



Application for Licence Amendment

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

Licence Number	L4503/1975/14
Licence Holder	BHP Iron Ore Pty Ltd
ACN	008 700 981
File Number	DER2013/000901-2
Premises	<p>Mt Whaleback/Orebody 29/30/35</p> <p>Tenements E52/2009-I, ML244SA, ML244SA, G52/019-G52/256, G52/258-G52/274, G52/276, G52/277, G52/279, L47/92, L52/99, L52/185 K858923 and N088235</p> <p>NEWMAN WA 6753</p> <p>As defined by the coordinates in Schedule 2 of the revised licence</p> <p>As defined by the premises maps in Schedule 1 of the revised licence</p>
Date of Report	10 April 2024
Decision	Revised licence granted

MANAGER, PROCESS INDUSTRIES

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

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1. Decision summary

Licence L4503/1975/14 is held by BHP Iron Ore Pty Ltd (Licence Holder) for the Mt Whaleback/Orebody 29/30/35 (the premises), located approximately 2 km west of Newman in Western Australia's Pilbara Region

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 Licence L4503/1975/14 has been granted.

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

The premises relates to the categories and the assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in existing licence L4503/1975/14.

On 7 November 2023, the Licence Holder submitted an application to the department to amend Licence L4503/1975/14 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- To install and operate a 2 million tonne per annum (Mtpa) screening plant for purpose of reclaiming old stockpiles.

This amendment is limited only to changes to category 5: processing or beneficiation of metallic or non-metallic ore activities from the existing Licence. This amendment does not relate to any changes to currently approved throughputs for category 5. No changes to the aspects of the Licence relating to category 6, 54, 61, 64 or 73 have been requested by the Licence Holder.

2.2.2 Additional screening activities from a mobile screening plant

The proposed mobile screening plant (2Mtpa) will be brought onto site to process a 220 kilotonne (kt) stockpile of reclaimable material within the Whaleback Rail Loop to put it back onto the final product belts. The stockpile is a result of spillage from the Fixed Plant Processing Facilities that have been hosed into sumps and transported to drying cells before being stockpiled. The Licence Holder has advised that over the years the stockpiles have grown to a height of over 16 m and are source of dust emissions during high winds and dumping of material. The Licence Holder has advised that although dust emissions are likely to increase temporarily during screening activities, the screening of these stockpiles will reduce overall ongoing dust emissions from the premises.

The Licence Holder has indicated that the screening campaign will be for a duration of approximately 6 weeks. An indicative schematic of the screening plant layout is shown in Figure 1. For this initial campaign, the stacker will feed the screened material onto conveyor CV405 (located at OHP4).

The Licence Holder has proposed several dust suppression measures to control dust during the

operation of the screening proposal.

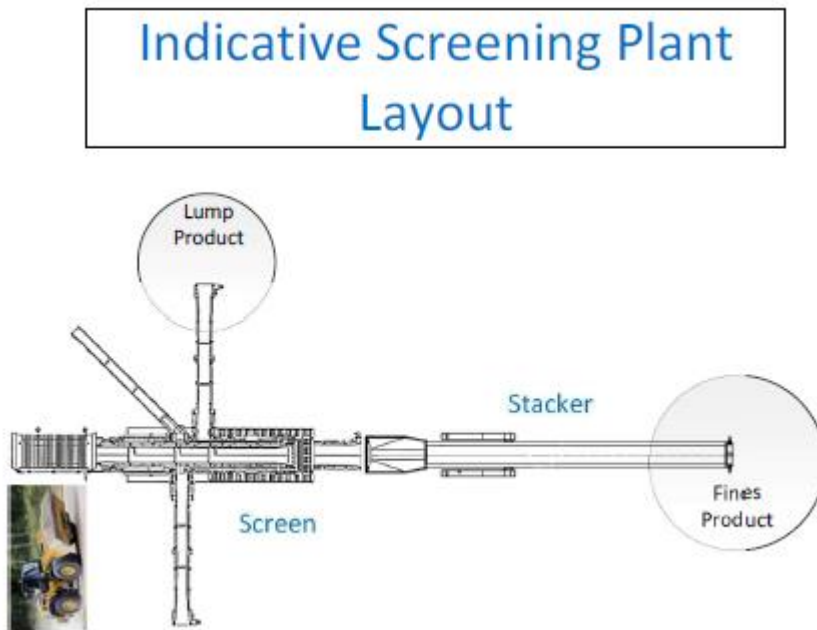


Figure 1: Indicative schematic of layout for mobile screening campaign

2.2.3 Ongoing provisions to allow for mobile screening in Fixed Plant West

The Licence Holder has requested that the licence include provisions to allow the plant (of a similar model) to be brought back onto the premises on an as-needed basis for future screening campaigns. This will involve allowing operations of a screening plant for a maximum 8-week duration (non-consecutive) and a maximum throughput of 300kt, per year. Additionally, the Licence Holder is requesting flexibility in location of activity (noting that all activity will occur within the Whaleback Hub ore processing facility and no closer than 3.5 km from the Town of Newman) as the stacker may load ore onto a different conveyor than the initial campaign. The same controls regarding dust suppression will occur regardless of location.

2.2.4 Administrative amendments

The Delegated Officer has also determined to make amendments to Licence L4503/1975/14. 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.

On 9 May 2023, 17 July 2023, 7 November 2023 and 12 December 2023, the Licence Holder provided the department with a list of administrative updates to be considered should a department-initiated amendment of the existing Licence be undertaken.

This amendment to licence L4503/1975/14 has considered the recommended administrative revisions proposed by the licence holder. Additionally, the Delegated Officer has determined to incorporate further minor administrative modifications as part of the licence amendment. The revisions to the existing licence are limited to the following aspects:

Licence Holder requested amendments:

- Updates to condition 2 (Table 14, item 2 of Schedule 4) to provide clarity on the location of water sprays;
- Updates to condition 2 (Table 14, item 6 of Schedule 4) to provide clarity on the location

where car dumpers receive ore and where dust laden air is extracted;

- Updates to condition 13 (Table 4, item 2) to provide clarity on the reportable event triggers to clearly indicate that the reportable event will be triggered if one or both monitors meet the criteria, however if both are triggered in the same period, this is considered to be a single reportable event to be consistent with previous ET 1 reporting and the reporting required in the Annual Environmental Report;
- Updates to condition 8 (Table 1, item 5) to replace the reference to 'Real Time Module' as a requirement for the dust monitor, and replaced with 'ES642', as these sensors will be used to measure the 10-minute airborne PM₁₀; and
- Updates to condition 12 (Table 3) to relocate dust monitor 'WBAQRT017' 200 m north as preliminary results from the field audit indicated that the current location does not meeting siting requirements due to the elevation in a rail embankment and location adjacent to a large shrub.

The department has noted that as part of the Improvement Plan submitted in accordance with condition 7 the Licence Holder has determined several dust monitors may need to be relocated. In the letter to the Licence Holder dated 2 February 2024, the department advised that proposed improvements including the re-location of several dust monitors (including the one requested above) should be sought out under a subsequent amendment application. Therefore, the Delegated Officer has determined that this proposed amendment will be considered in a future licence amendment combined with the other potential updates to the dust monitoring program.

Department initiated amendments:

- Update condition 20 to ensure that reporting in accordance with Schedule 5 is undertaken with immediate effect. The department notes that since the issuing of the previous licence amendment on 16 January 2023, the Licence Holder has continued to report in accordance with Schedule 5, in the event that any Reportable Event Criteria (as specified through condition 13) is exceeded;
- Updating of cross-referencing of naming used throughout licence and associated figures;
- Updating the format and appearance of the licence;
- Correcting clerical mistakes and unintentional errors; and
- Updates to include new constructed and proposed infrastructure as part of the Plan of Improvement Works for the Fixed Plant West required by condition 6 (discussed in section 2.2.5).

2.2.5 Plan of Improvement Works – Fixed Plant West

As part of the licence review and subsequent amendment granted on 16 January 2023, the Licence Holder was required to undertake further improvement works to manage dust emissions at the premises. On 16 January 2024, the Licence Holder submitted to the department the *Newman Dust Monitoring Network Review and Plan of Improvement Works – Fixed Plant West*. As part of this submission, the Licence Holder has advised that the following infrastructure and equipment have either been installed or updated in order to manage dust:

- Road Sealing of high use OHP4 Access – Licence Holder identified the key unsealed access routes to the OHP4 processing facility and maintenance area and are sealing these with two coat bitumen and asphalt on the intersections.;
- Installed secondary scraper and 2 x spray bars on the bend pulley of conveyor CV454 Shuttle Conveyor; and
- DC507 & DC508 Dust Scrubber Inlet Water Low Flow Interlock - Newly installed low flow

alarm and control system interlock that triggers a system shutdown when the water supply has no flow.

The department has initiated amendment to make reference to these infrastructure improvements where applicable, as part of this amendment.

Additional infrastructure and equipment upgrades:

- DC416 Fan VVVF Drive Replacement – Structural, electrical and control system design changes undertaken for the Dust Collect DC416 Fan to mitigate the risks of future failure; and
- Relocation of BOC302A Spray further down the conveyor to improve availability of the BOC spray.

During this submission, the Licence Holder provided additional improvement works that are yet to be completed:

- VVVF Drive Upgrade Procurement works including structural and electrical design changes to Key Water Pump VVVF Drive (PW691A); Dust Collector VVVF Fan Drives,(DC507, DC508, DC415, DC455) and Dust Collector VVVF Long Travel Drives(DC415, DC416 and DC455) to be completed by 30 June 2025; and
- BOC603 Dust Suppression spray relocation to after the transfer station from OHP5. These works are proposed to be completed by 30 January 2025.

These commitments from the Licence Holder have been conditioned in Table 1: *Dust control and monitoring infrastructure / equipment to be constructed / installed*. This mechanism will allow these further improvement works to be tracked.

2.2.6 2022-2023 Annual Reporting

The licence review and amendment granted on 16 January 2023 required the licence holder for the dust management trigger and reportable dust event criteria with the reportable event criteria within condition 13 and Table 2 of the existing licence.

In the most recent Annual Environmental Report (AER) (BHP,2023) it was advised that there were a total of 23 exceedance days across the data from Newman East (WBAQRT006) and Town Centre (WBAQRT010) dust monitors. BHP's assessment was that 9 of these exceedance days could be attributed to non-mining activities.

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 installation and 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
Construction (Installation)			
Dust	Placement of screening plant (to be brought on / off site on as-needed basis)	Air / Windborne pathway	<u>Existing monitoring regime (Licence L4503/1975/14):</u> <ul style="list-style-type: none"> Dust monitoring system management triggers and reportable dust event criteria [condition 12-17, Tables 3 and 4].
Operation			
Dust	<ul style="list-style-type: none"> Front end loading and movement on haul roads; Screening of materials; Stacking on conveyors; and Lift off from stockpiles. 	Air / Windborne pathway	<u>Proposed operational controls:</u> <ul style="list-style-type: none"> Dedicated watercart watering running track of loaders between stockpile & plant; Water sprays at the transfer point between screen & stacker, and stacker to the relevant conveyor as required; Stacker to be strategically positioned immediately prior to water spray located on the relevant conveyor to be loaded; Routine maintenance to avoid accumulation of waste materials; and Mobile screening plant located >3.5km from the Town of Newman. <u>Existing monitoring regime (Licence L4503/1975/14):</u> <ul style="list-style-type: none"> Dust monitoring system management triggers and reportable dust event criteria [condition 12-17, Tables 3 and 4].

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

Human receptors	Distance from prescribed activity
Closest Newman resident	<ul style="list-style-type: none"> • 350m east of the prescribed premises boundary; • 1.8km from the closest mining operations; • 3.9km northeast of closest ore processing (Cat 5) facilities (Truck Load Out); and • 4.7km northeast from proposed (initial) location of screening plant at conveyor CV405.
Town of Newman	<ul style="list-style-type: none"> • 1.5km east of prescribed premises boundary; and • >5km northeast from proposed (initial) location of screening plant at conveyor CV405.
Environmental receptors	Distance from prescribed activity
Ethel Gorge Stygobiont Threatened Ecological Community	<p>>8 km east from prescribed premises</p> <p><i>Distance of proposed category 5 activities to this TEC is sufficient to inform that the project activity impacts are not foreseeable.</i></p> <p><i>This TEC is not considered to be impacted during construction activities and operations, and therefore not further considered in the risk assessment.</i></p>
Threatened / priority fauna	12 ecologically significant species identified within the prescribed premises.
Priority flora	<p>6 priority flora species identified within the prescribed premises. Noting the flora identified on DWER GIS database indicates closest occurrence > 5 km north west of proposed activity.</p> <p><i>Distance of proposed category 5 activities to the nearest priority flora is sufficient to inform that project activity impacts are not foreseeable.</i></p> <p><i>The priority flora is not considered to be impacted during construction activities and operations and there not further considered in the risk assessment.</i></p>
Aboriginal heritage sites	Multiple sites within the prescribed premises.
Public Drinking Water Source Area	Newman Water Reserve (Priority 1) within the prescribed premises and area of scope of this application.
Surface water bodies	Whaleback Creek and other minor water drainage lines – located within the prescribed premises. Dry for most of the year and flowing intermittently with rainfall event.

3.2 Risk Rating

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 in-complete 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 2.

The Revised Licence L4503/1975/14 that accompanies this Amendment Report authorises emissions associated with the operation of the premises i.e. additional mobile screening activities.

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

Table 2. Risk assessment of potential emissions and discharges from the premises during construction and operation

Risk Event					Risk rating ¹	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory requirements
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
Construction								
Placement of screen (to be brought on / off site on as-needed basis) and associated equipment including vehicle movements	Dust	Pathway: air / windborne pathway Impact: human health and amenities	Town of Newman (nearest resident 3.9km from category 5 activities)	See section 3.1.1	C = Major L = Rare Medium Risk	N/A	Condition 10: Dust monitoring program Condition 11-18: Dust monitoring and management response	The Delegated Officer has determined that current licence conditions to manage dust is sufficient to control emissions caused by mobilising the mobile screening plant on / off site.
		Pathway: air / windborne pathway Impact: native vegetation health and increase of turbidity when creek is flowing	Whaleback creek and associated vegetation	See section 3.1.1	C = Minor L = Rare Low Risk		N/A	
Operation								
<ul style="list-style-type: none"> • Front end loading and movement on haul roads; • Stockpiles; • Screening of material; and • Stacking on conveyors. 	Dust	Pathway: air / windborne pathway Impact: human health and amenities	Town of Newman (nearest resident 3.9km from category 5 activities)	See section 3.1.1	C = Major L = Possible High Risk	N	Condition 2 (Table 14): operational requirements for screening plant <u>Condition 2 (Table 14): operational requirements for screening plant</u> Condition 6 (Table 1): dust suppression Condition 10: dust monitoring program Condition 11-18: Dust monitoring and management response <u>Condition 12: additional management response for ceasing mobile screening activities</u>	The Delegated Officer has conditioned the Licence Holder's proposed controls to operate the mobile screening plant with the use of water sprays and a water cart. Considering the number of reportable event triggers in the last AER (see Section 2.2.6) the likelihood for dust emissions to impact the Town of Newman is considered possible. While the Delegated Officer acknowledges that the removal of ore stockpiles will reduce dust sources from within the premises in the longer term, the screening activity will likely contribute to premises dust emissions in the short term. Due to this, and the existing risk of dust emissions from the premises impacting nearby receptors from other premises activities, the Delegated Officer has specified <u>additional regulatory controls within the licence to mitigate these additional dust emissions. This has included restricting/ceasing activities in the event of dust management trigger exceedances to decrease the likelihood of dust emissions impacting the Town of Newman. The Licence Holder is also required to operate dust suppression whenever the crushing and screening plant is operating and maintain records of the operations of this equipment to allow review against dust monitoring data.</u>
		Pathway: air / windborne pathway Impact: native vegetation health and increase of turbidity when creek is flowing	Whaleback creek and associated vegetation	See section 3.1.1	C = Minor L = Possible Medium Risk		Y	Condition 2 (Table 14): operational requirements for screening plant Condition 6 (Table 1): dust suppression

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 3 provides a summary of the consultation undertaken by the department.

Table 3: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website (08/12/2023).	None received	N/A
Local Government Authority (Shire of East Pilbara) advised of proposal 8 December 2023.	None received.	N/A
Department of Health (DoH) advised of proposal 8 December 2023.	Refer to Table 4.	Refer to Table 4.
Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) advised of proposal 8 December 2023.	DEMIRS provided a response 8 January 2024 with the following comments: <ul style="list-style-type: none"> Confirmation that the DEMIRS Resources Environmental Compliance team has reviewed the documentation provided; and From an environmental perspective, DEMIRS has no comments or concerns regarding the proposed operations. 	Noted.
Relevant stakeholder from within local community advised of proposal on 8 December 2023.	None received.	N/A
Licence Holder was provided with draft amendment on 8 April 2024.	Refer to Appendix 1: Summary of licence holder's comments on draft amendment.	Refer to Appendix 1: Summary of licence holder's comments on draft amendment.

Table 4: Department of Health's comments on amendment application

Comments received	Department's response
<p>DoH provided a response on 17 January 2024 with the following comments:</p> <ul style="list-style-type: none"> a) Based on the information provide regarding the proposed location, screening frequency and throughput, DoH is supportive of the inclusion of the Licence Holder's proposed controls within the licence conditions; b) DoH notes that other conveyors may be used for future short term screening projects with the expectation that the plant will not be located any closer than 3.5km from the Town of Newman. In addition, as the activity is only being proposed for a maximum of eight weeks per annum, DoH recommends that screening should only occur when the wind direction is likely to be predominantly away from the Town of Newman; c) DoH acknowledges that the proposed activity would likely contribute to ambient levels; and d) DoH has advised that for adequate health risk assessments, it is appropriate that air quality targets and limits be applied that are consistent with national standards, with variation to these standards only being considered after sufficient and relevant data is available to support the decision making. 	<ul style="list-style-type: none"> a) Noted. The Delegated Officer has conditioned the Licence Holder's proposed controls as regulatory requirements. b) Noted. The Delegated Officer obtained technical air quality advice during the assessment and has included additional conditions within the licence to manage the proposed screening activities. This has included additional specifications for dust suppression and restricting screening activities during exceedances of management trigger criteria. c) Noted. d) Noted. As described in the licence review, the department acknowledges the necessity for ongoing review and improvement of the dust management at this premises. The department also acknowledges the necessity for ongoing review the interim AGV, in conjunction with the improvement works that have been completed, or in currently being undertaken on the premises that were initiated through the review. <p>With the submission of both the plan of improvement works for the fixed plant west area, and the Newman dust monitoring network review, the Department intends to conduct a broader assessment of these submitted improvement plans, in both the context and intent of the original licence review, as well as considering updates and improvements to existing reportable event criteria, the premises dust monitoring network, dust management triggers and reporting requirements. This assessment is currently progressing and will inform future amendments to the premises licence.</p>

5. 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.

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

Relevant section or condition No.	Proposed amendments
Cover page	<ul style="list-style-type: none"> • Date of issue has been updated to demonstrate when the licence was first issued. • Date of amendment has been included to document the date of this licence amendment. • Under 'Premises details' the following text has been included: <ul style="list-style-type: none"> ○ 'Legal description –' included; ○ Updated list of tenements to correctly reflect existing prescribed premises; and ○ 'As defined by the premises maps in Schedule 1 and defined by the coordinates in Schedule 2' included. • Units for cubic metres included.
Licence history	<ul style="list-style-type: none"> • Headings updated to be accurate; • Updated to include licence amalgamation of Amendment Notices 1, 2 and 3 that was granted on 27/08/2020; and • Updated to include licence amendment details.
Throughout licence	<p>The following items have been updated throughout the licence:</p> <ul style="list-style-type: none"> • Condition numbering of the licence has been updated due to the removal of old condition 6 and 7 and addition of a new condition 35; • Update Footer to be consistent with current licence formatting conventions; • Emissions, Department, Department Request, Discharges, Licence, Premises, Prescribed and Primary Activities are now demonstrated in lower case; • Commas included to separate digits; • Units, spacing, semi-colons, colons, full stops, lowercase and upper-case lettering have been added and/or removed throughout the licence where these were originally not included or were no longer required; • Cubic metres replaced with m³; • Updates to cross referencing of conditions, tables and figures for accuracy purposes; • Inclusion of the column heading 'No.' where rows within tables have been itemised; • Acronyms expanded (in the first mentioned instance) for clarity purposes; • Individual monitoring locations now displayed as bullet points to enhance readability; • Inclusion of text to specify that days are 'calendar' days; • Table headings updated to state both 'infrastructure' and 'equipment'; • Table headings updated to repeat as header row at the top of each new page to enhance readability. • Where a dam, evaporation cell or pond is within the acid rock drainage (ARD)

Relevant section or condition No.	Proposed amendments
	facility this has been specified for clarity purposed; and <ul style="list-style-type: none"> • '/NZS' now incorporated into the referencing of all relevant standards.
Condition 3	As it has been more than six months since the licence amendment was issued, the regulatory requirement has been updated to state that all dust control equipment now needs to be accurately measured and achieved.
Old conditions 6 and 7	Both conditions removed as the works required under them have since been submitted to the department. Following condition numbers have been updated to reflect this removal.
Condition 6	Text updated to ensure that the words 'equipment' and 'installation' were captured within the condition and that all requirements were in accordance with Table 1.
Condition 6 (Table 1)	<ul style="list-style-type: none"> • A required completion date has been included for the installation of the PM₁₀ monitor for clarity purposes; • Changes to completion date for item 3; • Changes to item 5: <ul style="list-style-type: none"> ○ administrative update from reference of 'real time module' too 'an ES642 sensor" as requested by Licence Holder; ○ updating required completion date to specific date 18 months from the issue of the previous amendment. • Inclusion of infrastructure / equipment that the Licence Holder has committed to installing as part of the 'Plan of Improvement Works – Fixed Plant West' submitted to the department on 16 January 2024 in accordance with condition 6 including: <ul style="list-style-type: none"> ○ VVVF Drive Upgrade Procurement; and ○ relocation of BOC603 Dust Suppression Sprays. • Addition of mobile screening plant.
Condition 7 (Table 2)	In relation to the new putrescible landfill, the text has been updated to specify that waste disposal is undertaken in designated areas as depicted in Figure 1 of Schedule 1.
Condition 10 (Table 3)	<ul style="list-style-type: none"> • Table moved to a landscape format to enhance readability. • The top row of headings has been removed as this is obsolete information and there is no cross referencing associated with these headings within the licence; • Monitoring Station Name and Station ID text updated to match the comprehensive list of monitors provided by the Licence Holder on 31 January 2024 ; • The heading text for the second column has been updated to include reference to units and a reference to <i>Note 1</i>; and • The figure reference for the location of the AT796 weather sensor has been updated to Figure 4.
Conditions 11, 12, 14, 16 and	The department notes that the original condition text permitted a delay in required actions being undertaken until 16 January 2024. Consequently, the relevant text has been updated to require the licence holder to undertake the respective

Relevant section or condition No.	Proposed amendments
18	<p>condition actions without a delay.</p> <p>The department notes that the licence holder has continued to undertake the necessary actions (including reporting to the department) throughout the period since the previous licence amendment was issued on 16 January 2023.</p>
Condition 11 (Table 4)	<ul style="list-style-type: none"> • The heading text for the first column has been updated from 'Row' to 'No.' to achieve a consistent table layout throughout the instrument; • Monitoring station label text updated to match the correct station name displayed in Table 3; and • Addition of <i>Note</i>¹ to state that if both monitors meter the reportable event criteria in the same 24-hour period, this is considered to be a single reportable event to be consistent with other reporting requirements.
Condition 12	<p>Addition of new item b(i) to include the ceasing of mobile screening activities when a management trigger criteria is exceeded.</p>
Condition 19	<p>Text updated to remove reference to waste infrastructure as Table 5 includes a comprehensive list of all waste types.</p>
Condition 19 (Table 5)	<ul style="list-style-type: none"> • The heading text for the first column has been updated from 'Row' to 'No.' to achieve a consistent table layout throughout the instrument; • The heading text for column 2 has been updated to 'Waste type' with removal of reference to 'acceptance criteria' as this is not relevant in this instance; • References to specific figures and schedules have been included where relevant (items 4, 5, 6, 7, 9, 10 and 12); • Specific infrastructure labels have been included where relevant to allow better cross referencing against respective figures (items 7 and 8); and • Inclusion of text to specify that reverse osmosis reject water is discharged to a contingency discharge point (L2) (item 8).
Condition 21	<p>The text has been updated to 'waste type' with removal of reference to 'acceptance criteria' as this is not relevant in this instance.</p>
Condition 23 (Table 6)	<p>The text 'soil' has been updated to 'Uncontaminated fill' to align with the wording in the <i>Landfill Waste Classification and Waste Definitions 1996</i> (as amended 2019)</p>
Conditions 29, 30, 31, 32 and 33	<p>Inclusion of the word 'and' to provide clarify that all steps are required.</p>
Condition 30 (Table 8)	<ul style="list-style-type: none"> • The heading text for the first column has been updated from 'Monitoring point reference and location on map' to 'Monitoring point location' to achieve a consistent table layout throughout the instrument; • Units have been specified for limits where these were originally missing to achieve a consistent table layout throughout the instrument; and • The text for P11 has been updated from 'cell' to 'pond' to align with the text in Figure 3.
Condition 32	<ul style="list-style-type: none"> • The heading text for the first column has been updated from 'Monitoring point reference and location' to 'Monitoring point location' to achieve a consistent

Relevant section or condition No.	Proposed amendments
(Table 9)	<p>table layout throughout the instrument; and</p> <ul style="list-style-type: none"> • Text updated to remove 'ARD' from reference to the 'Evaporation Cells' to align with the text in Figure 3.
Condition 33 (Tale 10)	<p>The heading text for the first column has been updated from 'Monitoring location and reference' to 'Monitoring point location' to achieve a consistent table layout throughout the instrument.</p>
Condition 35	<p>The condition has been added to provide further clarity on Annual Audit Compliance Report (AACR) reporting requirements aligned with the department's standard condition for this aspect and to provide a link to the AACR definition that was captured within the original instrument. Following condition numbers have been updated to reflect this addition.</p>
Condition 36	<p>For item (b)(iii) the text ' , when in effect' has been removed as there is now no delay in the actions associated with condition 13.</p>
Condition 38	<p>Correction made to condition cross referencing.</p>
Condition 39	<p>Specifying to 'calendar' days.</p>
Definitions (Table 11)	<ul style="list-style-type: none"> • Definitions for the following terms have been included: <ul style="list-style-type: none"> ○ BAM ○ ° ○ kT ○ m; ○ mg/L; ○ m³; ○ µg/m³; ○ ML/day ○ m³/day; ○ mm; ○ m/s; ○ No. ○ TSF; • Definitions for the following terms have been removed as they have not been referenced within the existing instrument: <ul style="list-style-type: none"> ○ AS5621; and ○ ISO3087:2011. • Updated definition for 'Exclusion Periods' to reference correct naming conventions for Monitoring Station and Weather Station
Figure 4	<p>Updated Figure to show the monitoring locations labelled with same Station ID and Station Name as specified in Table 3 and the addition of the weather station.</p>
Schedule 3	<ul style="list-style-type: none"> • Definitions for each prescribed activity has been included to enhance

Relevant section or condition No.	Proposed amendments
(Table 13)	<p>readability;</p> <ul style="list-style-type: none"> • Infrastructure labelling now displayed as bullet points to enhance readability; • Infrastructure labelling text updated to align with the text in the respective figure; • Inclusion of new line item: '1 x 2 mtpa mobile screening plant' with the relevant approved locations; and • Updates to line item 14 to specify requirement for a dedicated watercart to condition the mobile screening plant activities.
Schedule 3 (Table 14)	<ul style="list-style-type: none"> • Infrastructure labelling now displayed as bullet points to enhance readability; • Updates to water sprays at OHP5 Relocatable Crusher to specify their location on 'equipment' as instead of 'conveyors' and remove 'to reduce carry back on the underside of the conveyor belt when transporting ore' as this is not applicable as conveyors do not have scrapers on the underside; • Updates to naming under 'Infrastructure location' for line items 3, 4 and 14 to be consistent with the referenced figures; • Changes to item 6 'Car Dumper': <ul style="list-style-type: none"> ○ Updates to 'Operational requirements' as Licence Holder has advised that dust controls are located within the 'building' instead of the 'tunnel'; and ○ Addition of new equipment that the Licence Holder has advised has been installed as part of the 'Plan of Improvement Works – Fixed Plant West' submitted to the department on 16 January 2024 in accordance with condition 6. • New line item 8 'Shuttle Conveyor CV454' to include the new dust measures installed as part of the 'Plan of Improvement Works – Fixed Plant West' submitted to the department on 16 January 2024 in accordance with condition 6; and • New line item 16 to include the 2 mtpa mobile screening plant and associated operational requirements including additional regulatory controls determined as part of the risk assessment
Schedule 4 (Table 15)	<ul style="list-style-type: none"> • Updates to naming under 'Infrastructure location' for line items 3 to be consistent with the referenced figures; • Corrected figure reference for line item 4; and • Inclusion of a figure with reference to line item 9.
Schedule 5	<p>Requirements for details in Quarterly Report to label monitoring stations to be consistent with naming conventions specified in Table 3 to ensure clarity and consistency in reporting.</p>

References

1. BHP Iron Ore (BHP) 2023, *Annual Environmental Report, July 2022 – June 2023*.
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.

Appendix 1: Summary of licence holder's comments on draft amendment

Condition	Summary of licence holder's comment	Department's response
Condition 3	Request for revised wording to: <i>"for all dust control equipment, except dust control infrastructure at OHP5 and stockyard water cannons which must be accurately measured and achieved by 17 January 2024".</i>	Following further discussion with the licence holder, this revised wording has been removed from the condition. Previous implementation dates have now passed, with requirements for measuring and achieving average monthly availability and average monthly performance now established. Inclusion therefore considered redundant, noting that the requirements of the condition as amended under this amendment are equivalent to that of the existing condition (from 17 January 2024).
Condition 6, Table 1, Item 3	Request to change required completion date from "30 June 2024" to be replaced with "30 August 2024" as this installation will not be able to be completed until the August shutdown.	Justification for this extension is considered satisfactory and accepts this change.
Condition 6, Table 1, Item 6	Licence Holder has committed to having the structural and electrical designs completed and equipment procured by 30 June 2025 but does not propose to install the new infrastructure until the old infrastructure starts to fail. Request to update the wording to: <i>"Structural and electrical design upgrades for the following infrastructure are completed and procured (but not installed until the old equipment requires replacing):</i> a) Key Water Pump VVF Drive (PW691A); b) Dust Collector VVF Fan Drivers (DC507, DC508, DC415, DC455); and c) Dust Collector VVF Long Travel Drives (DC415, DC416 and DC455)".	Proposed change accepted. Wording updated based on licence holder's request.
Condition 11, Table 4, Item 3	This is a PM _{2.5} monitor. Request to update to: "WBAQRT023 – Newman 1 Town Centre PM2.5".	Oversight during drafting. The department accepts this change but has updated to be consistent with naming in Table 3.
Condition 12	Incorrect reference to <i>condition 13</i> , replace with <i>condition 11</i> .	Oversight during drafting. The department accepts this change.
Condition 14	Incorrect reference to <i>condition 0</i> , replace with <i>condition 12</i> .	Oversight during drafting. The department accepts this change.
Condition 35	Request to change date for AACR submission to be align with submission date for AER. Request to change wording to: <i>"The licence holder must submit to the CEO no later than 1 October each year, an Annual Audit Compliance Report (AACR) indicating the extent to which the licence holder has complied with the conditions in the licence for the annual period."</i>	Proposed change accepted.
-	Licence Holder addressed department's request for location of 1. Sludge drying and 2. Bioremediation facilities: 1. There are currently no specific areas for sludge drying; 2. Bioremediation facilities do not trigger category under Schedule 1 of <i>Environmental Protection Regulations</i> based on previous discussions with the department, these are not shown on figure. The description of these activities on the licence enable new facilities to be constructed provided they comply with specifications in the licence.	The department accepts this explanation from Licence Holder regarding detailing specific location for these activities on a Figure in the licence (Figure 3 specifically).

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY			
Application type			
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L4503/1974/14
Date application received		7 November 2023	
Applicant and Premises details			
Applicant name/s (full legal name/s)		BHP Iron Ore Pty Ltd (008 700 981)	
Premises name		Mt Whaleback / Orebody 29/30/35	
Premises location		Mining Tenements: E52/2009-I, ML244SA, G52/19-G52/27, G52/276, G52/277, G52/279, K858923 and N088235 Newman 6753	
Local Government Authority		Shire of East Pilbara	
Application documents			
HPCM file reference number:		DER2013/000901-2-9	
Key application documents (additional to application form):		Supporting document: A2216672	
Scope of application/assessment			
Summary of proposed activities or changes to existing operations.		As per section 2.2 of this Amendment Report.	
Category number/s (activities that cause the premises to become prescribed premises)			
Table 1: Prescribed premises categories			
Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)	
Category 5: processing or beneficiation of metallic or non-metallic ore	80, 000, 000 tonnes per annum	No changes to overall throughput	
Category 6: mine dewatering	8, 000, 000 tonnes per annum	N/A	
Category 54: sewage facility	183.2 cubic metres per day	N/A	
Category 61: Liquid waste facility	9, 348, 600 tonnes per annum	N/A	
Category 64: class II or III putrescible landfill site	14, 500 tonnes per annum	N/A	
Class 73: bulk storage of chemicals, etc	13, 000 cubic metres	N/A	
Legislative context and other approvals			

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: 963 EPA Report No: 1982
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Mining lease / tenement <input checked="" type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CPS No: 5617/6 <i>Noting: no clearing required for this amendment</i>
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Licence/permit No: GWL65148(11) – Whaleback Pit: allocation 6,000,000kL/annum and GWL160418(8) – Orebody 29,30 and 35: 8,000,000kL/annum
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: N/A <i>Noting: Premises lies over <u>Proclaimed Pilbara Surface Water Area</u> and <u>Proclaimed Pilbara Groundwater Area</u></i>

<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Name: Newman Water Reserve Priority: P1 /P3 Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> <i>Noting: area of activity (OHP4) is located in P1 area of reserve.</i></p>
<p>Is the Premises subject to any other Acts or subsidiary regulations</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><i>Iron Ore (Mount Newman) Agreement Act 1964</i> <i>Rights in Water and Irrigation Act 1914</i> <i>Dangerous Goods and Safety Act 2004</i></p>
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Classification: Contaminated – remediation required (C-RR) Date of classification: 10/12/2020</p>