



## Application for Licence Amendment

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

---

<b>Licence Number</b>	L5415/1988/9
<b>Licence Holder</b>	BHP Iron Ore Pty Ltd
<b>ACN</b>	008 700 981
<b>File Number</b>	DER2013/000900-1
<b>Premises</b>	Wheelarra Hill (Jimblebar) Iron Ore Mine  Tenements L52/108, L52/109, L52/163, I126948, M266SA and ML244SA  NEWMAN WA 6753  As defined by the Premises maps attached to the Revised Licence
<b>Date of Report</b>	13 February 2024
<b>Decision</b>	Revised licence granted

#### **SENIOR ENVIRONMENTAL OFFICER, INDUSTRY REGULATION**

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

## 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 Application summary	1
2.2.1 Changes to category 5	2
2.2.2 Changes to category 6	3
2.2.3 Other amendments	4
<b>3. Consultation</b>	<b>4</b>
<b>4. Conclusion</b>	<b>4</b>
4.1 Summary of amendments	5
<b>References</b>	<b>7</b>
<b>Appendix 1: Summary of Licence Holder’s comments on draft amendment</b>	<b>8</b>

## 1. Decision summary

The Delegated Officer has determined to make amendments to Licence L5415/1988/9. The amendments are administrative in nature therefore they do not alter the risk profile of the Premises, providing that activities, emissions and receptors as stated in existing approvals remain unchanged.

This Amendment Report documents the amendments made pursuant to section 59 and 59(B) of the *Environmental Protection Act 1986* (EP Act).

The decision report for the Existing licence will remain on the department's website for future reference and will act as a record of the department's decision making.

## 2. Scope of assessment

### 2.1 Regulatory framework

In amending the licence, 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

Licence L5415/1988/9 is held by BHP Iron Ore Pty Ltd (Licence Holder) for the Wheelarra Hill (Jimblebar) Iron Ore Mine (the Premises), located on Tenements L52/108, L52/109, L52/163, I126948, M266SA and ML244SA, Newman.

The Premises relates to the categories and the assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in existing Licence L5415/1988/9.

On 16 October 2023, the Licence Holder submitted an application to the department to amend Licence L5415/1988/9 under section 59B of the *Environmental Protection Act 1986* (EP Act).

The amendment is for the following:

#### Category 5:

- Amend the design of the new Jimblebar Train Load Out (TLO) from a single to dual bin.

#### Category 6:

##### Caramulla Managed Aquifer Recharge (MAR)

- Expand the Caramulla MAR construction zone.
- Add flow meter FJB0018 to FJB0017.
- Add emission point reference FJB0018.
- Add "or HCM0016M" to HCM0017M.

##### Orebody 18 MAR

- Remove works specifications relating to the Orebody 18 MAR.
- Remove all monitoring requirements for the bores associated with OB18 MAR.
- Remove Turkeys Nest OB18GWLTN1 monitoring requirements.
- Remove blocked bore HMG0121M.
- Remove HMG0103M and HMG0119M.

South Jimblebar MAR

- Remove all monitoring requirements for the bores associated with South Jimblebar MAR. The bores are as follows:
  - HEOP0828M
  - HEOP0838M
  - HMG0103M
  - HMG0109M
  - HMG0115M
  - HMG0119M
  - HMG0121M
  - HSJ0073M
  - HSJ0081M
  - HSJ0083M
  - HSJ0115M
  - HSJ0117M
  - SJ0435RM
  - SJ0571RM
- Replace SJB0001 with SJB0012.
- Remove JBDMOWW007 and replace with SJTN001 (South Jimblebar Turkeys Nest).

Jimblebar reinjection bores

- Remove all references to the 'Jimblebar reinjection bores' HSJ0003P, HSJ0069P, HSJ0076P and HMG0056P.

Ophthalmia Dam Discharge Point

- Add FNPI0002 (Ophthalmia Dam Discharge Point Sample Tap) with the requirement to monitor electrical conductivity and hydrochemistry quarterly (when reinjecting). Or if the point cannot be accessed then from one of the Orebody 18 Injection bores (HEOP0847P, HEOP0843P or HEOP0845P).
- Remove HEOP0847P, HEOP0843P and HEOP0845P monitoring requirements, keeping cumulative volume and flow rate (monthly when reinjecting).
- Remove HEOP0828M, HEOP0838M and HEOP0842M and replace with HEOP0835M, HEOP0826M, and HEOP0829M.

Other

- Correction of typographical errors.

During this amendment, the department has also updated the licence to the current template format.

**2.2.1 Changes to category 5**

The Licence Holder proposes to upgrade the TLO bin from single to dual to remove a bottleneck in the processing chain. There will be no change to the existing approved category 5 design capacity due to this upgrade.

The department has updated Condition 11 Table 6; Condition 16 Table 7 and added Figures 4 and 5 in Schedule 1 to reflect this change.

## 2.2.2 Changes to category 6

### Caramulla MAR

The Caramulla MAR construction zone is proposed to be expanded to allow the construction of additional reinjection bores which is consistent with the draft Jimblebar Water Management Plan (2019).

The Licence Holder is required to add a flow meter along a split in the Caramulla Creek discharge pipeline. The Caramulla Creek discharge pipeline splits into two sections and then rejoins to one pipe prior to discharge. Flow meter JFB0017 already exists on the main section of the discharge pipeline and FJB0018 has been installed on the section of pipeline which splits off. Adding this flow meter will allow the Licence Holder to measure flow rate (L/s) and record cumulative volume (kL) monthly when discharging, consistent with the requirements of flow meter FJB0017.

The department has added FJB0018 to Condition 18, Table 8; Condition 26, Table 12 and updated Figure 2 for the Caramulla Creek Discharge Point.

The Licence Holder has advised that HMG0111M is blocked, and requested this bore be replaced with HMG0131M which is located 200 m west of HMG0111M1 and installed in the same hydrogeological unit (regional dolomitic aquifer).

A pump is stuck down the shaft of monitoring bore HCM0017M causing a blockage. The Licence Holder has requested to include the option to sample from HCM0016M which is near to HCM0017M and considered a suitable alternative.

The department has updated Condition 29 and Figure 2 for the following:

- Removed HMG0111M and replaced with HMG0131M; and
- Included HCM0016M.

### Orebody 18 MAR

Orebody 18 MAR (OB18) has been decommissioned; therefore, the Licence Holder has requested to remove all instances of OB18 reinjection bores from the licence, which include works specifications, monitoring requirements, Turkey's Nest OB18GFWLTN1 monitoring requirements, with exception to HEOP0847P, HEOP0843P and HEOP0845P. In addition, the Licence Holder has requested the removal of blocked bore HMG0121M and monitoring bores HMG0103M and HMG0119M used to monitor reinjection bores which were not used for reinjection.

The department has removed OB18 from Condition 11 Table 6; Condition 19 Table 9; Condition 29 Table 15; and Condition 37 Table 19. Previous conditions 1.2.12 and 1.2.13 have been deleted.

### South Jimblebar MAR

South Jimblebar MAR has been decommissioned; therefore, the Licence Holder has requested to remove all associated reinjection bores, SJB0001, and their monitoring requirements.

Process monitoring point JBDMOWW007 is currently used to sample total recoverable hydrocarbons from treated oily water at the Jimblebar Oily Wastewater Treatment Plant. The treated oily water is then sent to the South Jimblebar Turkey's Nest (SJT001) where it is mixed with dewatering water and then used for dust suppression. The Licence Holder has stated that treated water at JBDMOWW007 does not give a representative sample of water that is used for dust suppression as it is not mixed with dewatering water. The Licence Holder proposes to replace JBDMOWW007 with SJTN001 as a process monitoring point.

The department updated Condition 26 Table 12; Condition 27 Table 13; and Condition 30

Table 17.

Reinjection bores HEOP0828M, HEOP0838M and HEOP0842M are proposed to be replaced with HEOP0835M, HEOP0826M, and HEOP0829M and monitor the following parameters:

- Water level (mbgl) - monthly (when reinjecting); and
- Electrical conductivity and hydrochemistry - quarterly (when reinjecting).

The department has updated Condition 27 Table 13.

#### Jimblebar reinjection bores

Jimblebar reinjection bores HSJ0003P, HSJ0069P, HSJ0076P and HMG0056P have been decommissioned; therefore, the Licence Holder has requested to remove all references and monitoring requirements. The department has removed the references from Condition 19 Table 9; and Condition 27 Table 13.

#### Ophthalmia Dam Discharge Point Sample Tap

FNPI0002 is the surface water discharge point sample tap at Ophthalmia Dam where flow rate and cumulative flow is currently monitored. The Licence Holder proposes to additionally monitor electrical conductivity and hydrochemistry from this point.

Cumulative volume and flow rate parameters were incorrectly assigned to monitoring bores and the Licence Holder requests these be reassigned to reinjection bores HEOP0847P, HEOP0843P and HEOP0845P. These bores have also been proposed to be backup sample points in the event that FNPI0002 cannot be accessed.

The department has updated Condition 27 Table 13 for the above changes.

### 2.2.3 Other amendments

The Licence Holder proposes the correction of the following typographical errors:

- 'k/L' to be corrected to 'kL'; and
- 'cumulative flow rate' to be corrected to 'cumulative volume'.

During this amendment, the department has also removed / updated the following previous conditions:

- Condition 1.2.14 has been removed because a compliance report for the construction of Orebody 31 was provided to the Department on 31 August 2017. The second part of the condition allowed operation "in accordance with the conditions of this Licence". However, there were no operational conditions in the licence.
- Condition 16 has been included with Table 7 to provide operational requirements of constructed infrastructure. Operational requirements for Orebody 31 dewatering infrastructure have been taken from previous amendment reports.
- Updated Schedule 1, Figure 1 to ensure all infrastructure referenced as 'shown in Figure 1' were labelled.

## 3. Consultation

The Licence Holder was provided with the draft Amendment Report on 12 January 2024. Comments received from the Licence Holder on 23 January 2024 have been considered by the Delegated Officer as detailed in Appendix 1.

## 4. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that an amended licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## 4.1 Summary of amendments

Table 1 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 1: Summary of licence amendments**

Condition no.	Proposed amendments
Cover page	Included Date of issue.
Introduction	Deleted, licence updated to current template format.
Licence History	Updated table headings to current format. Deleted works approval history as not relevant to the licence.
Severance	Deleted, in line with current licence format.
Interpretation	Included in line with current licence format.
General	Conditions 1.1.1 and 1.1.2 deleted in line with current licence template. Conditions 1.1.3 and 1.1.4. reformatted into the interpretation section.
Definitions	Moved to Table 20 and updated as required.
All conditions and tables	Numbering and table headings updated to current formatting. Wording update from “Licensee shall” to “licence holder must”
Condition 11, Table 6	‘Orebody 18 MAR project’ works removed as is decommissioned. Reference to “‘DWER Licence Infrastructure’ map in Schedule 1” replaced with “Schedule 1: Maps Figure 1” and other figures as relevant.
1.2.12 and 1.2.13	Conditions removed as related to Orebody 18 MAR project which has been decommissioned.
1.2.14	Removed. Compliance report was provided on 31 August 2017.
Condition 11, Table 6	Infrastructure location updated as applicable to the correct Schedule 1: Maps Figure.
Condition 16, Table 7	Inclusion of operational requirements for the Orebody 31 dewatering infrastructure and TLO.
Condition 18, Table 8	Surface water emission point “FJB0018” added, plus operational requirements.
Condition 19, Table 9	Removal of the Jimblebar reinjection bores.
Condition 26, Table 12	“FJB0018” added as a Caramulla Creek Discharge Point monitoring point. “South Jimblebar” monitoring point removed. Unit corrections.
Condition 27, Table 13	Removal of Jimblebar and Orebody 18 groundwater monitoring points. Inclusion of Orebody 18 groundwater monitoring bores.

Condition no.	Proposed amendments
	Correction of monitoring parameters.
Condition 29, Table 15	Removal of South Jimblebar MAR reinjection bores. Included “or HCM0016M” to “HCM0017M”.
Condition 30, Table 17	Replacement of JBDMOWW007 for the South Jimblebar Turkeys Nest (SJTNO01).
Condition 31	Updated wording in-line with current condition wording and requirements.
Condition 32	
Condition 33	
Condition 34	
Condition 37, Table 19	Conditions 1.2.11 and 1.2.12 removed as related to Orebody 18 MAR project which has been decommissioned. Previous condition for 1.2.16 has been updated to ensure compliance documentation associated with conditions 12 to 15 is submitted. Condition ‘b)’ added in-line with current reporting requirements for construction items.
Definitions	Definitions updated: ‘AACR’, ‘annual period’, ‘CEO’, ‘Department’, ‘Licensee’, ‘premises’,
	Definitions added ‘ACN’, ‘books’, ‘discharge’, ‘emission’, ‘EP Act’, ‘monthly period’, and ‘waste’.
Figures	Figures 1 and 2 updated. Figures 4 and 5 added to show amended TLO.
Schedule 2	N1 form updated to latest format.



## References

1. BHP 2019, *Jimblebar Water Management Plan DRAFT*, August 2019, Perth, Western Australia.
2. BHP 2023, *Application form*, October 2023, Perth, Western Australia.
3. BHP 2023, *Application to Amend the Jimblebar Hub Environmental Licence L5415/1988/09 Licence Amendment Supporting Documentation (Including Information relating to Attachments 1 to 11)*, October 2023, Perth, Western Australia.
4. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.

## Appendix 1: Summary of Licence Holder's comments on draft amendment

Condition	Summary of Licence Holder's comment	Department's response
Licence History, 26, 27, Schedule 1, 16 and 18	<p>The wording around the Ophthalmia Dam discharge point is slightly inaccurate. FNPI0002 is actually a sample tap located back up the line as opposed to the direct discharge point. Based on this can the following changes be made.</p> <ul style="list-style-type: none"> <li>• References to “FNPI0002 (Ophthalmia Dam Discharge Point)” be updated to “FNPI0002 (Ophthalmia Dam Discharge Point Sample Tap)” in: <ul style="list-style-type: none"> <li>○ Licence History Table;</li> <li>○ Table 12; and</li> <li>○ Table 13.</li> </ul> </li> <li>• Figure 2: Updated (attached) to: <ul style="list-style-type: none"> <li>○ indicate where FNPI0002 (Ophthalmia Dam Discharge Point Sample Tap) is located.</li> <li>○ remove the Ophthalmia dam Discharge Point (still shown on Figures 1 and 3).</li> </ul> </li> <li>• Tables 7 and 8: Remove FNPI0002 from the Ophthalmia Dam Discharge Point reference.</li> </ul>	Updated.
18	Table 8: It is not possible to undertake visual inspections of the various Discharge Points when discharging (access issues). BHP would like to require this requirement is removed. Telemetry is also not installed as volumes are calculated via the flow metre at the sample taps. Erosion control at the discharge points will be maintained.	Removed visual inspections and telemetry.
26, 27, 28 and 29	Can the Notes related to “pH in-field non NATA accredited analysis permitted” (Tables 12, 13, 14, 15 and 16) be updated to include EC as well i.e. “pH and EC in-field non NATA accredited analysis permitted”.	Updated to include EC.

Condition	Summary of Licence Holder's comment				Department's response												
27	Table 13 Row "Orebody 18" replace "Electrical conductivity" with "Flow rate" and "µS/cm" with "L/s". This was an error in the application and the change will make these bores consistent with the other reinjection bores on the licence.				Updated.												
11, 12 and 13	<p>Clarification on Constructed infrastructure:</p> <table border="1" data-bbox="394 624 1816 1326"> <thead> <tr> <th data-bbox="394 624 636 719">Approval</th> <th data-bbox="640 624 1133 719">Activities</th> <th data-bbox="1137 624 1630 719">DWER Request</th> <th data-bbox="1635 624 1816 719">BHP response</th> </tr> </thead> <tbody> <tr> <td data-bbox="394 722 636 975">Wheellarra Hill processing plant works (Amendment Notice #1)</td> <td data-bbox="640 722 1133 975"> <ul style="list-style-type: none"> <li>• Installation of a larger fines product conveyor belt at the existing Ore Handling Plant</li> <li>• Installation of a modified gearbox for product screen feed conveyor at existing Ore Handling Plant; and</li> <li>• Adjustment to process controls systems to increase throughput</li> </ul> </td> <td data-bbox="1137 722 1630 975">BHP to confirm if this has been constructed</td> <td data-bbox="1635 722 1816 975">Constructed</td> </tr> <tr> <td data-bbox="394 978 636 1326">Wheellarra Hill processing plant works – Primary Crusher 3 (Amendment Notice #2)</td> <td data-bbox="640 978 1133 1326"> <p>Upgrade of Primary Crusher 3 from a 6089 MKII Superior Crusher to a 7089 MK II Superior Crusher involving the installation of a;</p> <ul style="list-style-type: none"> <li>• Longer main shaft;</li> <li>• A super spider with high arching arms;</li> <li>• An upper top shell; and</li> <li>• An upgraded driver motor from 630 kW to 750 kW.</li> </ul> </td> <td data-bbox="1137 978 1630 1326">BHP to confirm if this has been constructed</td> <td data-bbox="1635 978 1816 1326">Constructed</td> </tr> </tbody> </table>				Approval	Activities	DWER Request	BHP response	Wheellarra Hill processing plant works (Amendment Notice #1)	<ul style="list-style-type: none"> <li>• Installation of a larger fines product conveyor belt at the existing Ore Handling Plant</li> <li>• Installation of a modified gearbox for product screen feed conveyor at existing Ore Handling Plant; and</li> <li>• Adjustment to process controls systems to increase throughput</li> </ul>	BHP to confirm if this has been constructed	Constructed	Wheellarra Hill processing plant works – Primary Crusher 3 (Amendment Notice #2)	<p>Upgrade of Primary Crusher 3 from a 6089 MKII Superior Crusher to a 7089 MK II Superior Crusher involving the installation of a;</p> <ul style="list-style-type: none"> <li>• Longer main shaft;</li> <li>• A super spider with high arching arms;</li> <li>• An upper top shell; and</li> <li>• An upgraded driver motor from 630 kW to 750 kW.</li> </ul>	BHP to confirm if this has been constructed	Constructed	Removed constructed items of infrastructure from the design and construction table.
Approval	Activities	DWER Request	BHP response														
Wheellarra Hill processing plant works (Amendment Notice #1)	<ul style="list-style-type: none"> <li>• Installation of a larger fines product conveyor belt at the existing Ore Handling Plant</li> <li>• Installation of a modified gearbox for product screen feed conveyor at existing Ore Handling Plant; and</li> <li>• Adjustment to process controls systems to increase throughput</li> </ul>	BHP to confirm if this has been constructed	Constructed														
Wheellarra Hill processing plant works – Primary Crusher 3 (Amendment Notice #2)	<p>Upgrade of Primary Crusher 3 from a 6089 MKII Superior Crusher to a 7089 MK II Superior Crusher involving the installation of a;</p> <ul style="list-style-type: none"> <li>• Longer main shaft;</li> <li>• A super spider with high arching arms;</li> <li>• An upper top shell; and</li> <li>• An upgraded driver motor from 630 kW to 750 kW.</li> </ul>	BHP to confirm if this has been constructed	Constructed														

Condition	Summary of Licence Holder's comment				Department's response
	Caramulla MAR Scheme	Flow meter FJB0018.	BHP to confirm if this has been constructed	Constructed	
	Condition 12	Construction of a new 5 mtpa relocatable crusher at Jimblebar Hub.	BHP to confirm if this has been constructed. BHP to advise if these plants have been removed and then brought back to site.	Not yet constructed	
	Condition 13	1x 1 mtpa mobile crushing and screening plant (non-ore) for the TLO project.	BHP to confirm if this has been constructed. BHP to advise if these plants have been removed and then brought back to site.	Not yet constructed	