



Application for Licence Amendment

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

Licence Number	L6168/1991/11
Licence Holder	BHP Iron Ore Pty Ltd
ACN	008 700 981
File Number	DER2013/001190-1
Premises	Yandi (Marillana Creek) Iron Ore Mine Mining Tenements M270SA, M47/292, G47/12, G47/13, G47/14, G47/15, G47/16, G47/17, G47/18, G47/19, M47/69, M47/70 and M47/71 NEWMAN WA 6753 As depicted in Schedule 1
Date of Report	13 December 2021
Decision	Amendment 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 L6168/1991/11 is held by BHP Iron Ore Pty Ltd (licence holder) for the Yandi (Marillana Creek) Iron Ore Mine (the Premises), located at on multiple mining tenements in Newman, WA.

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 L6168/1991/11 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 23 June 2021, the licence holder submitted an application to the department to amend Licence L6168/1991/11 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Amalgamate amendment notice 1 with L6168/1991/11 to form a single consolidated licence;
- Update the licence tenure by removing dead tenements M47/292, M47/69, M47/70 and M47/71;
- Remove discharge point MCDMDEW031 and the associated monitoring requirements as this discharge point has been decommissioned;
- Amend the waste management conditions of the licence to
 - Remove 'Clean fill' from listed waste;
 - Allow for the inert concrete and pipework to be used in the backfill of Yandi Pits;
 - Increase the limit of Category 64 by 6,000 tonnes to 21,800 tonnes per annum to allow for the disposal of inert concrete sleepers and pipework; and
- Remove the landfarm locations from the map in Schedule 1 of the Licence to allow for new landfarms to be constructed as required provided they comply with Condition 1.2.6.

The licence holder requested following additional amendments during the assessment process which were not included in the submitted application:

- Remove Yandi Camp irrigation point MCSWSTP001 as Yandi Camp has been decommissioned;
- Remove reference to category 64 landfill from construction Table 1.2.6;

This amendment is limited to categories 6 and 64, and administrative changes. No changes to the aspects of the existing licence relating to Category 5, 12, 52, 54 and 73 have been requested by the licence holder. Table 1 below outlines the proposed throughput changes to the existing Licence.

Table 1: Proposed throughput changes

Category	Current throughput capacity	Proposed throughput capacity
64	15,800 tonnes	21,800 tonnes

2.3 Part IV of the Environment Protection Act

Premises activities have been assessed under Part IV of the EP Act with two ministerial statements issued, MS679 amended by MS1039. MS679 was for approval for life-of-mine proposal to mine iron ore and includes clearing of native vegetation, subsequent rehabilitation and decommissioning of the site. MS1039 includes amendments for mine production rate and throughput, administrative amendments and replacement of conditions relating to clearing of native vegetation, decommissioning and rehabilitation. Management of impacts to Marillana Creek and conservation of significant flora and fauna associated with ground disturbance activities have been assessed under the ministerial statements.

The activities and emissions from the licence holder proposed amendments have not been assessed under the ministerial statements and will be assessed under this Part V licence.

2.4 Aboriginal Heritage Act 1972

DWER's review of heritage revealed that 169 registered Aboriginal Heritage sites were located within the prescribed premises boundary (see Figure 3 of Appendix 1). Under the *Aboriginal Heritage Act 1972* consent is required from the Minister for Aboriginal Affairs for any activity which will negatively impact Aboriginal heritage sites. DWER consequently requested comment from Department of Planning Lands and Heritage (DPLH) regarding the applicants proposed amendments. A summary of consultation is included in Section 4. These are not considered receptors and are not regulated under the EP Act.

2.5 Removal of dewatering discharge point

The licence holder has requested removal of mine dewater discharge point MCDMDEW031 and the associated monitoring requirements. They have indicated that the discharge point has been decommissioned and that the discharge point was last used in Quarter 3 of 2018 financial year. This information is consistent with the information provided in the Annual Environmental Reports submitted to the department. The Delegated Officer has therefore determined to remove dewatering discharge point MCDMDEW031 and associated monitoring requirements from the licence.

2.6 Removal of Yandi irrigation point

The licence holder has requested removal of MCSWSTP001 Yandi Camp WWTP irrigation area as the Yandi camp has been decommissioned. The Delegated Officer has determined to remove MCSWSTP001 from the licence.

2.7 Removal of clean fill from waste acceptance

The licence holder has requested removal of 'clean fill' from the waste acceptance (condition 1.2.1) and processing (condition 1.2.3) tables. This amendment will not change the risk profile of the premises or alter the requirements of other waste types authorised for disposal under category 64 (Class II putrescible landfill) on the licence. The Delegated Officer has therefore determined to remove "clean fill" from the relevant licence conditions.

2.8 Removal of landfill from construction table

The licence holder has requested removal of reference to category 64 from Table 1.2.6, indicating that no construction of the landfill occurred and that waste is simply deposited in the borrow pit. As schedule 1 of the licence shows the current approved landfill locations, the Delegated Officer has determined to remove this reference from the licence.

2.9 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes made under the Amendment Notices as summarised in Table 2.

Table 2: Licences consolidated in this amendment

Instrument	Issued	Summary of approval
L6168/1991/11	12/11/2015	Licence granted
L6168/1991/11	5/12/2018	Amendment Notice 1 to include category 12 and 52, construct a new inert landfill, increase the category 64 disposal limit, increase the category 73 storage volume and update the premises map in Schedule 1.

The obligations of the licence holder have not changed in consolidating the licence. The department has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the format and appearance of the Licence;
- revised licence condition's numbers and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The full consolidation of licence conditions as they relate to this Revised Licence are detailed in Section 5.1. The previously issued Amendment Notice will remain on the department's website for future reference and will act as a record of the department's decision making.

3. Risk assessment

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

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

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 3 below. Table 3 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary. Site Layout is displayed in Figure 1 and sensitive receptors in Figure 2 and Figure 3.

Table 3: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Construction of additional landfarms	Air/windborne pathway	<ul style="list-style-type: none"> No proposed controls for dust associated with construction of additional landfarms.
Operation			
Hydrocarbon contaminated water (from stormwater etc.)	Operation of additional landfarms	Seepage through base and embankments to soil and groundwater	<p><u>Applicant proposed controls:</u></p> <p>Landfarm facilities will be:</p> <ul style="list-style-type: none"> lined (either with clay or a synthetic liner) to achieve an impermeability of 1 x 10⁻⁹ m/s or less; and Not be constructed within 50m of watercourses. <p><u>Existing licence controls for approved landfarm:</u></p> <p>Condition 1.2.3: Contaminated soil is only to be remediated within the Landfarm facilities shown on the Map in Schedule 1</p>
		Overtopping land farm embankments	<p><u>Applicant proposed controls:</u></p> <p>Landfarm facilities will be:</p> <ul style="list-style-type: none"> designed so that any potentially contaminated runoff from the treatment cells is contained; not constructed within 50m of watercourses. <p><u>Existing licence conditions for approved landfarm:</u></p> <p>Condition 1.2.6: Any potentially contaminated runoff from the treatment cells is contained</p>
Dust	Operation of a category 64 class II putrescible landfill (increase throughput)	Air/windborne pathway	<p>No additional applicant controls proposed for increase to throughput.</p> <p><u>Existing licence conditions:</u></p> <ul style="list-style-type: none"> 1.2.1 and 1.2.2: waste acceptance criteria and limit 1.2.3 waste processing: <ul style="list-style-type: none"> o Disposal only within defined area; o Disposal within trenches o Tipping area restrictions 1.2.4 Cover requirements

Emission	Sources	Potential pathways	Proposed controls
Contaminated leachate		Seepage through base and embankments to soil and groundwater	No additional applicant controls proposed for increase to throughput. <u>Existing licence conditions:</u> <ul style="list-style-type: none"> • 1.2.1 and 1.2.2: waste acceptance criteria and limit • 1.2.3 waste processing: <ul style="list-style-type: none"> ○ Separation between base of the landfill and the highest groundwater level shall not be less than 2m.
Windblown waste		Air/windborne pathway	No additional applicant controls proposed for increase to throughput. <u>Existing licence conditions:</u> <ul style="list-style-type: none"> • 1.2.1 and 1.2.2: waste acceptance criteria and limit • 1.2.3 waste processing: <ul style="list-style-type: none"> ○ Disposal only within defined area ○ Disposal within trenches ○ Tipping area restrictions • 1.2.4 Cover requirements • 1.2.5 Windblown waste contained within premises boundary and returned to tipping area on at least a monthly basis.
Dust	Transport and deposition of inert concrete and pipework waste	Air/windborne pathway	<u>Applicant proposed control:</u> Use of water cart on unsealed roads
Leachate	Disposal of inert concrete waste and inert pipework in pit voids. (No asbestos)	Seepage through base and embankments to soil and groundwater	<u>Applicant proposed control:</u> Only inert materials (concrete and pipework waste) classified as inert in accordance with the <i>Landfill Waste Classification and Waste Definitions, 1996</i> to be deposited within the pit voids.
Leachate	Disposal of inert concrete waste within overburden storage areas	Seepage through soil and groundwater	<u>Applicant proposed control:</u> <ul style="list-style-type: none"> • Only inert materials (concrete and pipework waste), classified as inert in accordance with the <i>Landfill Waste Classification and Waste Definitions, 1996</i> to be deposited within the overburden storage areas; and • Waste to be tested to confirm that no harmful chemicals are present.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the licence holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 4 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)). The nearest town of Newman is approximately 85km south-east of the premises.

Table 4: Sensitive human and environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Pilbara Groundwater Area, proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act)	The Premises is located within the Pilbara Groundwater Area. Main Aquifer is the Hammersley – Fractured Rock Aquifer – groundwater levels may be deep below the surface, and water is generally fresh. Main use of the aquifer is for mining and mine dewatering from iron ore mines. Bores also drilled for road and railway construction. Groundwater depth across the prescribed premises ranges from 5 to 55 m (BHP, 2021).
Pilbara Surface Water Area, proclaimed under the RIWI Act.	The Premises is located within the Pilbara Surface Water Area, within the Fortescue River Upper surface water catchment.
Marillana Creek, being a tributary of the Weeli Wolli Creek, which is a tributary of the Fortescue River. Assessed and managed under Ministerial Statement MS1039.	Within the premises boundary
Adjacent native vegetation	Within premises boundary
<i>Pseudomys Chapmani</i> (Western Pebble-mound Mouse), Priority 4 on the Department of Biodiversity, Conservation and Attractions Priority Fauna List. Managed under Ministerial Statement MS1039 for ground disturbance activities.	Within the premises boundary
<i>Liasis olivaceus barroni</i> (Pilbara Olive Python) – EPBC status – listed as vulnerable Managed under Ministerial Statement MS1039 for ground disturbance activities.	Within premises boundary
<i>Dasyurus hallucatus</i> (Northern Quoll), Division 1 (Endangered Mammals) Schedule 2, Wildlife Conservation Act 1950. Managed under Ministerial Statement MS1039 for ground disturbance activities.	Within premises boundary

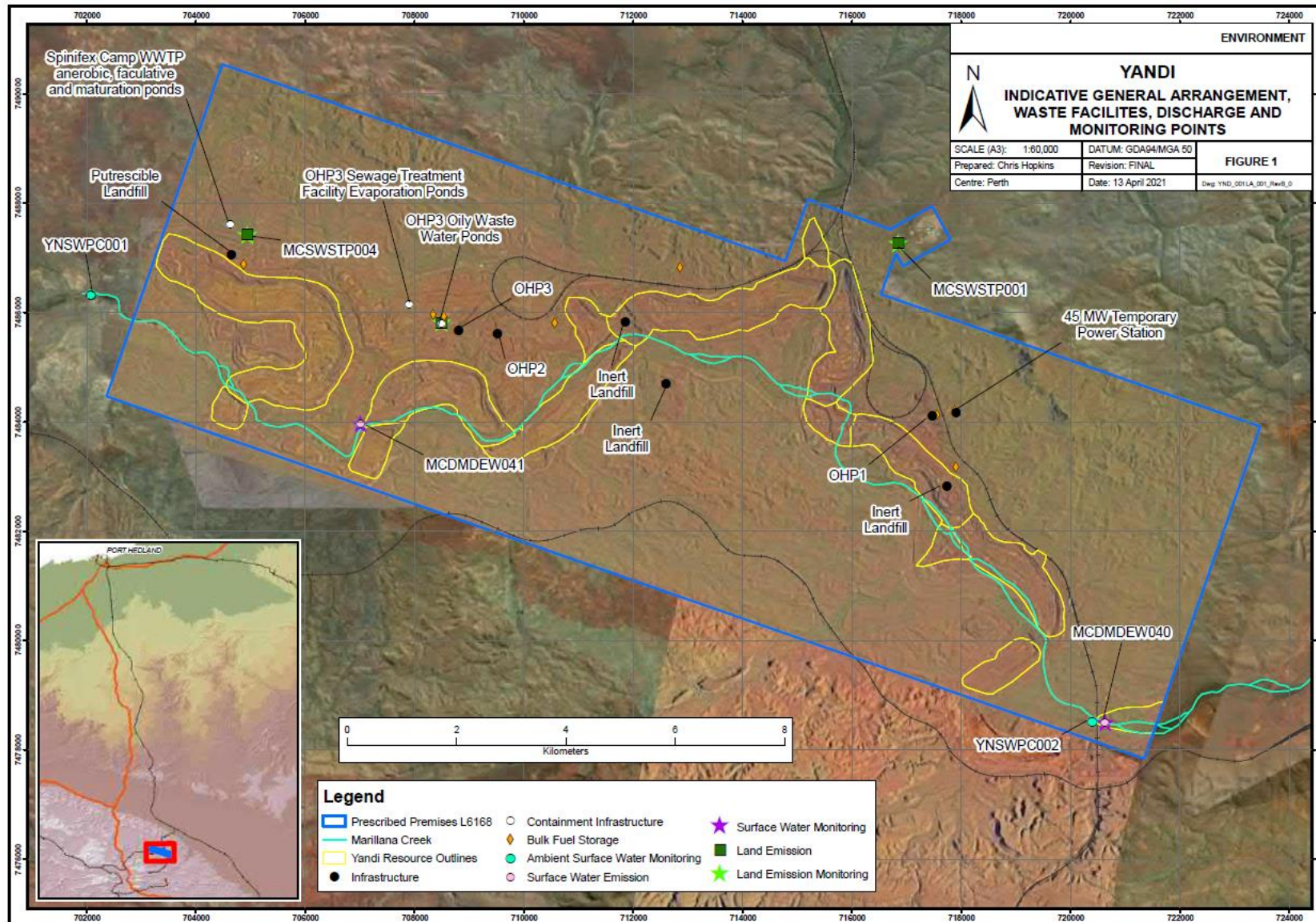


Figure 1 Site Layout. Overburden storage areas located adjacent to the “Yandi Resource Outlines” (yellow polygons)

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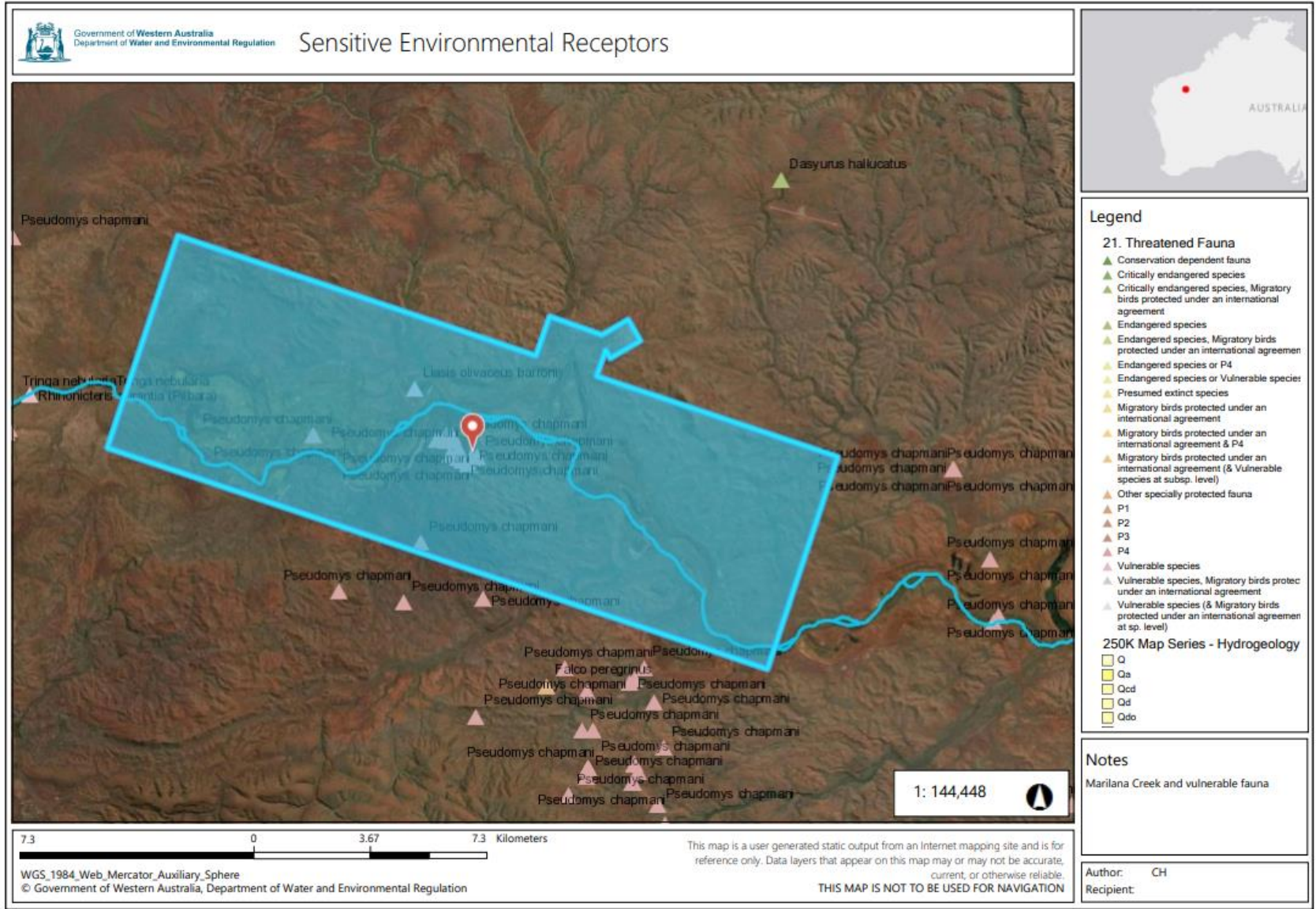


Figure 2 Sensitive environmental receptors

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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the licence holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the licence holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the licence holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 5.

The Revised Licence L6168/1991/11 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. category 6 and 64 activities. The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 5. Risk assessment of potential emissions and discharges from the Premises during construction and operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Construction								
Construction of additional landfarms	Dust	Air/windborne pathway causing impacts to adjacent aboriginal heritage sites, native vegetation and priority fauna	Native vegetation Priority fauna	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1.2.13 – Limit of three additional landfarms to be constructed. Condition 1.2.14 – reporting requirements	Dust associated with construction of landfarms is likely to be of short duration. The “Central and Eastern” landfarm locations will remain in Schedule 1 of the licence.
Operation								
Operation of additional landfarms	Hydrocarbon on contaminated water (from stormwater etc.)	Seepage through base and embankments to soil and groundwater	Groundwater (applicant stated range between 5 – 55m bgl) Marillana Creek and associated minor creek lines Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	N	Condition 1.2.13 – construction and location requirements Condition 1.2.14 – reporting requirements	As the licence holder has not provided the number or location of bioremediation landfarms proposed for construction, the following location requirements have been added to the licence as regulatory controls: <ul style="list-style-type: none"> • Applicant proposed 50m buffer from surface water courses; • Applicant proposed containment of contaminated run-off; • Applicant proposed use of a synthetic liner with permeability of 1×10^{-9}m/s to mitigate seepage risk. The applicant proposed use of either a clay or synthetic liner for landfarms (with permeability of 1×10^{-9}m/s) and DWER does not consider a clay liner to be suitable given the risk associated with contaminated seepage.
		Overtopping landfarm embankments (stormwater)	Marillana Creek and associated minor creek lines	Refer to Section 3.1	C = Moderate L = Possible	N		

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
			Adjacent native vegetation Priority fauna		Medium Risk			<ul style="list-style-type: none"> DWER control for adequate fencing or positioning to prevent public access; DWER control to place adequate signage warning of contamination DWER control to mitigate the risk of overtopping - a requirement for stormwater diversion will also be included as a regulatory control. DWER control: modification of Annual Environmental Report to include quantities of hydrocarbon contaminated waste <p>The "Central and Eastern" landfarm locations will remain in Schedule 1 of the licence.</p>
Operation of category 64 landfill – class II putrescible landfill (increased throughput)	Dust	Air/windborne pathway causing impacts to adjacent native vegetation, priority fauna	Priority fauna	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	<u>Existing licence conditions:</u> 1.2.1 and 1.2.2: waste acceptance criteria and limit 1.2.3 waste processing: <ul style="list-style-type: none"> Disposal only within defined area; Disposal within trenches Tipping area restrictions 1.2.4 Cover requirements	Existing licence controls are considered sufficient to mitigate risk associated with additional class II landfill throughput.
	Contamina	Seepage	Groundwater (applicant)	Refer to	C = Moderate	Y	<u>Existing licence</u>	Existing licence controls are considered

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
	leachate	through base and embankments to soil and groundwater	stated range between 5 – 55m bgl) Marillana Creek and associated minor creek lines Adjacent native vegetation and priority fauna	Section 3.1	L = Possible Medium Risk		<u>conditions:</u> 1.2.1 and 1.2.2: waste acceptance criteria and limit 1.2.3 waste processing: <ul style="list-style-type: none"> o Separation between base of the landfill and the highest groundwater level shall not be less than 2m. 	sufficient to mitigate risk associated with additional class II landfill throughput.
	Wind blown waste	Air/windborne pathway	Adjacent native vegetation Priority fauna	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	<u>Existing licence conditions:</u> 1.2.1 and 1.2.2: waste acceptance criteria and limit 1.2.3 waste processing: <ul style="list-style-type: none"> o Disposal only within defined area; o Disposal within trenches o Tipping area restrictions 1.2.4 Cover requirements 1.2.5 Windblown	Existing licence controls are considered sufficient to mitigate risk associated with additional class II landfill throughput.

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
							waste contained within premises boundary and returned to tipping area on at least a monthly basis	
Transport and deposition of inert concrete and pipework waste	Dust	Air/windborne pathway causing impacts to adjacent native vegetation, threatened flora and fauna	Adjacent native vegetation Priority fauna	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	Risk of significant dust emissions associated with transport of inert pipework and concrete is considered low. No additional regulatory controls proposed.
Disposal of inert concrete waste and inert pipework in pit voids	Leachate	Seepage through base and embankments to soil and groundwater	Groundwater (applicant stated range between 5 – 55m bgl) Marillana Creek and associated minor creek lines Adjacent native vegetation and priority fauna	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	<u>Modifications to existing conditions:</u> 1.2.1 modification to waste acceptance table	Waste acceptance for inert waste type 1 has been modified to allow for disposal within pit voids and overburden storage areas. Inert concrete and pipework are at low risk for leachate generation: no additional regulatory controls proposed.
Disposal of inert concrete waste within overburden	Leachate	Seepage through soil and	Groundwater (applicant stated range between 5 –	Refer to Section	C = Minor L = Unlikely	Y	<u>Modifications to existing conditions:</u>	

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
storage areas		groundwater	55m bgl) Marillana Creek and associated minor creek lines Adjacent native vegetation and priority fauna	3.1	Medium Risk		1.2.1 modification to waste acceptance table	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

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

Table 6: Consultation

Consultation method	Comments received	Department response
Shire of East Pilbara advised of proposal 9/9/2021	No comments received.	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal 9/9/2021	No comments received.	N/A
<p>Department of Planning, Lands and Heritage advised of proposal 9/9/2021</p> <p>DPLH was contacted due to the density of aboriginal heritage in the area (169 Aboriginal Heritage sites).</p>	<p>DPLH replied to DWER's request for comment on 15 September 2021 requesting further information with respect to the locations of the proposed "Overburden Storage Areas" (OSAs)</p> <p>DWER contacted the applicant on 15 September 2021 requesting they provide further information and location of the Overburden Storage Areas.</p> <p>The applicant replied on 5 October, declining to provide shapefile locations for reference, indicating that the proposed works will occur in areas where consent has already been granted for mining operations under section 18 of the Aboriginal Heritage Act 1972 (AHA). They also indicated there is no planned disturbance of heritage sites for future OSAs or expansions of existing OSAs at Yandi.</p> <p>DPLH provided further response on 18 October 2021 that there is no further requirement for approvals to be obtained under the AHA for operations occurring within an area where section 18 consent exists and where the purpose for which the consent was granted remains the same.</p>	<p>The applicant has stated that there is no planned disturbance of heritage sites for future OSAs or expansions of existing OSAs at Yandi.</p> <p>The applicant has indicated existing OSAs at Yandi have been designed to avoid the disturbance of heritage sites, except where approval has already been obtained under Section 18 of the Aboriginal Heritage Act 1972 and disturbance has already occurred in accordance with the approval.</p>
Licence holder was provided with draft amendment on 3 November 2021 and a second draft on 18 November 2021.	<p>For comments on the first draft see Appendix 2</p> <p>No comments were received on the second draft.</p>	See Appendix 2

5. Conclusion

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

5.1 Summary of amendments

Table 7 provides a summary of the proposed amendments and will act as record of implemented changes. Table 8 summarises amendments resulting from consolidation of the licence with the amendment notice. All proposed changes have been incorporated into the Revised Licence as part of the amendment process. All references to “Licensee” have been updated to “Licence Holder”.

Table 7: Summary of licence amendments

Condition no.	Proposed amendments
Cover page	Licence Holder Name updated from “BHP Billiton Iron Ore Pty Ltd” to “BHP Iron Ore Pty Ltd” Category throughput for category 64 revised from 15,800 to 21,800 tonnes per annual period
1.2.1 Table 1.2.1	Removal of “clean fill” from waste acceptance table Modification to include inert concrete and pipework in “Inert waste type 1” Increase throughput quantity for inert and putrescible wastes to 21,800 tonnes per annual period
1.2.3 Table 1.2.2	Removal of “clean fill” from waste acceptance table Modification to allow inert waste type 1 concrete and pipework disposal in pit voids and overburden storage areas.
1.2.7	Condition 1.2.7 and Table 1.2.5 removed as being redundant – production/design limits are already listed at the front end of the licence. Condition and Table numbers renumbered from 1.2.8 to 1.2.12.
1.2.11	Reference to category 64 landfarm construction removed
1.2.13	Bioremediation landfarm design and construction requirements
1.2.14	Reporting requirement for landfarm design and construction
2.1 Table 2.1.1	Discharge point MCDMDEW031 removed
2.2.1	MCSWSTP001 emission point removed.
2.3.1	Administrative error corrected – incorrect reference to ‘land’ replaced with ‘air’.
3.2.1 Table 3.2.1	Monitoring point MCDMDEW031 removed
4.2.1 Table 4.2.1	Placed requirement for Annual Environmental Report to include the quantity of hydrocarbon contaminated waste placed in landfarms for remediation

Table 8: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
Cover page	Prescribed Premises Category table	N/A	Revised to include category 12 and 52 as per AN1. Assessed production/design capacity for category 73 revised to 4000 cubic metres.
Introduction	N/A	N/A	Introductory text updated and redundant text removed.
1.1.2	Interpretation and definitions	N/A	Correspondence address updated
1.2.7 Table 1.2.5	Production/design capacity	Removed	Category throughputs are also listed at the front of the licence, condition 1.2.7 has consequently been removed as being redundant.
1.2.8 – 1.2.12	New infrastructure conditions (power station, bulk fuel storage facility and cat 64 landfill)	N/A	New conditions added as per AN1.
2.3 Table 2.3.1	Point source emissions to air	N/A	New condition added as per AN1.
Schedule 1: Maps	Premises maps	Schedule 1: Maps	Figure 1 updated, and Figures 2 and 3 added as per AN1

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water (DoW), 2013, *Water Quality Protection Note 26 – Liners for containing pollutants, using synthetic membranes*
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Environmental Protection Authority (EPA) 2018, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual*, Environmental Protection Authority, Perth, WA.

Appendix 1: Aboriginal Heritage Locations

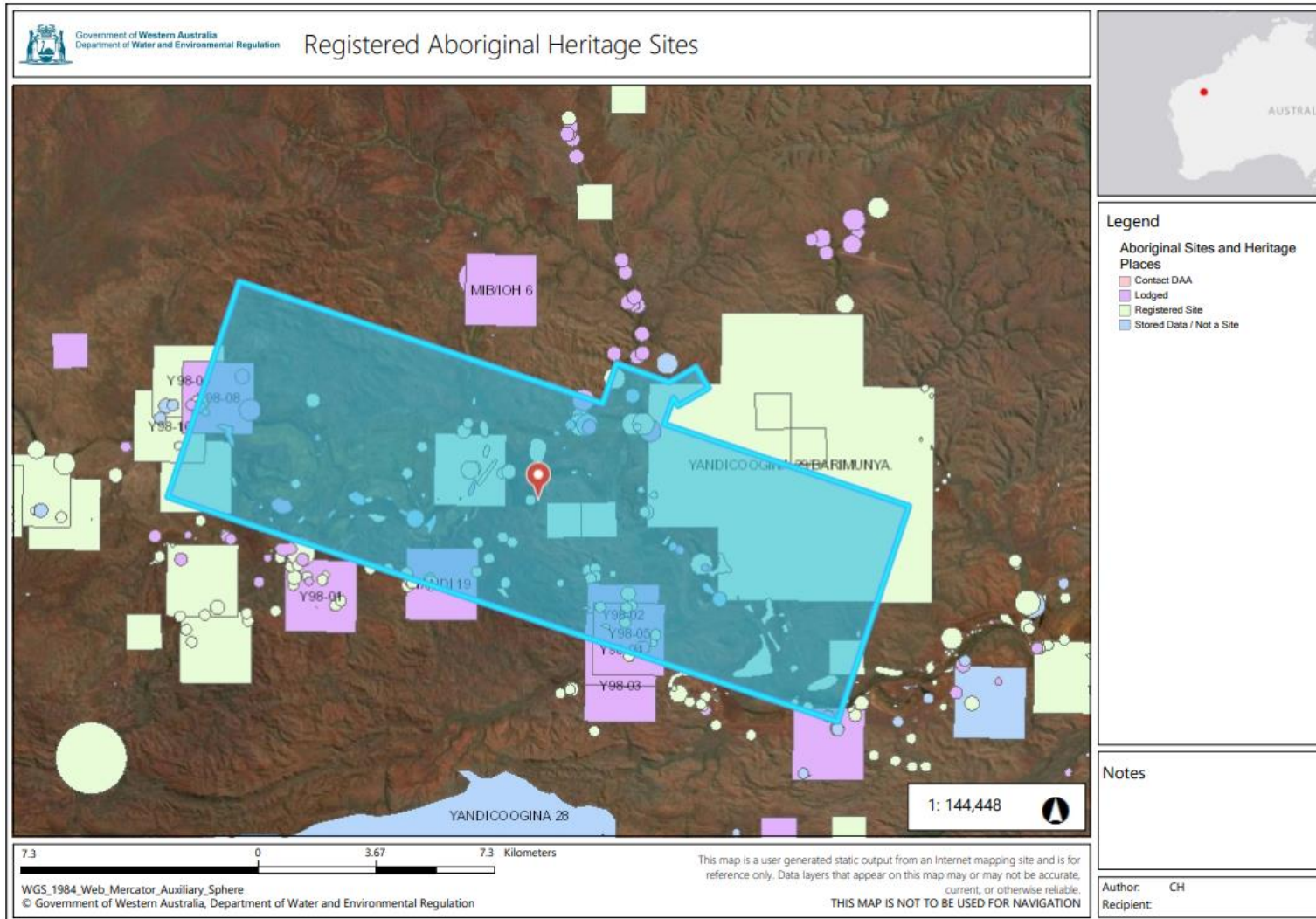


Figure 3: Aboriginal Heritage

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Appendix 2: Summary of Licence Holder’s comments on risk assessment and draft conditions

Condition	Summary of Licence Holder’s comment	Department’s response
1.2.11 Table 1.2.6	Request removal of category 64 landfill from table.	Approved – see section 2.8 – Removal of landfill from construction table.
1.2.13 Table 1.2.7 4.2.1 Table 4.2.1	Request removal of throughput limit from bioremediation landfarms and remove quantity reporting requirements from the AER. “Soil is not disposed of at the landfarm. It is treated until the hydrocarbons have been broken down and the soil is no longer contaminated. As this is not a waste disposal process or location it does not trigger a Category of Schedule 1 of the Environmental Protection Regulations, 1987 (EP Regs) and therefore annual throughput is not required for the licence.”	Throughput has been removed, however a requirement for reporting on bioremediation quantity will remain. The reporting requirement will not limit throughput and will remain only for monitoring purposes.
2.2.1 Table 2.2.1	Request removal of Yandi camp irrigation point MCSWSTP001 as the Yandi camp has been decommissioned.	Approved – see section 2.6.
2.3.1	Correct reference from ‘land’ to ‘air’, for air emissions condition.	Corrected.
Schedule 1 - Figure 1	Replace current map with updated map with point MCSWSTP001 removed	Map updated.

Appendix 3: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L6168/1991/11	
		Relevant works approval number:		N/A
Date application received		23/06/2021		
Applicant and Premises details				
Applicant name/s (full legal name/s)		BHP Iron Ore Pty Ltd		
Premises name		Yandi (Marillana Creek) Iron Ore Mine		
Premises location		Within co-ordinates (MGA Zone 50): 704481.82, 7490541.67; 714784.89, 7486945.16; 715198.68, 7488071.36; 716701.09, 7487519.20; 717466.94, 7487946.94; 717808.33, 7487335.66; 716935.12, 7486847.97; 716805.61, 7487079.86; 716531.93, 7486335.29; 723469.10, 7483913.57; 721347.81, 7477838.09; 702360.11, 7484466.54; and 704481.82, 7490541.67.		
Local Government Authority		Shire of Ashburton and the Shire of East Pilbara		
Application documents				
HPCM file reference number:		DER2013/001190-1		
Key application documents (additional to application form):		Yandi Licence Supporting Document		
Scope of application/assessment				

<p>Summary of proposed activities or changes to existing operations.</p>	<p>Licence amendment</p> <ul style="list-style-type: none"> • Amalgamate amendment notice 1 with L6168/1991/11 to form a single consolidated licence; • Update the licence tenure by removing dead tenements M47/292, M47/69, M47/70 and M47/71; • Remove discharge point MCDMDEW031 and the associated monitoring requirements as this discharge point has been decommissioned; • Amend the waste management conditions of the licence to <ul style="list-style-type: none"> ○ Remove 'Clean fill' from listed waste; ○ Allow for the inert concrete and pipework to be used in the backfill of Yandi Pits; ○ Increase the limit of Category 64 by 6,000 tonnes to 21,800 tonnes per annum to allow for the disposal of inert concrete sleepers and pipework; and • Remove the landfarm locations from the map in Schedule 1 of the Licence to allow for new landfarms to be constructed as required provided they comply with Condition 1.2.6
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Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Production or design capacity	Proposed changes to the production or design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	87,000,000 tonnes of ore per annual period	No changes
Category 6: Mine dewatering	15,000,000 tonnes per annual period.	No changes
Category 12: Screening, etc. of material	200,000 tonnes per annual period.	No changes
Category 52: Electric power generation	45 MW	No changes
Category 54: Sewerage facility	773 m ³ per day.	No changes
Category 64: Class II putrescible landfill site	15,800 tonnes per annual period.	21,800 tonnes per annual period
Category 73: Bulk storage of chemicals, etc.	4,000 cubic metres in aggregate	No changes

Legislative context and other approvals

<p>Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Referral decision No: Managed under Part V <input type="checkbox"/></p>
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significant proposal?		Assessed under Part IV <input 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: 679 and 1039 EPA Report No: 1166 and 1577
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Mining lease / tenement <input checked="" type="checkbox"/> Expiry: M270SA – 03/09/2033 G47/12 – 07/05/2033 G47/13 – 07/05/2033 G47/14 – 07/05/2033 G47/15 – 07/05/2033 G47/16 – 07/05/2033 G47/17 – 07/05/2033 G47/18 – 07/05/2033 G47/19 – 07/05/2033
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	If N/A explain why? Activities take place on a mining tenement.
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A No clearing is proposed.
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"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: Licence / permit not required.

<p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Name: Proclaimed Pilbara Surface/ Groundwater area Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: North West</p>
<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>State Iron Ore (Marillana Creek) Agreement Act 1991. Dangerous Goods Safety Act 2004 Mining Act 1978</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: possibly contaminated – investigation required (PC–IR) Date of classification: 03/12/2014 Contact Contaminated Sites Branch, Officer Kellie Field. Trim ID DEC14365</p>