



## Application for Works Approval

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

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**Works Approval Number** W2865/2025/1

**Applicant** ARM Mining Pty Ltd

**ACN** 147 134 432

**File number** APP-0026278

**Premises** Londonderry Historic Quarry  
Located on Mining Tenement M15/1362 within Pastoral Lease N049612

**Date of report** 03 April 2025

**Proposed Decision** Works approval granted

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## 1. Decision summary

This decision report documents the assessment of potential risks to the environment from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W2865/2025/1 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 3 November 2024, ARM Mining Pty Ltd (the applicant) submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is for the extraction, crushing and screening of rubidium ore and the crushing and screening of existing low-grade pegmatite waste material stockpiles located on the premises. The proposed operations are expected to be carried out across two stages which are outlined in further detail in section 2.3.2 below.

The premises is about 20 km southwest of Coolgardie and is located on the Bullabulling Pastoral Station (PL No. 049612) within mining tenement M15/1362 and accessed from Nepean Road via miscellaneous tenement L15/452 (Figure 1).

The premises relates to the category 5 and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W2865/2025/1. 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 2020b) are outlined in works approval W2865/2025/1.



Figure 1: Proposed prescribed premises boundary

## 2.3 Description of proposed activity

### 2.3.1 Construction

The proposed activities are to be carried out within a previously disturbed mine site, with limited regrowth vegetation present. The applicant advises that clearing required to facilitate construction will be kept to under 10-hectares per financial year and subject to the applicable exemption in accordance with Regulation 5, Item 20 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*. The Delegated Officer notes that the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) has delegated authority for the administration of applications to clear native vegetation for mineral activities regulated under the *Mining Act 1978*, which applies to this premises.

Key site infrastructure is illustrated in Figure 2 and a comprehensive list of equipment is included in Works Approval W2865/2025/1.

Operations will consist of crushing, screening and stockpiling. Dust suppression systems throughout the crushing and screening circuit will have fog cannons or misting systems, enclosed conveyors with dust extraction units and water spray bars at transfer points.

The crushing plant will achieve a maximum throughput of 400 tph, resulting in a feed size up to 185 mm before being screened at a maximum rate of 500 tph. The applicant has stated that the maximum design capacity is 250,000 tonnes per year given the limitations of ore available for processing.



Figure 2: Site Infrastructure Layout

### 2.3.2 Operations (including time limited operations)

The proposed operations are expected to be carried out across two stages. Stage 1 proposes to dry process low-grade pegmatite waste material stockpiles located at the premises using a mobile crushing and screening plant consisting of primary and secondary crushers and screens.

Approximately 500 tonnes of Pegmatite waste material per day will be crushed to approximately 100 mm and screened before being transported offsite. An estimated total of 212,000 tonnes of material is expected to be crushed and screened from the existing low-grade pegmatite waste material stockpiles. Screening waste will be backfilled into existing excavations onsite. This stage is expected to take approximately 14 months.

Once Stage 1 is complete and the existing low-grade waste stockpiles have been processed and transported off-site, Stage 2 will commence. This stage will involve the deployment of one 30-tonne excavator and two 30-tonne haul trucks to extract approximately 233,000 tonnes of rubidium ore and 311,000 tonnes of waste material. The ore will undergo a two-stage dry crushing and screening process before being transported to the port for export. Waste material will be stockpiled onsite and will be subject to rehabilitation following the completion of mining activities. This phase is expected to take approximately 16 months.

The applicant has requested a time-limited operation period to operate the mobile crushing and screening plant post-construction while a licence application is assessed.

Due to the proposed mining depth and the limited water in the existing pits no dewatering will be required to facilitate mining, and all site water requirements (for dust suppression, etc.) will be obtained from off-site water sources. All waste generated from activities at the premises will be temporarily stored and regularly transported offsite to the appropriate licenced disposal pathways.

## 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 2020b).

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 construction and operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

**Table 1: Proposed applicant controls**

Emission	Sources	Potential pathways	Proposed controls
<b>Construction</b>			
Dust	Placement and mobilisation of screening and crushing plant, and associated	Air / windborne pathway	<ul style="list-style-type: none"> <li>Dust suppression system installed (hood fitted with sprinklers or extraction)</li> <li>Visual monitoring is undertaken daily for output of excessive dust</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
	equipment including vehicle movements		<ul style="list-style-type: none"> <li>• Stockpiles sprayed with water as required based on weather conditions to aid dust suppression</li> <li>• Windbreaks as required</li> <li>• Operational hours controlled, day shift and 12 hours per day</li> <li>• Regular maintenance undertaken on the plant</li> </ul>
<b>Operation</b>			
Dust	Screening, crushing, unloading, loading and storage of material  Vehicle movements	Air / windborne pathway	<ul style="list-style-type: none"> <li>• Dust suppression system installed (hood fitted with sprinklers or extraction)</li> <li>• Visual monitoring is undertaken daily for output of excessive dust</li> <li>• Stockpiles sprayed with water as required based on weather conditions to aid dust suppression</li> <li>• Windbreaks as required</li> <li>• Regular maintenance undertaken on the plant</li> </ul>
Sediment-laden stormwater	Heavy rainfall runoff through operational areas including screening, crushing, unloading, loading and material storage areas	Overland runoff and/or infiltration	No controls proposed.
Hydrocarbon discharge	Fuel storage area – unplanned fuel storage leaks, delivery and refueling activities	Overland runoff and/or infiltration	<ul style="list-style-type: none"> <li>• Spill kits kept in proximity to hydrocarbon and chemical storage areas, workshop and gensets</li> <li>• Personnel trained in refueling practices and spill response</li> <li>• Hydrocarbons and chemicals kept banded during storage and transport</li> </ul>

### 3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020b), the Delegated Officer has excluded the applicant’s employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 below provides a summary of potential environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020a)).



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

Environmental receptors	Distance from prescribed activity
Adjacent native vegetation	Within, adjacent to and surrounding the prescribed premises and proposed operations.
Groundwater	Limited information is available on groundwater levels at the premises. The closest groundwater bores recorded on the Water Information Reporting (WIR) database are about 2 km away to the north of the premises boundary (site reference 120411945 and 120411946). Groundwater levels in these bores was recorded as 8 m below ground level in 1987. Due to the age of the data and the distance of groundwater bores from the premises this data is not considered representative of groundwater levels at the premises.

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020b) for each identified emission source and considers 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 works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works approval W2865/2025/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises i.e. Category 5 activities. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

**Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation**

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
<b>Construction</b>								
Placement and mobilisation of screen and associated equipment including vehicle movements	Dust	<b>Pathway:</b> Air/windborne pathway  <b>Impact:</b> Health impacts to vegetation health	Adjacent native vegetation	Refer to Section 3.1	C = Slight L = Possible <b>Low Risk</b>	Y	Condition 1, Table 1, Condition 6, Table 2	N/A
<b>Operation (including time-limited-operations operations)</b>								
Screening, crushing, unloading, loading and storage of crushed material  Vehicle movements	Dust	<b>Pathway:</b> Air/windborne pathway  <b>Impact:</b> Health and amenity, impacts to vegetation health, fauna habitat and ecosystems	Adjacent native vegetation	Refer to Section 3.1	C = Slight L = Possible <b>Low Risk</b>	Y	Condition 1, Table 1, Condition 6, Table 2	N/A
	Sediment laden stormwater	<b>Pathway:</b> Overland runoff  <b>Impact:</b> Ecosystem disturbance or impact to groundwater	Adjacent native vegetation Groundwater	Refer to Section 3.1	C = Minor L = Unlikely <b>Medium Risk</b>	N	<b><u>Condition 1, Table 1,</u></b> <b><u>Condition 6, Table 2</u></b>	No stormwater controls were proposed at the time of application, however the applicant has provided the intent to add diversion bunding to divert clean stormwater away from the

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								operational areas. They also propose to use bunding to contain contaminated stormwater. The Delegated Officer has determined to specify the installation of stormwater diversion infrastructure on the works approval to reduce the risk and impacts to vegetation and avoids erosion on disturbed areas.
Fuel storage area – unplanned fuel storage leaks, delivery and refueling activities	Hydrocarbons	<b>Pathway:</b> Overland runoff  <b>Impact:</b> Ecosystem disturbance or impact to groundwater	Adjacent native vegetation  Groundwater	Refer to Section 3.1	C = Minor L = Unlikely <b>Medium Risk</b>	Y	Condition 1, Table 1, Condition 6, Table 2	N/A

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

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

## 4. Consultation

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

**Table 4: Consultation**

Consultation method	Comments received	Department response
Marlinyu Ghoorlie Aboriginal Corporation	No comments received.	N/A
Local Government Authority advised of proposal on 20 January	No comments received.	N/A
Applicant was provided with draft documents on 14 March 2025	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 works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020b, *Guideline: Risk Assessments*, Perth, Western Australia.
4. State of Western Australia 2023, *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*, Perth, Western Australia.
5. ARM Mining 2024, *Supporting Information for Works Approval Application for the Londonderry Operation located on tenement M15/1362*, Sydney, New South Wales.

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

Condition	Summary of applicant’s comment	Department’s response
Draft Decision Report – Page 5	<p>The Department requested the following information:</p> <p>The applicant has stated that the maximum design capacity is 250,000 tonnes per year, however, the Delegated Officer has calculated the maximum design capacity to be 3,504,000 tonnes per year, based on the limiting factor being the crushing plant.</p> <p><u>Applicant response:</u></p> <ul style="list-style-type: none"> <li>• The 250,000 tonnes per year figure provided is for the historical surface waste piles to be processed over the first one to two years. Any further processing volumes depend on increased offtake agreements.</li> <li>• Crushing equipment will be operated on dayshift only, running 12 hours per day and 7 days per week.</li> </ul>	<p>The applicant has provided sufficient clarification regarding the maximum design capacity of 250,000 tonnes per year, which is due to the limitations of ore available for processing.</p>
Draft Decision Report – Page 9	<p>The Department requested the following information:</p> <p>Limited information is available on groundwater levels at the premises. The closest groundwater bores recorded on the Water Information Reporting (WIR) database are about 2 km away to the north of the premises boundary (site reference 120411945 and 120411946). Groundwater levels in these bores was recorded as 8 m below ground level in 1987. Due to the age of the data and the distance of groundwater bores from the premises this data is not considered representative of groundwater levels at the premises.</p> <p><u>Applicant response:</u></p> <ul style="list-style-type: none"> <li>• There is no additional groundwater level data that can be provided.</li> </ul>	<p>Noted.</p>
Draft Works Approval –Table 2 (also applicable to Table 1)	<p>The Department requested the following information:</p> <p>Sediment laden or contaminated surface waters must be contained on-site and clean water to be diverted away from the crushing and screening plant and crushed material stockpile area.</p> <p><u>Applicant response:</u></p> <ul style="list-style-type: none"> <li>• Diversion bunds and drains will be installed at the premise where required, to ensure clean stormwater is diverted away from the crushing and screening plant and crushed stockpile area and to ensure that any sediment laden stormwater will be retained so that it does not</li> </ul>	<p>Table 1 and Table 2 of the Works Approval have been updated to accurately reflect stormwater management measures.</p>

Condition	Summary of applicant's comment	Department's response
	cause impact on the surrounding environment.	