile which would act as a buffer to dust emissions. Given this and the operational controls on the existing licence, the Delegated Officer considers these controls are likely to be adequate in mitigating dust emissions to reduce impacts to nearby receptors.
	Contaminated stormwater/sediment laden runoff	Direct discharge to land potentially causing groundwater	Groundwater, soil	Refer to Section 3.1	C = Minor L = Possible	Y	Condition 1 (Table 1): has been amended to include stormwater management	Noting the licence holder's controls for stormwater management outlined in section 3.1 and that there

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
		contamination			Medium Risk		requirements and storage capacity for the collection sump Condition 1 (Table 1): has been amended to include the construction requirements of the perimeter bund. Condition 10: discharges of contaminated water	are no surface water lines in close proximity to the proposed activity, the Delegated Officer considers the controls are adequate to manage stormwater at the premises.
	Noise	Air/windborne pathway causing impacts to health and amenity	Residential premises (closest being R1 600m from stockpile pad)	Refer to Section 3.1	C = Minor L = Possible Medium Risk	Y	Condition 1 (Table 1) has been amended to include the earth bund construction Existing condition 21: records and reports of complaints	The Delegated Officer has taken into consideration the installation of the earthen bund around the stockpile which would act as a buffer to noise emissions. <i>The Environmental Protection (Noise) Regulations 1997</i> (EP Noise Regulations) apply
	Leachate	Leaching through pad	Groundwater, soil	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 (Table 1): has been amended to include stormwater management requirements for leachate containment. Existing condition 18 (Table 7): monitoring groundwater bores and at stormwater dam locations	The Delegated Officer has considered the risk of leachate from the compacted soil liner and has included a requirement for liner to be constructed minimum 90% modified maximum dry density to a depth of 300 mm.

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

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

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4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4 : Consultation

Consultation method	Comments received	Department response
The licence holder was provided with draft amendment on 7 August 2025.	Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

Based on the assessment in this amendment report, the Delegated Officer has determined that a revised licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

Table 5 : Summary of licence amendments

Condition	Proposed amendments
Cover page	Updated registered business address; Added Environmental Online file number; Added Date of Issue and Date of Amendment; and Inserted prescribed premises details into a table.
Contents and introduction	Removed and updated to new format.
Amendment 2020	Removed as duplicated in licence history table.
Licence history	Added amendment to expand existing HMC stockpile pad and update registered business address.
Definitions	Updated conditions for 'Balranald NHMC', 'CEO', 'Department; DWER', 'EP Act', 'HMC', 'licence', 'NHMC', 'premises', 'prescribed premises' and 'ZFP.'
Table 1: Infrastructure and equipment controls table	Added Balranald HMC storage pad construction and operational requirements.
Table 7: Ambient groundwater monitoring	Removed monitoring bore B65 from monitoring sites.
Records and reporting	Added conditions 20 and 21 for compliance reporting of condition 1.

Schedule 1: Maps	<p>Update Figure 1 – Prescribed premises boundary and site layout map;</p> <p>Update Figure 2 – Water monitoring sites;</p> <p>Removed Figures 3, 4, and 5;</p> <p>Added a new Figure 4 – Location of expanded stockpile area;</p> <p>Updated Figure 6: Dust monitoring locations and renumbered it to Figure 3;</p> <p>Removed Figures 7 and 8; and</p> <p>Updated figure numbering throughout licence.</p>
Schedule 2: Prescribed premises boundary	<p>Updated premises boundary coordinates;</p> <p>Removed the premises map from schedule 2 and updated Figure 1 with the amended premises map.</p>

References

1. Australian and New Zealand Environmental Conservation Council (ANZECC) 2018, *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*.
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. Department of Water 2013, *Water quality protection note 27 – Liners for containing pollutants, using engineered soil*, Perth, Western Australia.
5. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
6. Narngulu Operations, Iluka Resources Ltd 2025, *Licence 5425/1989/12: HMC Stockpile Pad Expansion*, Western Australia

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

Condition	Summary of licence holder's comment	Department's response
Registered business address	The licence holder has confirmed registered business address is Level 17, 240 St George Terrace.	Noted and updated.
Premises Details – Legal Description	The licence holder has requested to add Lot 9 (part of) on Diagram 64009.	Noted and updated.
Definitions	The licence holder has requested to add 'Balranald NHMC- means non-magnetic heavy mineral concentrate (NMHC) sourced from the Balranald Critical Minerals Development'.	Definition accepted and added.
Condition 1, Table 1, Item 3 - Balranald NHMC storage pad	The licence holder confirmed day shift hours are from 6am to 6pm.	Noted and accepted.
	<p>The licence holder has requested to amend "constructed with compacted soil (*minimum 90% modified maximum dry density to a depth of 300 mm) to reach a permeability of 1×10^{-9} m/s" to "constructed with compacted soil (minimum 90% modified maximum dry density to a depth of 300 mm)".</p> <p>The licence holder states there is no remnant native vegetation, naturally occurring surface water bodies, freshwater aquatic systems or surface expressions of groundwater in the project area or nearby surrounds that could be affected by leachate from the stockpile. Additionally, the existing groundwater quality (brackish to saline) within the area limits beneficial use of the groundwater and the leachate water quality results for the Balranald NHMC are within the Irrigation and Livestock Drinking Water (ANZECC 2018) guideline limits.</p>	The Delegated Officer is satisfied that it is unlikely receptors will be impacted from material leaching through the compacted clay pad and that the proposed controls by the licence holder are adequate. The condition has been updated as per licence holder comment with removal of hydraulic conductivity rate.
	<p>The licence holder has requested to amend "construction of a 6-metre-high earthen perimeter bund around the storage pad;" to "construction of an earthen perimeter bund around the HMC stockpile storage area."</p> <p>The height of the perimeter bund around the HMC stockpile pad varies in</p>	Design noted and amended in condition, no change to risk assessment.

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Condition	Summary of licence holder's comment	Department's response
	height form approximately 2.7 m on the northern side and approximately 5 m on the southern and eastern sides.	
	<p>The licence holder has requested the condition "all surface water runoff is directed to, and contained within, a collection sump with capacity to contain a 1 in 100-year, 72-hour duration rainfall event" be amended to;</p> <p>"All surface water runoff from the expanded pad area is directed to a collection sump for infiltration and evaporation." and</p> <p>"Portable pumps will be available as a contingency measure during heavy rainfall events to pump stormwater to areas within the plant such as other established stormwater sumps."</p>	The Delegated Officer is satisfied with the alternative controls proposed by the licence holder. The condition has been updated as per licence holder's requested and alternative controls have been added to Table 1 of this report.
Records and reporting – Conditions 21 and 22	Amend 'works approval holder' to 'licence holder'.	Noted and updated.
Revised Figures	Revised figures have been provided by the licence holder for Figures 1-9.	Updated Figures 1, 2, 6 and 9 have replaced old figures. Figures 3, 4, 5, 7 and 8 have been removed from the licence.
Amendment Report – Section 3.1.1, Table 1	<p>The licence holder was asked to explain weather monitoring methods and additional controls during windy and dry conditions.</p> <p>The licence holder intends to monitor dust during construction as per Condition 9, Table 5 (Fugitive dust controls) and additional use of water cart.</p>	Noted and accepted. Controls have been added to Table 1.
Construction – Dust (fugitive)	<p>The licence holder was asked to provide frequency of inspections.</p> <p>Licence holder confirmed daily inspections, occurring proactively subject to weather forecasting, focusing on forecasted higher risk times will be carried out.</p>	Noted and accepted.
Amendment Report – Section 3.1.1, Table 1 Construction – Contaminated Stormwater	<p>The licence holder was asked to explain monitoring methods for ..</p> <p>The licence holder intends to monitor weather conditions and to prepare for forecasted periods of rainfall using Bureau of Meteorology (BoM) forecasting.</p>	Noted and accepted.
Amendment Report – Section 3.1.1, Table 1 Operation – Dust (fugitive)	<p>The licence holder was asked to explain weather monitoring methods and additional controls during windy and dry conditions.</p> <p>The licence holder intends to monitor dust during operation as per Condition 9, Table 5 (Fugitive dust controls) and additional use of water</p>	Noted and accepted. Controls have been added to Table 1.

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Condition	Summary of licence holder's comment	Department's response
	cart.	
	<p>The licence holder was asked to confirm the storage capacity if the water truck maintained on site and when dust control agents (Gluon) are applied onto the stockpile.</p> <p>The licence holder confirmed the water truck has a 20kL capacity. Dust control agents (Gluon) will be applied onto the Balranald NHMC stockpile as per Condition 9, Table 5 in the licence. Typically, Gluon (or other binder agents) is applied to the exposed (southern) side of HMC stockpiles prior to the windy summer period and maintained throughout summer.</p>	Noted and accepted. Controls have been added to Table 1.
	The licence holder requests the removal of "dust suppression spray bars installed within the crushing and screening plant to dampen product and suppress dust generation during plant operation". Iluka Narngulu does not have a crushing and screening circuit.	Noted and removed.
Amendment Report – Section 3.1.1, Table 1 Operation – Contaminated/sediment laden stormwater	<p>The licence holder was asked to confirm the storage capacity of drainage infrastructure.</p> <p>The licence holder confirms storage capacity of the sump is approximately 1,100 m³. The pad is designed to contain rainfall captured within the expanded pad area based on the average annual rainfall. In the event of forecast above average rainfall, portable pumps are installed to transfer excess water to other stormwater sumps or dams.</p>	Noted and accepted. Controls have been added to Table 1.
Amendment Report – Section 3.1.1, Table 1 Operation - Noise	<p>The licence holder has requested "construction of a 6-metre high earthen perimeter bund" be amended to "construction of an earthen perimeter bund around the HMC stockpile storage area".</p> <p>The height of the perimeter bund around the HMC stockpile pad varies in height from approximately 2.7 m on the northern side and approximately 5 m on the southern and eastern sides</p>	Design noted and amended in condition, no change to risk assessment.
	The licence holder requests 'UHMC material' be amended to "Balranald NHMC material".	Noted and updated.
Amendment Report – Section 3.1.1, Table 1	The licence holder requests 'UHMC material' be amended to "Balranald NHMC material".	Noted and updated.

Condition	Summary of licence holder's comment	Department's response
Operation - Leachate		
Amendment Report – Section 3.1.2, Table 2	The licence holder requests the Residential Premises be updated in accordance to Figure 2Figure 2.	Noted and accepted.
	The licence holder request 'native vegetation surrounding the expanded stockpile pad' be removed or amended to "N/A – vegetation within the premises boundary is intentionally planted or is regrowth of endemic species".	As per reasoning provided by licence holder, native vegetation from within the premise boundary has been removed as a receptor.
Amendment Report – Section 3.2, Table 3	The licence holder requests that emission of leachate be amended to reflect that there are no plausible source, pathway and impact to thee listed receptor. The licence holder considered the controls described in the licence amendment application are adequate to manage the risk, and therefore a defined hydraulic conductivity rate in the licence is not required for the stockpile pad.	The Delegated Officer is satisfied that it is unlikely receptors will be impacted from material leaching through the compacted clay pad and that the proposed controls by the licence holder are adequate. Table 3 has been updated to remove the hydraulic conductivity rate.