



## Application for Licence Amendment

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

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<b>Licence Number</b>	L8495/2010/2
<b>Licence Holder</b>	Terra Mining Pty Ltd
<b>ACN</b>	605 732 518
<b>File Number</b>	2010/009798-3
<b>Premises</b>	Extension Hill Mine Site PAYNES FIND WA 6612  Legal description - Mining Tenements G59/33, G59/34, G59/62, L59/68, L59/69, L59/87, M59/338, M59/339, M59/526, M59/454, M59/455 and M59/609
<b>Date of Report</b>	27 September 2024
<b>Decision</b>	Revised licence granted

Fiona Westcott

**MANAGER, RESOURCE INDUSTRIES**

**REGULATORY SERVICES**

*an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)*

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## 1. Decision summary

Licence L8495/2010/2 is held by Terra Mining Pty Ltd (Licence Holder) for the Extension Hill Mine Site (the Premises), located within Mining Tenements G59/33, G59/34, G59/62, L59/68, L59/69, L59/87, M59/338, M59/339, M59/526, M59/454, M59/455 and M59/609, Paynes Find WA 6612.

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 construction and operation of the Premises. As a result of this assessment, Revised or Licence L8495/2010/2 has been granted.

## 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 Application summary

On 23 July 2024, the Licence Holder submitted an application to the department to amend Licence L8495/2010/2 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Operation of newly installed crushing and screening plant for the processing up to 5,000,000 tonnes of iron ore per annual period at the Extension Hill Mine Site (Figure 1).

New crushing and screening equipment was installed as part of Works Approval W6818 and includes crushing and screening plant, ore stacking plant, and a range of heavy and light vehicles. The new crushing and screening plant replaces old equipment which was used for crushing and screening operations by a previous occupant. The new occupant (Terra Mining Pty Ltd) is not proposing any change to the throughput capacity.

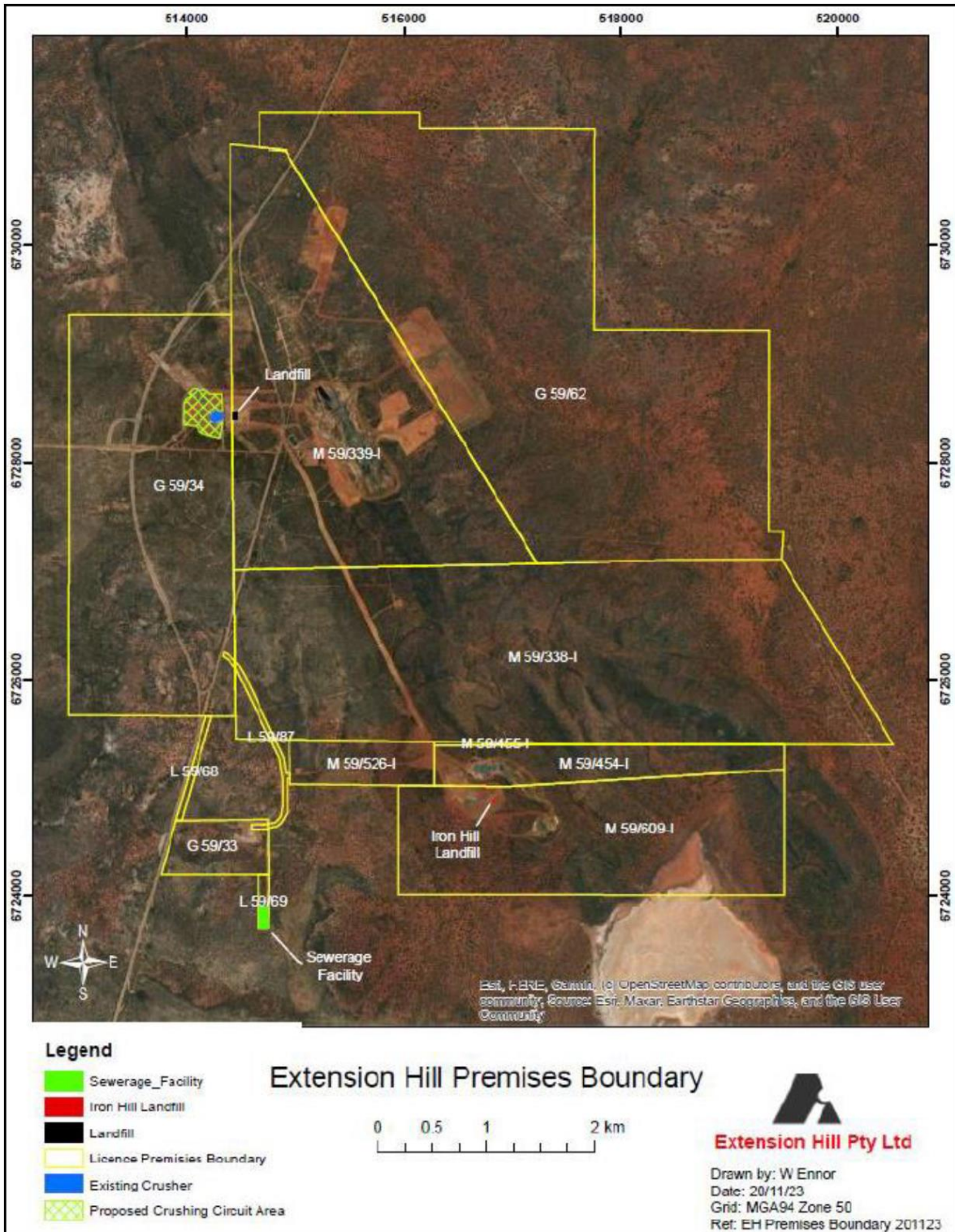
The intention of this licence amendment is to transfer the operation of this new crushing and screening infrastructure from works approval W6818 on to existing licence L8495.

Mining will occur by conventional drill and blast, truck and excavator mining, with ore being placed on a Run of Mine pad before being loaded into the crushing circuit via a front-end loader into the hopper for processing.

An Environmental Compliance Report (ECR) was submitted in accordance with conditions 1, 2 and 3 of Works Approval W6818. The ECR confirmed that construction compliance was met in accordance with the requirements of W6818.

### 2.3 Part IV of the EP Act

Extension Hill Mine Site has a corresponding Ministerial Statement (MS) 753, approved on 24 October 2007. MS 889 was issued on 28 February 2012 to amend MS 753 conditions relating to a performance bond and fauna management along the services corridor. Threatened and priority fauna located within the premises are managed in accordance with the Ministerial Statement through the implementation of management plans including Bush Fire Management Plan; Mine Site Fauna Management Plan; Malleefowl Conservation Plan; Preliminary and Final Closure Plans.



**Figure 1: Extension Hill Mine Site Crushing and Screening Operations**

This amendment is limited only to changes to Category 5 activities from the Existing Works Approval. No changes to the aspects of the existing Licence relating to Category 63, 64 and 85 have been requested by the Licence Holder.

Table 1 below outlines the proposed changes to the existing Licence

**Table 1: Proposed throughput capacity changes**

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
5	5,000,000 tonnes per annual period	5,000,000 tonnes per annual period	Newly installed crushing and screening equipment continues existing operations, replacing old plant that has been removed from the premises. There are no proposed changes to the design or throughput capacity as a part of this licence amendment.

### 3. Risk assessment

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

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

#### 3.1 Source-pathways and receptors

##### 3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 3 below. Table 3 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

**Table 2: Licence Holder controls**

Emission	Sources	Potential pathways	Proposed controls
Dust	Screening and crushing of materials, unloading, loading and storage of material and vehicle movements.	Air/windborne pathway	<ul style="list-style-type: none"> <li>• Use of water sprays where appropriate;</li> <li>• Covered and skirted conveyors at ore transfer points;</li> <li>• Use of containment apparatus on conveyor transfer points;</li> <li>• Use of belt scrapers on the conveyor belt;</li> <li>• Use of collection trays under the belt plough on the return belt;</li> <li>• Operation of dust suppression sprinklers at transfer points and stockpiles; and</li> <li>• Operation of deluge sprays at the Run of mine area and the hopper.</li> </ul>
Sediment laden		Overland	<ul style="list-style-type: none"> <li>• Pre-existing haul roads and access tracks are used to minimise interference to natural</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
stormwater		runoff	drainage; <ul style="list-style-type: none"> <li>• During high rainfall events the stormwater discharge from the site is controlled through on-site drainage infrastructure. Sediment laden stormwater is managed through the appropriate location of site structures including stockpiles and roadways to ensure the water runoff is directed and controlled through dedicated drainage infrastructure;</li> <li>• Contaminated water from work areas is kept separate from clean storm water; and</li> <li>• Water interfacing with work areas is directed to oil water separators.</li> </ul>
Hydrocarbons		Overland runoff	<ul style="list-style-type: none"> <li>• Lubricants and waste oil are contained within portable bunding;</li> <li>• All refuelling and vehicle maintenance occurs within a bunded area to prevent uncontrolled releases into drainage lines;</li> <li>• The fuel tank (double skinned) has been protected against collision by equipment and/or vehicles by the placement of appropriate barriers or bollards; and</li> <li>• Water or other liquids that collect in the storage facilities are removed and treated.</li> </ul>

### 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 Holder's 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 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 3: Sensitive human and environmental receptors and distance from prescribed activity**

Human receptors	Distance from prescribed activity
Aboriginal Cultural Heritage	There are three Aboriginal Cultural Heritage sites located within the premises boundary. Two are listed as being culturally sensitive: Mt Gibson Rockshelter Complex which is 2.5 km northeast of the crushing and screening operation, and Mt Gibson Rockhole which abuts the operation. The final site, Extension Hill 1, is located within the premises boundary and 2.5 km southeast of the crushing and screening operations. This site is not listed as culturally sensitive.  The Badimia Bandi Barna Aboriginal Corporation was

	<p>consulted during the assessment of the works approval and no comment was provided. The DPLH was also consulted, and they advised no comment as the operations do not intersect with any known Aboriginal Cultural Heritage.</p> <p><b>Considering this prior engagement, and the fact that no changes are being made to the footprint or output of the prescribed premises, no further consultation is recommended, and the Delegated Officer does not consider the operations to present a significant risk to Aboriginal Cultural Heritage.</b></p>
Pastoral Stations	<p>The premises overlaps the Ninghan and Mt Gibson pastoral stations. The boundary of these two pastoral stations runs directly through the crushing and screening operations.</p> <p><b>The Delegated Officer has excluded this from the risk assessment due to the proposed activities presenting little to no risk to pastoral stations or their activities.</b></p>
<b>Environmental receptors</b>	<b>Distance from prescribed activity</b>
Adjacent Vegetation	The crushing and screening operation is located adjacent to an uncleared area of native vegetation.
Threatened Ecological Communities	<p>The critically endangered Eucalypt woodlands of the Western Australian Wheatbelt is located within the premises boundary and 2 km north-east and 2 km south of the crushing and screening operation.</p> <p>The priority 1 ecological community, Mt Gibson Range vegetation complexes, is also located within the prescribed premises boundary, 600 metres east of the crushing and screening operation.</p>
Threatened and Priority Fauna	<p>The endangered <i>Idiosoma kopejtkorum</i> (Lake Goorly shield-backed trapdoor spider) is located within the premises boundary. In addition, the following vulnerable species have been recorded within the premises boundary:</p> <ul style="list-style-type: none"> <li>- <i>Leipoa ocellata</i> (Malleefowl)</li> <li>- <i>Egernia stokesii badia</i> (Western spiny-tailed skink)</li> </ul> <p><b>The above listed species are currently managed on the premises in accordance with MS 753 and EPBC 2005/2381 and as such the Delegated Officer has not considered this as part of the risk rating.</b></p>

## 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 5.

The Revised Licence L8495/2010/2 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Category 5: crushing and screening activities.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).



**Table 4. Risk assessment of potential emissions and discharges from the Premises operation**

Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
<b>Operation</b>								
Screening, crushing, unloading, loading and storage of material Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity	Adjacent Vegetation Threatened Ecological Communities	Refer to Section 3.1	C = Slight L = Unlikely <b>Low Risk</b>	Y	Condition 1	N/A
	Sediment laden stormwater	Overland runoff potentially causing disturbance to ecosystem health	Adjacent Vegetation Threatened Ecological Communities	Refer to Section 3.1	C = Slight L = Unlikely <b>Low Risk</b>	Y	Condition 1	N/A
	Hydrocarbon contamination	Overland runoff potentially causing disturbance to soils, flora, fauna and ecosystem health	Adjacent Vegetation Threatened Ecological Communities	Refer to Section 3.1	C = Slight L = Unlikely <b>Low Risk</b>	Y	Condition 1	N/A

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.

## 4. Consultation

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

**Table 5: Consultation**

Consultation method	Comments received	Department response
Application advertised on the department's website (21/08/2024)	None received,	N/A
Licence Holder was provided with draft amendment on 24 September 2024.	Applicant had no comments and waived the comment period on 26 September 2024.	Noted.

## 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 7 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

**Table 6: Summary of licence amendments**

Condition no.	Proposed amendments
1	Addition of 'Table 1: Infrastructure and equipment requirements' including relevant equipment with controls and locations.
Various	Amendments to Table numbers and condition numbers where applicable.

## References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.