



## Application for Licence Amendment

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

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<b>Licence Number</b>	L9422/2024/1
<b>Licence Holder</b>	Fenix Resources Ltd
<b>ACN</b>	125 323 622
<b>File Number</b>	APP-0026515
<b>Premises</b>	Iron Ridge Project  Legal description –  Mining Lease: M20/118 Miscellaneous Licence: L20/83; L20/84; L20/85 General Purpose Lease: G20/28 As depicted in Schedule 1
<b>Date of Report</b>	06 May 2025
<b>Decision</b>	Revised licence granted

## Table of Contents

<b>1. Decision summary .....</b>	<b>1</b>
<b>2. Scope of assessment .....</b>	<b>1</b>
2.1 Regulatory framework .....	1
2.2 Amendment summary .....	1
2.3 Category 6 activities .....	1
2.3.1 Construction works (Excluded from the assessment) .....	1
2.3.1 Operational dewatering pipelines and proposed water storage dam.....	1
2.4 Part IV activities.....	3
<b>3. Risk assessment.....</b>	<b>3</b>
3.1 Source-pathways and receptors .....	3
3.1.1 Emissions and controls .....	3
3.1.2 Receptors.....	4
3.2 Risk ratings.....	7
<b>4. Consultation .....</b>	<b>10</b>
<b>5. Conclusion .....</b>	<b>11</b>
5.1 Summary of amendments.....	11
<b>References.....</b>	<b>11</b>
Table 1: Licence Holder controls.....	4
Table 2: Sensitive human and environmental receptors and distance from prescribed activity.	5
Table 3. Risk assessment of potential emissions and discharges from the Premises during Operation.....	8
Table 4: Consultation .....	10
Table 5: Summary of licence amendments .....	11
Figure 1: Plan of the new water storage dam (as constructed).....	2
Figure 2: Cross section of the proposed water storage dam (As Constructed) .....	3
Figure 3: Distance to sensitive receptors.....	6

## 1. Decision summary

Licence L9422/2024/1 is held by Fenix Resources Ltd (Licence Holder) for the Iron Ridge Project (the Premises), located at Mining Lease: M20/118, Miscellaneous Licence: L20/83; L20/84; L20/85 and General Purpose Lease: G20/28, Via Wilgie Mia Road WA 6640.

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 L9422/2024/1 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 Amendment summary

On 25 November 2024, the Licence Holder submitted an application to the department to amend Licence L9422/2024/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). On 18 December 2024, the Licence Holder submitted the application with the updated location for the proposed water storage dam.

Construction activities are excluded from this assessment due to the water storage dam proposed to be constructed on mining tenement L20/84 has already been constructed before this amendment was granted. Refer to section 2.3 for further details.

The following amendments are being sought:

- Amendment to operation of the second water storage dam and related pipeline that connects the existing and new water storage dams.

This amendment is limited only to changes to Category 6 activities from the Existing Licence. No changes to the aspects of the existing Licence relating to Category 5 and 85 have been requested by the Licence Holder.

### 2.3 Category 6 activities

#### 2.3.1 Construction works (Excluded from the assessment)

In accordance with section 54(2a) of the EP Act, the Chief Executive Officer (CEO) of the department invited the Shire of Cue to comment on the proposal. The Shire of Cue has informed the department that during a recent site inspection the water storage dam proposed to be constructed on mining tenement L20/84 has already been constructed (See the Table 4) during the public consultation period. The given construction activities having been completed (Figure 1), the department has undertaken a risk-based assessment focusing **on the operation of the category 6 infrastructure** proposed in the current amendment application.

#### 2.3.1 Operational dewatering pipelines and proposed water storage dam

A second water storage dam is proposed for construction and operation under this licence amendment. Water will be transferred from the existing water storage dam at the Iron Ridge project and pumped to a storage dam constructed on L20/84; for use in construction of haul roads at Fenix's Beebyn-W11 project, located approximately 20 km east of the Iron Ridge project.

As per the existing licence, all pipework associated with the additional water storage dam located outside the pit will be positioned within V drains. The water storage dam will have a capacity of 1900 m<sup>3</sup> (Figure 1 and Figure 2). The storage dam was fenced to 1.2m high and fauna egress was installed.

Two dewatering bores have been installed in the pit and water abstraction has been undertaken since commencement of operations to draw the local water table down and keep it below the advancing pit floor. Water is pumped to a “turkeys’ nest” water storage dam for use as dust suppression around the mine site and crushing works, and for reverse osmosis treatment for domestic purposes.

The groundwater is fresh to slightly brackish quality.

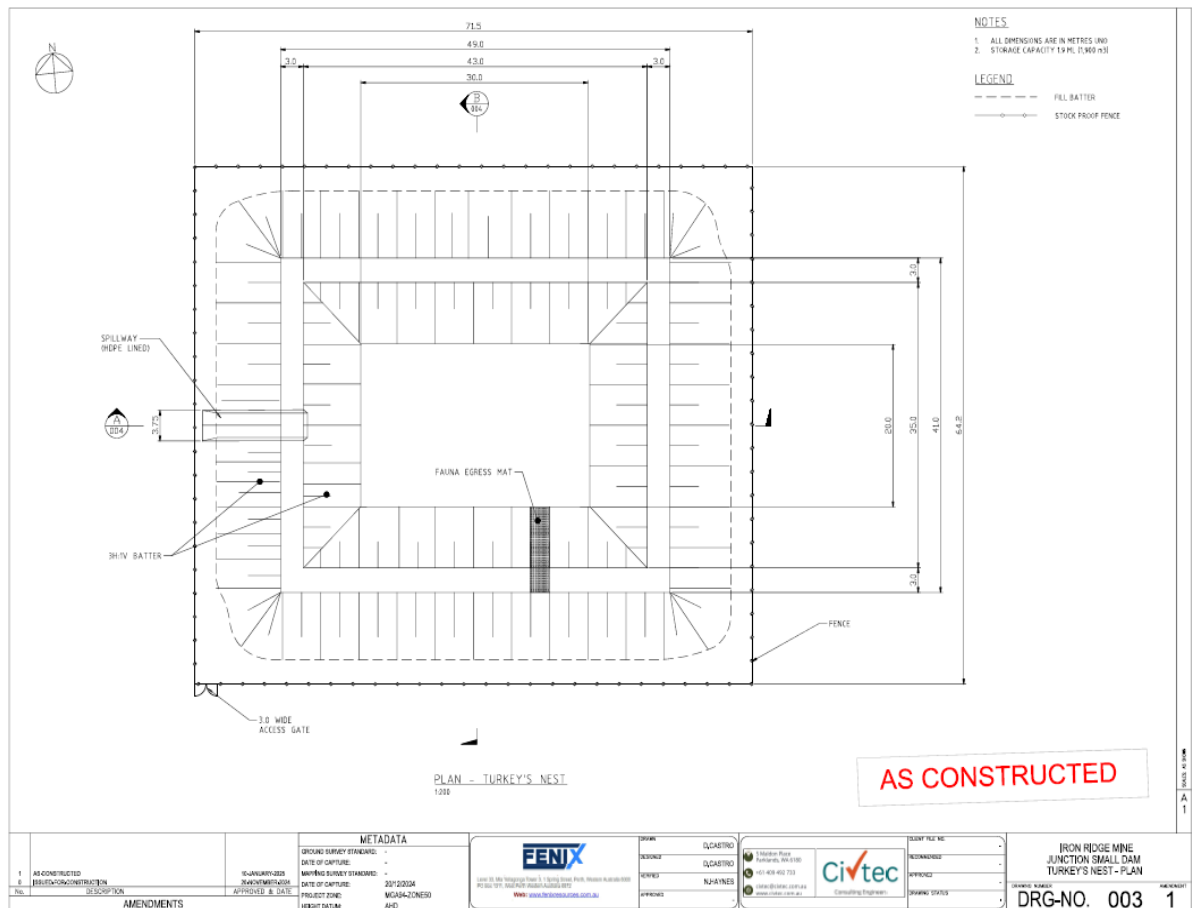
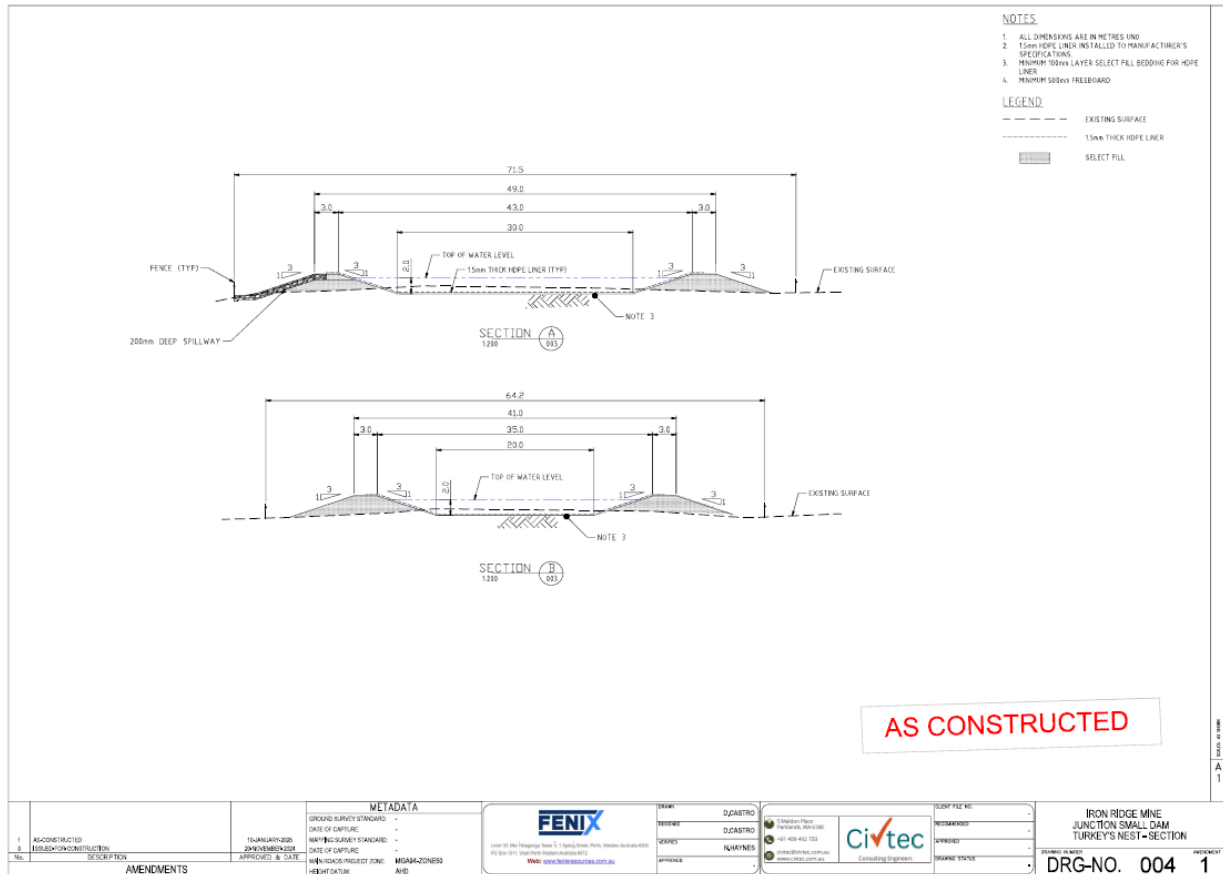


Figure 1: Plan of the new water storage dam (as constructed) (FBL, 2025)



**Figure 2: Cross section of the proposed water storage dam (As Constructed) (FBL, 2025)**

## 2.4 Part IV activities

A small portion of the prescribed premises is located on tenement L20/85 which is subject to Ministerial Statement 908 (MS908). MS908 is held by another company, Sinosteel Midwest Corporation Limited (SMC), for the Weld Range Iron Ore Project (DWER, 2024). The Iron Ridge Project on tenements G20/28, L20/83, L20/84 and L20/85 does not form part of the Weld Range Project and is not subject to MS908. Therefore, this assessment and proposed activities are not constraint by any conditions in the ministerial statement MS908.

## 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 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 (FRL, 2024)
Dewatered water (Hypersaline water)	<u>Dewatering and related activities:</u>  Spills, unintended releases of hypersaline mine dewater from storage dam.  <ul style="list-style-type: none"> <li>Storage dam overflows and/or leaks</li> </ul>	<b>Pathway:</b>  Direct runoff, direct discharge to land; seepage to ground and seepage to surrounding groundwater  <b>Impact:</b>  Contamination of groundwater and affects for environmental health	(a) The dam has been lined with 1.5 mm thick HPDE liner; (b) The storage dam is fenced to 1.2m high; (c) Fauna egress has been installed; (d) A minimum 500 mm freeboard is to be maintained; (e) 200mm deep spillway is installed on dam wall;
	<u>Dewatering and related pipelines</u>  <ul style="list-style-type: none"> <li>Mine water discharge from pipeline leaks/ruptures</li> </ul>	<b>Pathway:</b>  Direct discharge to land; seepage to ground and underlying groundwater; and/or run-off into surface creeks  <b>Impact:</b>  Localised erosion and/or adverse impacts to soils, surface water or groundwater quality	(a) Pipelines are constructed of impermeable material and free of leaks and defects; and (b) all pipework associated with the new water storage dam located outside the pit will be positioned within V drains.
	Dust suppression and domestic applications within the project area	<b>Pathway:</b>  Direct discharge to land; seepage to ground and seepage to surrounding groundwater  <b>Impact:</b>  Environmental Health	(a) Monitoring of vegetation health

### 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 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**

Environmental receptors	Distance from prescribed activity
Groundwater	55 m mBGL (DWER, 2024)
Surface water (Creek line)	400 m Northwest of the new water storage dam area.
Cultural Receptors	Distance from prescribed activity
<u>Aboriginal heritage sites</u> 1. ID: 32734 ACH Identifier: ACH-00032734 Name: Little Wilgie	1. Little Wilgie: 610 m Northwest of the L20/84 <b>Screened out due to the distance</b>



Drawn: CAD Resources ~ www.cadresources.com.au ~ Tel: (08) 9246 3242 ~ Fax (08) 9246 3202 ~ Source: Aerial: Landgate (Jan 2005), Drone images: Fenix Resources (28/06/2022)

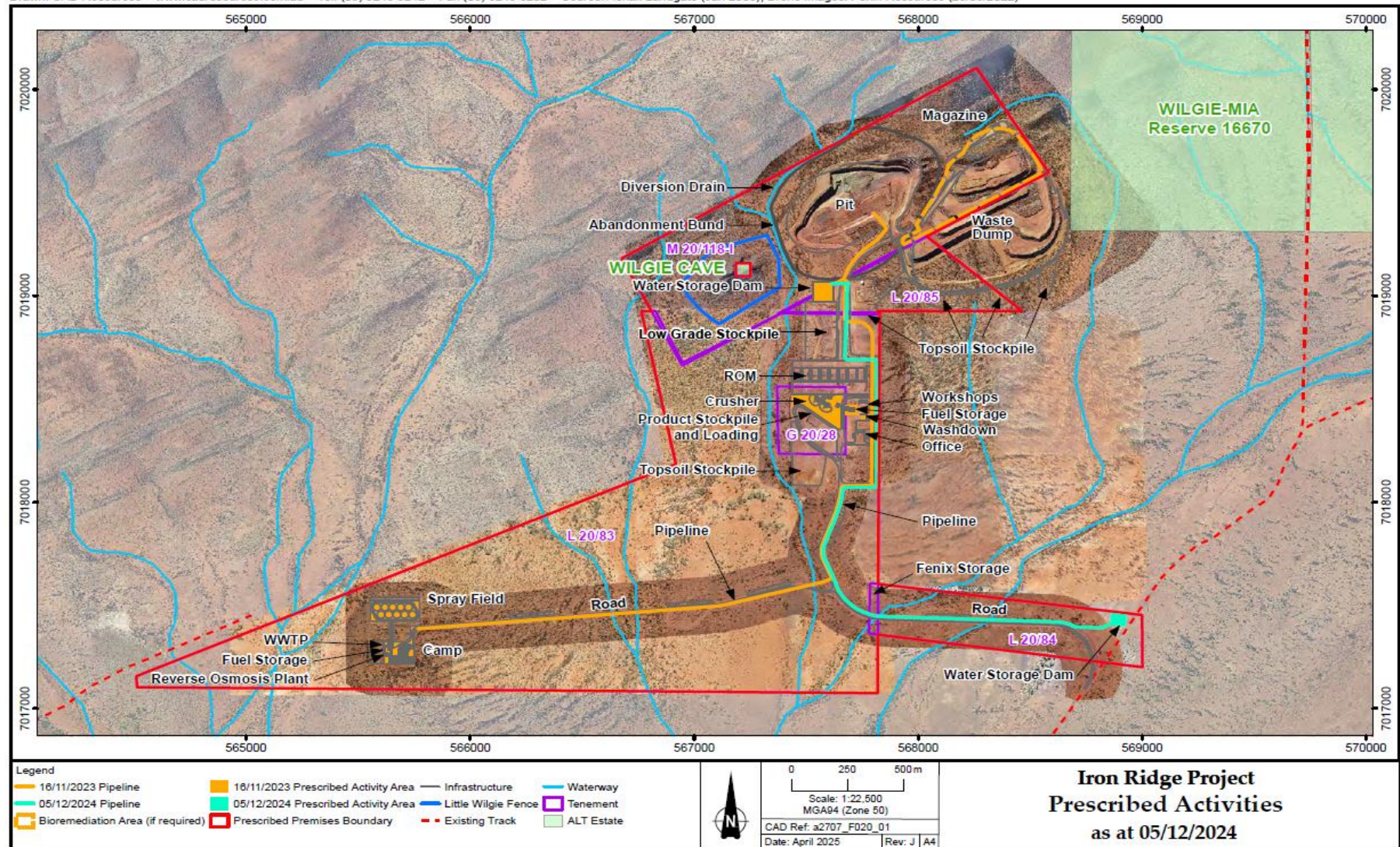


Figure 3: Distance to sensitive receptors



## 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 L9422/2024/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. category 6 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 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				
Operation								
<u>Dewatering activities and related activities:</u> <ul style="list-style-type: none"><li>Spills, unintended releases of hypersaline mine dewater from storage dam.</li><li>Storage dam overflows and/or leaks</li></ul>	Dewatered water (Hypersaline water)	<b>Pathway:</b>  Direct runoff, direct discharge to land; seepage to ground and seepage to surrounding groundwater <b>Impact:</b>  Contamination of groundwater and affects for environmental health	Groundwater  Surface creeks	Refer to Section 3.1	C = Slight  L = Possible <b>Low Risk</b>	Y	Condition 1: operational requirements in the existing licence	N/A
<u>Dewatering and related pipelines</u> <ul style="list-style-type: none"><li>Mine water discharge from pipeline leaks/ruptures</li></ul>		<b>Pathway:</b>  Direct discharge to land; seepage to ground and underlying groundwater; and/or run-off into surface creeks <b>Impact:</b>  Localised erosion and/or adverse impacts to soils, surface water or groundwater quality	Land (Soil)  Groundwater  Surface creek	Refer to Section 3.1	C = Minor  L = Possible <b>Medium Risk</b>	Y	Condition 1: operational requirements in the existing licence	N/A

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				
Dust suppression and domestic applications within the project area		<b>Pathway:</b> Direct discharge to land; seepage to ground and seepage to surrounding groundwater  <b>Impact:</b> Environmental Health	Groundwater  Surface creeks	Refer to Section 3.1	C = Minor L = Possible  <b>Medium Risk</b>	Y	Condition 4: to prevent damage to surrounding vegetation	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 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 10 February 2025.	None received	N/A
Local Government Authority (Shire of Cue) advised of proposal on 07 February 2025.	The Shire of Cue has informed the department on 26 February 2025, that during a recent site inspection the water storage dam proposed to be constructed on tenement L20/84 has already been constructed. A copy of the map where the Shire of Cue indicated the existing dam is located, which aligns with plans provided by the licence holder on 18 December 2024.	<p>Comments noted.</p> <p>The department sought clarification on the status of the proposed water storage dam that is the subject of the current assessment with the licence holder. In response the licence holder advised that an opportunity to construct the temporary water dam became available at the end of December 2024, thus the water dam was constructed. However, it is not being used, and it will not be used until the amendment to L9422/2024/1 is granted by the department.</p> <p>The department obtained the construction specifications from the applicant to assess that the infrastructure is fit-for-purpose and can be accurately reflected on the amended licence.</p> <p>Where non-compliances with the requirements of the EP Act are identified, the department will take appropriate action in accordance with the relevant legislation and policies.</p>
Department of Planning, Land and Heritage (DPLH) advised of proposal on 07 February 2025.	<p>DPLH replied on 20 February 2025 advising that the subject area, as provided in Attachment 2B – Map, does not intersect with the actual boundaries of any known Registered sites or Aboriginal heritage places. Therefore, AHC had no comment in relation to the proposal.</p> <p>The registered site Little Wilgie (ID 32734) is located adjacent to the proposed works. Page 16 of the amendment application form states the site is within an excised portion of M 20/118 and is fenced.</p>	Comments noted.

	Further to this, DPLH stated that the proposal area in its entirety may not have been comprehensively surveyed, so it is unknown the other Aboriginal heritage may be in the area. Therefore, DPLH advised that the proponent will need to be aware of its obligations under the <i>Aboriginal Heritage Act 1972</i> .	
Wajarri Yamaji Aboriginal Corporation RNTBC advised of proposal on 07 February 2025.	None received	N/A
Licence Holder was provided with draft amendment on 23 April 2025.	The Licence Holder replied on 28 April 2025 with the requested additional information and waived the remaining consultation period.	Additional information added to the Amendment Report.

## 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 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 no.	Proposed amendments
2	Discharge point and location updated as "water storage dams".
Schedule 1, Figure 2	Deleted the old figure 2 and added the updated map with new water storage dam constructed.

## 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.
4. Fenix Beebyn Pty Ltd (FBL) 2025, Response for further information request 2, Perth, Western Australia.
5. Fenix Resources Ltd (FRL) 2024, Iron Ridge Project. Licence Amendment, Attachment 3B, Activity Detail, Perth, Western Australia