



Application for Works Approval

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

Works Approval Number W3071/2025/1

Applicant Abra Mining Pty Ltd (AMPL)

ACN 110 233 577

File number DER2023/000048

Premises Abra Base Metals Project
MEEKATHARRA WA 6642
Legal description -
Part of mining tenements L52/194, M52/776,
G52/292 and L52/210
As defined by the premises maps attached to the issued works
approval

Date of report 22/10/2025 (**FINAL**)

Proposed Decision Works approval granted

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Application summary	1
2.3 Overview of prescribed premises	1
2.3.1 Category 89 – Landfill	1
2.3.2 E-waste to landfill ban in Western Australia	2
3. Risk assessment.....	5
3.1 Source-pathways and receptors	5
3.1.1 Emissions and controls.....	5
3.1.2 Receptors	6
3.2 Risk ratings	9
4. Consultation	13
5. Conclusion	13
References	13

Table 1: Proposed applicant controls.....	5
Table 2: Sensitive human, environmental, and cultural receptors and distance from prescribed activity	7
Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation.....	10
Table 4: Consultation	13
Figure 1: Premises Map	4
Figure 2: Proposed landfill location.....	5
Figure 3: Distance to sensitive receptors	8

1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W3071/2025/1 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

On 28 May 2025, 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 to undertake construction works relating to a landfill facility at the premises. The premises is approximately 183 km south-west of Newman. The premises relates to the category 89 and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W3071/2025/1.

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 2020) are outlined in works approval W3071/2025/1.

2.3 Overview of prescribed premises

The prescribed premises is currently operating under the existing licence L9383/2023/1 and contains a landfill under Category 89 covered by registration R2521/2021/1. The landfill was approved with a design capacity of 2,000 tonnes per annum (tpa) with an estimated lifespan of 5 years based on the anticipated rate of disposal.

The design capacity of the existing mine landfill is 15,000 cubic metres (m³), with an estimated 1,500 m³ of remaining capacity. The average rate of waste disposal has been approximately 8.83 m³ per day.

The density of disposed materials varies significantly, ranging from 0.5 to 1.5 tonnes per cubic metre (t/m³). Using the maximum expected t/m³, the estimated annual disposal rate equates to approximately 3,795 tonnes per annum (tpa). This figure is approximately double the original projected disposal volume.

To accommodate the increased waste generation, a new landfill facility is proposed. The design and operational parameters of the new facility will ensure that total waste disposal does not exceed the maximum allowable throughput of 5,000 tpa, as defined under Category 89.

2.3.1 Category 89 – Landfill

The proposed landfill facility is planned to be constructed adjacent to the eastern boundary of the existing mine landfill facility (refer to Figure 2). It is designed to accept Class II waste types, including:

- Type 1 inert waste – approximately 2,500 tonnes per annum (tpa) (pallets, strapping, cleaned ammonium nitrate bulk bags, concrete, rock bolts and steel support mesh that

can't be recycled).

- Type 2 inert waste – approximately 750 tpa (Used tyres).
- Putrescible waste – approximately 450 tpa (food/kitchen waste, paper and cardboard).
- Recyclables – approximately 1,000 tpa (timber, batteries, HDPE pipe and steel).
- Contaminated solid waste (meeting Class II acceptance criteria) – approximately 95 tpa (bioremediated soil meeting Class II landfill acceptance criteria).

With respect to the disposal of ammonium nitrate (AN) bags (1 tonne), the applicant has advised that empty bags are taken to one side after use, inspected to ensure that no AN remains inside and the set aside and taken to the surface for disposal. Where the 20kg bags are used, a similar inspection is undertaken prior to being set aside until the end of the charge up, whereby it is taken to the surface for disposal (otherwise they would be disposed of in the vicinity of the charge up area).

In the unlikely event that there are minor quantities of AN prill remaining the bags, it will be disposed of in the vicinity of the charge up area.

The empty bag is then taken to one side after use, inspected to ensure no AN remains inside and the set aside for waste disposal on the surface.

The facility will comprise the following infrastructure:

- Five landfill trenches, each measuring 5 m in width, 4 m in depth, and 150 m in length (total trench volume: 15,000 m³)
- 0.5 m high earthen bunds
- Faunal egress ramps for each trench
- Access tracks
- Signage and fencing, as required
- Earthmoving equipment

Trench construction will proceed from west to east, with only one trench active at a time. Trenches will be progressively closed upon reaching capacity. Operational controls will be implemented in accordance with the [Environmental Protection \(Rural Landfill\) Regulations 2002](#) (Rural Landfill Regulations). Post construction in accordance with the works approval the site is intended to be operated under a Registration, consistent with the existing landfill site.

2.3.2 E-waste to landfill ban in Western Australia

Key findings

The applicant has indicated that batteries will be a part of the waste disposed into the proposed landfill. Disposal of batteries to landfill is a waste type that is now restricted from being landfilled across Western Australia.

Batteries are considered an electronic waste (e-waste) under the [Waste Avoidance and Resource Recovery \(e-waste\) Regulations 2024](#). In support of the Waste Avoidance and Resource Recovery Strategy 2030, the State Government implemented an e-waste to landfill ban in Western Australia.

The Regulations ban the disposal of regulated e-waste to landfill by e-waste service providers, significant business or public entities, and landfill operators; or those who collect, aggregate, sort, recycle, process, store and dispose of e-waste.

E-wastes may only be received onto a landfill under exemption which can be applied for by an e-waste service provider, a landfill operator or a significant entity operating within Western

Australia. The applicant has not indicated that any exemption currently exists for the proposed landfill.

This waste-type will therefore not be authorised for disposal as part of this approval.

Further information on the E-waste ban to landfill can be found at:

<https://www.wa.gov.au/service/building-utilities-and-essential-services/waste-management/e-waste-landfill-ban-wa>



Figure 1: Premises Map

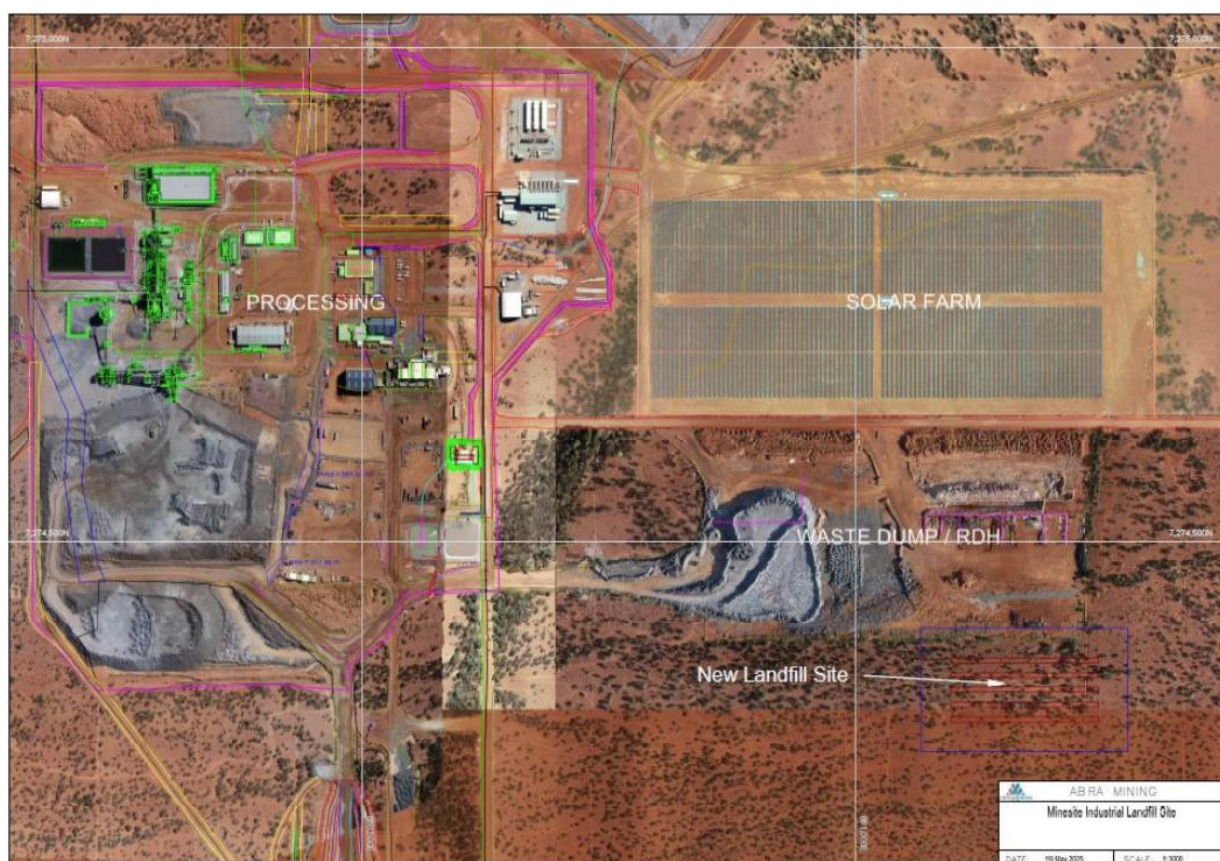


Figure 2: Proposed landfill location

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises 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
Construction			
Dust	Construction of Class II landfill	Air / Windborne	<i>No controls proposed by the applicant¹.</i>

Emission	Sources	Potential pathways	Proposed controls
	Vehicle movement along haul roads during construction	pathway	
Operation			
Dust	Operation of Class II landfill Vehicle movement in loading and unloading of waste	Air / Windborne pathway	<i>No controls proposed by the applicant¹.</i>
Odour			<i>No controls proposed by the applicant¹.</i>
Windblown Waste			- Any windblown wastes will be collected monthly and returned to the Landfill for burial. - Wastes will be covered monthly to reduce windblown waste. - Waste is disposed of into a below-ground trench which reduces the exposure of the waste to the wind. - The earthen bunds around the trench perimeter will assist in diverting the wind
Fire			<i>No controls proposed by the applicant¹.</i>
Seepage of leachate		Seepage to ground and underlying groundwater	<i>No controls proposed by the applicant¹.</i>
Contaminated stormwater runoff		Direct discharge to land; seepage to ground and underlying groundwater; and/or run-off into ephemeral drainage lines	A 0.5 m high earthen stormwater bund around the perimeter of each trench.

Note 1: While no specific controls have been proposed, DWER notes that the site will be managed in accordance with the Rural Landfill Regulations.

3.1.2 Receptors

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

Table 2 and Figure 3 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, environmental, and cultural receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Pastoral Lease	The prescribed premises resides within a pastoral lease.
Environmental receptors	Distance from prescribed activity
Native vegetation	The threatened or closest priority flora species is located 3.5km north of the proposed activity.
Fauna	The threatened or closest priority fauna species is located 8.4km east of the proposed activity.
Underlying groundwater	Groundwater levels range from 16 – 54 mbgl at the Premises.
Surface water lines	Ephemeral water line 1.5km south-east of the proposed activity.
Cultural receptors	Distance from prescribed activity
Aboriginal heritage site	The proposed activity has multiple aboriginal heritage sites surrounding its vicinity. These are the approximate distances and directions: • Ethel Creek Scatter 1 – 1.1km south of the proposed activity • 5 – Mile Creek 04 – 1.2km south-east of the proposed activity • Ethel Creek Scatter 2 – 1km south-east of the proposed activity • Ethel Creek Scatter 3 – 1km south-east of the proposed activity • 5 – Mile Creek 06 – 1.1km south-east of the proposed activity • GAL22-03 – 1.4km north-east of the proposed activity • GAL22-02 – 1.5km north-east of the proposed activity • GAL22-01 – 1.8km north-east of the proposed activity

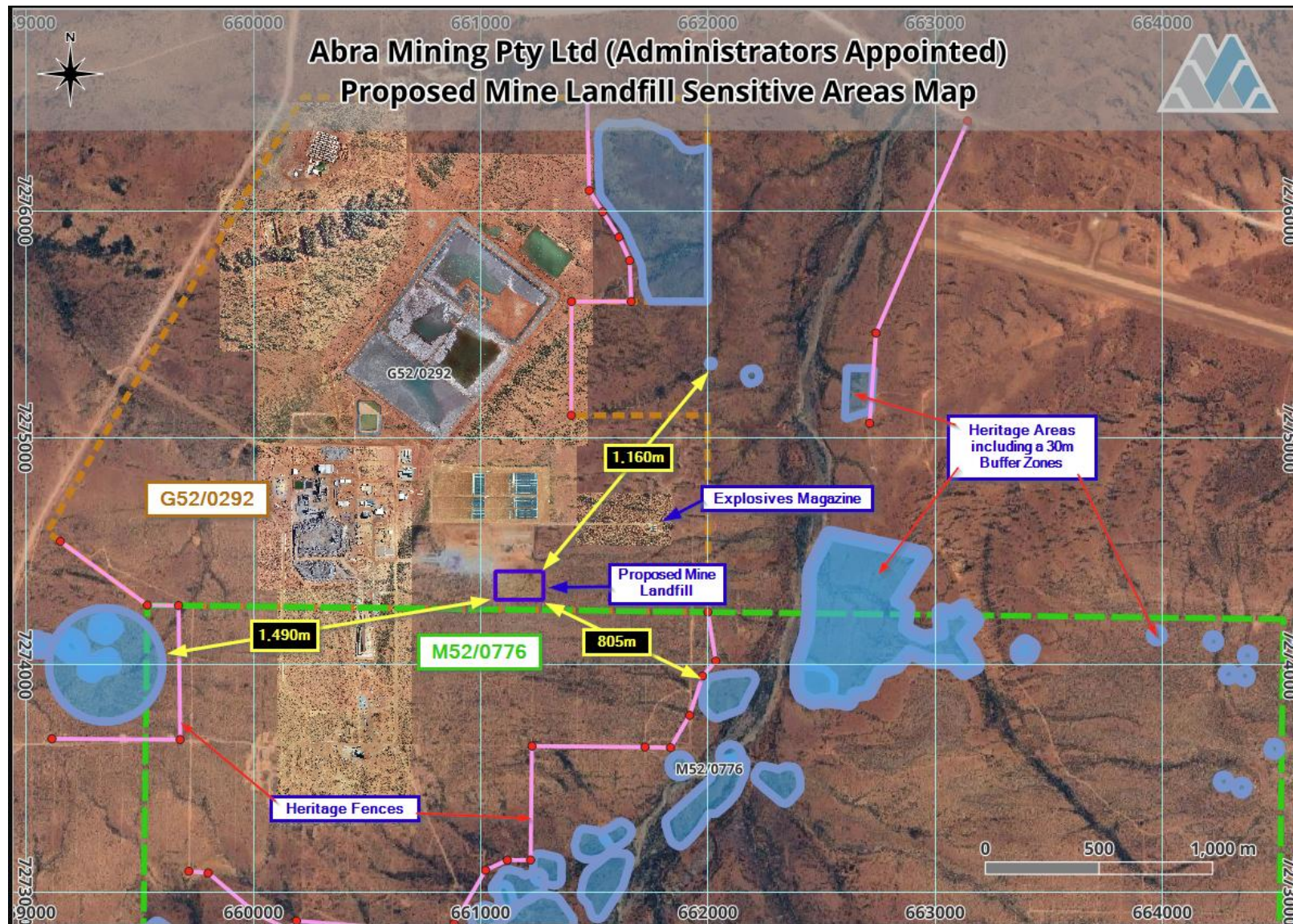


Figure 3: Distance to sensitive receptors

Works Approval: W3071/2025/1

IR-T13 Decision report template (short) v3.0 (May 2021)

3.2 Risk ratings

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

Where the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the 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 W3071/2025/1 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 89 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 ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls / DWER Comments
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Construction of Class II landfill Vehicle movement along haul roads during construction	Dust	Pathway: Air/windborne pathway Impact: Health and amenity	Native vegetation within the prescribed premises boundary Local fauna	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	N	Condition 2: dust management requirements during construction	The Delegated Officer finds the emission of dust to be limited in the construction of the landfill facility. Requirements to manage dust have been specified consistent with the Rural Landfill Regulations.
Operation (including time-limited-operations operations)								
Operation of Class II landfill Vehicle movement in loading and unloading of waste	Dust	Pathway: Air/windborne Impact: smothering of native vegetation inhibiting photosynthesis/ growth cycle. Reduction in amenity and health of local fauna. Impact: Dust deposition on cultural heritage sites	Native vegetation within the prescribed premises boundary Local fauna Aboriginal cultural heritage sites	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 10: dust management requirements during operation	The Delegated Officer finds the emission of dust to be limited in the operation of the landfill facility. Requirements to manage dust have been specified consistent with the Rural Landfill Regulations.
	Odour	Pathway: Air/windborne	Attraction of feral animals	Refer to Section	C = Minor	Y	Condition 1 - infrastructure and	The installation of the fence and covering of waste is sufficient in managing odour

Works Approval: W3071/2025/1

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls / DWER Comments
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
		Impact: adverse effects to environment and local fauna	and vermin – could increase predator level	3.1	L = Unlikely Medium Risk		equipment requirements Condition 8 and 9 – Waste acceptance and disposal	related issues. Requirements to manage odour have been specified consistent with the Rural Landfill Regulations (weekly cover).
	Seepage of leachate	Pathway: seepage to ground and underlying groundwater Impact: adverse effects on groundwater quality	Underlying Groundwater (16-54mbgl)	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 - infrastructure and equipment requirements	The trenches are constructed to be 4m deep. The Delegated Officer finds the separation of the landfill and the underlying groundwater sufficient in managing risks from seepage. Requirements to manage adequate separation distances from surface water and groundwater have been specified consistent with the Rural Landfill Regulations.
	Stormwater runoff	Pathway: direct discharge to land; seepage to ground and underlying groundwater; and/or run-off into ephemeral drainage lines Impact: contamination of soils leading and/or adverse effects on groundwater quality	Native vegetation within the prescribed premises boundary Ephemeral surface water drainage lines/areas outside the premises boundary Underlying Groundwater (16-54mbgl)	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 - infrastructure and equipment requirements Condition 7 – operational requirements for infrastructure	The applicants' proposed controls for managing stormwater runoff as sufficient. Requirements to manage stormwater have been specified consistent with the Rural Landfill Regulations.
	Windblown Waste	Pathway: Air/windborne Impact: adverse effects to	Native vegetation within the prescribed premises boundary	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 - infrastructure and equipment requirements Condition 8 – Waste acceptance and	The installation of the fence, covering of waste, and monthly collection of waste is sufficient in managing windblown wastes. Requirements to manage windblown waste have been specified consistent with

Works Approval: W3071/2025/1

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls / DWER Comments
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
		environment and local fauna	Attraction of feral animals and vermin – could increase predator levels				disposal	the Rural Landfill Regulations.
	Fire	Pathway: Air/Windborne pathway Impact: adverse effects to environment and local fauna	Native vegetation within the prescribed premises boundary Local Fauna	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 - infrastructure and equipment requirements Condition 8 and 9 – Waste acceptance and disposal	Firebreak requirements have been specified consistent with the Rural Landfill Regulations. Covering of waste will assist in managing fire related issues.

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

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

4. Consultation

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

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 08 August 2025	None received	N/A
Applicant was provided with draft documents on 17 September 2025	Further clarification provided on inspection of ammonium nitrate bags prior to disposal to landfill (30/09/2025)	Section 2.3.1 of the Decision Report updated to reflect additional information.

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. Abra Mining Pty Limited 2025, '*Abra Mine WA Application for Mine Landfill 2025*', Perth Western Australia
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. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Government of Western Australia. (2002) *Environmental Protection (Rural Landfill) Regulations 2002*. Perth, Western Australia.