



## Application for Licence Amendment

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

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<b>Licence Number</b>	L9392/2023/1
<b>Licence Holder</b>	Iron Bridge Operation Pty Ltd
<b>ACN</b>	165 513 557
<b>File Number</b>	DER2023/000275
<b>Premises</b>	North Star Magnetite Project – Junction Camp  Legal description – Miscellaneous Tenement L45/625
<b>Date of Report</b>	03/01/2025
<b>Decision</b>	Revised licence granted

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

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## 1. Decision summary

Licence L9392/2023/1 is held by Iron Bridge Operation Pty Ltd (IB Operations) (licence holder) for the North Star Magnetite Project – Junction Camp (the premises), located at Mining Tenement L45/625.

This amendment report documents the assessment of potential risks to the environment and public health from proposed changes to the monitoring during the operation of the premises. As a result of this assessment, revised licence L939/2023/1 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 16 July 2024, the licence holder submitted an application to the department to amend licence L9392/2023/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments were sought in relation to emission and discharge monitoring:

- The reduction in frequency of monitoring for *E. coli* and thermotolerant coliforms, 5 day biological oxygen demand (BOD), total suspended solids (TSS), total dissolved solids (TDS), residual chlorine and pH parameters from a weekly to a quarterly basis;
- The removal of major ions, metals and metalloid monitoring requirements;
- The removal of Total Nitrogen and Total Phosphorous parameters; and
- The addition of Load of Total Nitrogen and Load of Total Phosphorous monitoring.

In amending the licence, conditions relating to the construction and commissioning of wastewater treatment plant infrastructure have been removed. The Environmental Compliance Report for this infrastructure was received by the department on 19 April 2024, with the Environmental Commissioning Report received on 16 July 2024. The Environmental Compliance Report was accepted on 1 November 2024. The delegated officer determined that the conditions have been adequately satisfied and thus have been removed from the revised licence.

### 2.3 Part IV of the EP Act

The North Star Magnetite Project is subject to Ministerial Statement number MS 993. The proposed licence amendment does not propose to alter or duplicate requirements covered under this existing Statement.

## 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
Treated effluent	Irrigation sprayfield	Direct application to vegetation and seepage to soil and groundwater	<ul style="list-style-type: none"> <li>No additional proposed controls</li> </ul>
Diluted RO wastewater (as blended effluent)	Irrigation sprayfield		<ul style="list-style-type: none"> <li>No additional proposed controls</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 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 activity / prescribed premises
Remnant native vegetation – <i>Corymbia hamerslyana</i> open woodland over <i>Triodia epactia</i> hummock grassland	Within irrigation sprayfield footprint.
Surveyed Priority 4 flora – <i>Bulbostylis burbidgeae</i>	Mapped within the prescribed premises boundary during North Star Slurry and Infrastructure Corridors Conservation Significant Flora and Vegetation Assessment.
Conservation listed significant fauna	<p>A significant fauna habitat for Pilbara Leaf-nosed Bat was mapped approximately 133 m west of the prescribed premises.</p> <p>A significant fauna habitat for Brush-tailed mulgara was mapped approximately 169 m east of the prescribed premises.</p>
Minor drainage line	Approximately 308 m north of prescribed premises

## 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 L9392/2023/1 that accompanies this amendment report authorises emissions associated with the operation of the premises i.e. sewage facility on which treated sewage is discharged onto land.

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				
<b>Operation</b>								
Irrigation sprayfield	Treated effluent  Diluted RO wastewater (as blended effluent)	Direct application to vegetation and seepage to soil and groundwater resulting in secondary salinisation and impacts to native vegetation	Remnant native vegetation  Surveyed Priority 4 flora – <i>Bulbostylis burbidgeae</i> within premises boundary  Pilbara Leaf-nosed Bat habitat approximately 133 m west of the prescribed premises  Brush-tailed mulgara habitat approximately 169 m east of the prescribed premises  Minor drainage line 308 m north of premises boundary.	Refer to Section 3.1.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Y	Condition 2, 3, 4, 5, 6, 9	<p>The delegated officer notes that the licence holder requested to remove testing requirements for Total Nitrogen (TN) and Total Phosphorous (TP) as part of this amendment. It is noted, however, that there are discharge limits on this licence for TN and TP which cannot be met if TN and TP are not routinely measured. Continual high concentrations of nitrogen and phosphorus in irrigated wastewater can be toxic to native vegetation. The delegated officer, therefore, does not consider it appropriate to remove TN and TP monitoring from the licence.</p> <p>The licence holder proposed to incorporate Total Load of Nitrogen and Total Load of Phosphorous measured in kg/ha/day in place of monitoring for TN and TP. Total Load of Nitrogen and Total Load of Phosphorous are calculations (yearly averages) based on nitrogen and phosphorous monitoring samples taken at numerous points over time. Laboratories are not NATA accredited to perform these calculations. These calculations therefore cannot be considered replacements of TN and TP monitoring.</p> <p>The delegated officer reviewed the risk assessment and has determined that there is no change to the risk by amending the discharge monitoring frequency from weekly to quarterly for the requested parameters.</p> <p>Following the improvements to the WWTP, the Environmental Commissioning Report submitted on the 16 July 2024 did not report any concentrations of major ions, metals and metalloids in exceedance of relevant criteria listed in the <i>Guideline: Assessment and management of contaminated sites</i> (DWER 2021). The delegated officer has removed monitoring of major ions, metals and metalloid monitoring.</p>

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
Licence holder was provided with draft amendment on 18 November 2024.	Applicant provided comments on the 10 December 2024.	See 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 below 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 number	Previous Condition no.	Proposed amendments
N/A	Condition 1 Table 1	Removed as construction and installation has occurred and this condition has been satisfied.
N/A	Condition 2 Condition 3	Removed as construction has occurred and compliance report has been submitted; this condition has been satisfied.
N/A	Condition 4 Condition 5, Table 2	Removed as infrastructure environmental commissioning phase has been completed.
N/A	Condition 6, Table 3 Condition 7, Table 4	Removed as environmental commissioning phase has been completed.
N/A	Condition 8 Condition 9 Condition 10 Condition 11 Table 5	Removed as environmental commissioning phase has been completed. Monitoring during environmental commissioning no longer required.

Condition number	Previous Condition no.	Proposed amendments
	Condition 12 Table 6	
N/A	Condition 13 Condition 14	Removed as environmental commissioning phase has been completed, compliance reporting conditions have been satisfied.
N/A	Condition 15	Removed as infrastructure environmental commissioning phase has been completed and reporting requirements satisfied.
Condition 1 Table 1	Condition 16 Table 7	Updated condition and table number.
Condition 2 Table 2	Condition 17 Table 8	Updated condition and table number.
Condition 3 Table 3	Condition 18 Table 9	Updated condition and table number.
Condition 4	Condition 19	Updated condition number.
Condition 5	Condition 20	Updated condition number.
N/A	Condition 21	Condition removed. The licence outlines the methods to be used and calibration requirements. All non-compliances with the licence must be reported to the department in line with AACR reporting requirements.
Condition 6 Table 4	Condition 22 Table 10	Updated condition number. Amended monitoring frequencies. Removed major ions, metals / metalloids, chemical oxygen demand, fluoride and nitrate monitoring.
Condition 7 Table 5	Condition 23 Table 11	Updated condition and table number.
Condition 8	Condition 24	Updated condition number.
Condition 9	Condition 25	Updated condition number.
Condition 10	Condition 26	Updated condition number and removed reference to deleted conditions.
Condition 11	Condition 27	Updated condition number.
Definitions Table 6	Definitions Table 12	Updated table number.



## 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. Department of Water and Environmental Regulation (DWER) 2021, *Guideline: Assessment and management of contaminated sites*, Perth, 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
Cover page	Correction of Mining Tenement L45/625 to 'Miscellaneous' Tenement L45/625	Updated as requested. The licence holder has demonstrated occupancy of the tenement.
6	Requests the removal of this condition. "The implementation of this new requirement poses is inconsistent with the requirements of other Fortescue Ltd operational licences and offers additional operational challenges. Furthermore, if there are any foreseeable issues or discrepancies in the interpretation of the requirements of calibration, these will be brought to the attention of the department and reported in the Annual Audit Compliance Report (AACR) in accordance with Condition 10 of the Licence."	Updated as requested. The removal of this condition does not alter the risk profile of the premises. The licence outlines the methods to be used and calibration requirements. All non-compliances with the licence must be reported to the department in line with AACR reporting requirements.
7 Table 4	Requesting the removal of monitoring of Chemical oxygen demand, fluoride and nitrate from emissions and discharge monitoring	Updated as requested. Chemical oxygen demand, fluoride, nitrate levels provided in the Environmental Compliance report are all within the acceptable levels noted in Guideline: Assessment and management of contaminated sites (DWER 2021). The delegated officer has removed this monitoring requirement from the licence.