



Application for Licence Amendment

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

Licence Number	L5275/1972/12
Licence Holder	Pilbara Iron Company (Services) Pty Ltd
ACN	107 210 248
File Number	DER2014/000429-1
Premises	Greater Paraburdoo Iron Ore Operations Legal description – Located within Tenements - AML70/246, AML70/4, AG70/4, AG70/14 and L47/326 ROCKLEA WA 6751
Date of Report	14 November 2023
Decision	Revised licence granted

A/MANAGER, RESOURCE INDUSTRIES

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

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Application summary	1
2.3 Part IV of the EP Act	1
3. Risk assessment	2
3.1 Source-pathways and receptors	2
3.1.1 Emissions and controls	2
3.1.2 Receptors	3
3.2 Risk ratings	7
4. Consultation	9
5. Conclusion	9
5.1 Summary of amendments	9
References	10
Appendix 1: Summary of Licence Holder’s comments on draft conditions	11
Appendix 2: Application validation summary	12
Table 1: Proposed design capacity changes	1
Table 2: Licence Holder controls	2
Table 3: Sensitive human and environmental receptors and distance from prescribed activity	3
Table 4. Risk assessment of potential emissions and discharges from the Premises during operation of the refuelling facilities	8
Table 5: Consultation	9
Table 6: Summary of licence amendments	9
Figure 1: Distance to sensitive receptors	5
Figure 2: Aboriginal Sites and Heritage (Source: Rio Tinto 2023b)	6

1. Decision summary

Licence L5275/1972/12 is held by Pilbara Iron Company (Services) Pty Ltd (Licence Holder) for the Paraburdoo Iron Ore Mine and Eastern Range Project (the Premises), located at AML70/246, AML70/4, AG70/4, AG70/14 and L47/326, ROCKLEA WA 6751.

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 L5275/1972/12 has been granted.

2. Scope of assessment

2.1 Regulatory framework

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

2.2 Application summary

On 16 August 2023, the Licence Holder submitted an application to the department to amend Licence L5275/1972/12 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Operation of three temporary bulk refuelling facilities (Category 73) constructed under W6643/2021/1;
- Increase the Category 73 design capacity; and
- Premises name change.

This amendment is limited only to changes to Category 73 activities from the Existing L5275/1972/12. No changes to the aspects of the existing Licence relating to Category 5, 6, 12, 52, 64 and 85 have been requested by the Licence Holder.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed design capacity changes

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
73	5,903 cubic metres in aggregate	6,578 m ³ in aggregate	The Licence Holder constructed three temporary bulk refuelling facilities under Works Approval W6643/2021/1.

2.3 Part IV of the EP Act

The Licence Holder has stated that the Greater Paraburdoo Iron Ore Hub Proposal was referred to the Environmental Protection Authority (EPA) under section 38 of the EP Act in November 2018 and determined to be assessed at the level of Public Environmental Review (PER).

The assessment consisted of an extensive stakeholder consultation and the proposal review. The proposal was approved in August 2021 and is subject to Ministerial Statement (MS) 1195 and its conditions.

Condition 3-2 on MS 1195 states that the Licence Holder should “avoid, where practicable, and otherwise minimise direct and indirect impacts as a result of implementation of the proposal to Yinhawangka cultural heritage values within and surrounding the development envelope”.

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 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Hydrocarbons	Temporary bulk refuelling facilities	Direct infiltration impacting surrounding soil, groundwater and native vegetation	<p>Automatic cut off valves are located at the heavy mobile equipment dispenser</p> <p>Regular inspection and maintenance of all facilities</p> <p>Provision of spill response equipment</p> <p>Tanks double skinned with leak detection systems and overfill protection (Rio Tinto 2023)</p> <p>Hydrocarbons managed via relevant legislation (including Australian Standard <i>AS 1940-2004: Storage and handling of flammable and combustible liquids</i>)</p> <p>Fuel storage tanks designed and constructed to <i>AS 1940-2004: The storage and handling of flammable and combustible liquids</i> (Rio Tinto 2023b)</p> <p>Fuel facilities located where the vertical distance between the facility and the groundwater level is more than 10 m (Rio Tinto 2023b)</p> <p>Vehicle refuelling to occur over areas compacted to 95% Maximum Dry Density and lined with a 0.75 mm high density polyethylene liner (Rio Tinto 2023b)</p>
Contaminated stormwater (sediment, hydrocarbons etc)		Overland flow	<p>Fuel facilities located more than 900 m from the nearest surface water (Rio Tinto 2023b)</p> <p>Potentially contaminated surface water directed to installed grates and sumps which will be pumped out periodically and removed offsite to a licensed facility (Rio Tinto 2023c)</p>

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 3 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 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
The nearest town of Paraburdoo Townsite	The town is approximately 7.5 km north north-east of the Premises. 12.5 km of the Western Range fuel facility.
Environmental receptors	Distance from prescribed activity
Surface water	Rio Tinto (2023) provided the following information regarding surface water: <ul style="list-style-type: none"> Seven Mile Creek is situated approximately 0.950 km south-east of the Camp fuel facility. Pirraburdu Creek is 2.5 km east of the Western Range fuel facility. No ephemeral water bodies are in the immediate vicinity of the fuel facilities. Surface water locations in Figure 1 .
Groundwater	W6643/2022/1 Decision Report states that: The Premises is located within the Proclaimed Pilbara Groundwater and Surface Water Areas. Paraburdoo area: The depth to groundwater is approximately 5 m below ground level (mbgl) in the Seven Mile Creek alluvial. Western Range area: The depth to groundwater is approximately 80 m to 250 mbgl.
Threatened Flora	<i>Aluta quadrata</i> (EPBC Act – Endangered) - 2.2 km away from the Camp fuel facility and another population 3 km from the Western Range fuel facilities. This species is found on the edge of creek beds, base of cliffs, rocky crevices, near crest of ridge. This habitat does not occur within either of the fuel facilities areas (Rio Tinto 2023).
Threatened and/or priority fauna	Nearby fauna species of conservation significance, listed as Vulnerable under the EPBC Act and the BC Act were recorded (Rio Tinto 2023): <ul style="list-style-type: none"> Pilbara Olive Python (<i>Liasis olivaceus barroni</i>) (EPBC Act – Vulnerable) Pilbara Leaf-nosed bat (<i>Rhinonictoris aurantia</i>) (EPBC Act – Vulnerable) Ghost bats (<i>Macroderma gigas</i>) – (EPBC Act – Vulnerable) Threatened and/or priority fauna in Figure 1 .

Priority Ecological Communities (PEC)	<p>The closest PEC (Priority 3) - Wona Land System Basalt upland gilgai plains supporting Roebourne Plains grass and Mitchell grass tussock grasslands, minor hard spinifex grasslands or annual grasslands/herbfields.</p> <p>They are located approximately 10 km north north-east of the Camp fuel facility and 15 km from the Western Range fuel facilities (Rio Tinto 2023).</p>
Aboriginal Heritage Sites	<p>Rio Tinto (2023b) confirmed the following Aboriginal Heritage Sites near to Temporary bulk refuelling facilities:</p> <p><u>Water related sites:</u></p> <p>Wanu Wanu (Seven Mile Creek) (ID: 3987) – 0.950 km south-east of the Camp temporary refuelling facility.</p> <p>Pirraburdoo Creek (ID: 39250) – 2 km southwest of the Camp temporary refuelling facility and ~4 km east of the Western Range temporary refuelling facilities.</p> <p>Gardagarli/Ratty Springs (ID: 7287) – 4.5 km east of the Western Range temporary refuelling facilities (Site ID 7287 is covered under MS 1195).</p> <p><u>No water related site:</u></p> <p>Another registered site (not water related) is WR01-A24 (ID: 22488) –325 m east of the Western Range temporary refuelling facilities.</p> <p>Aboriginal Heritage Sites locations in Figure 2.</p>

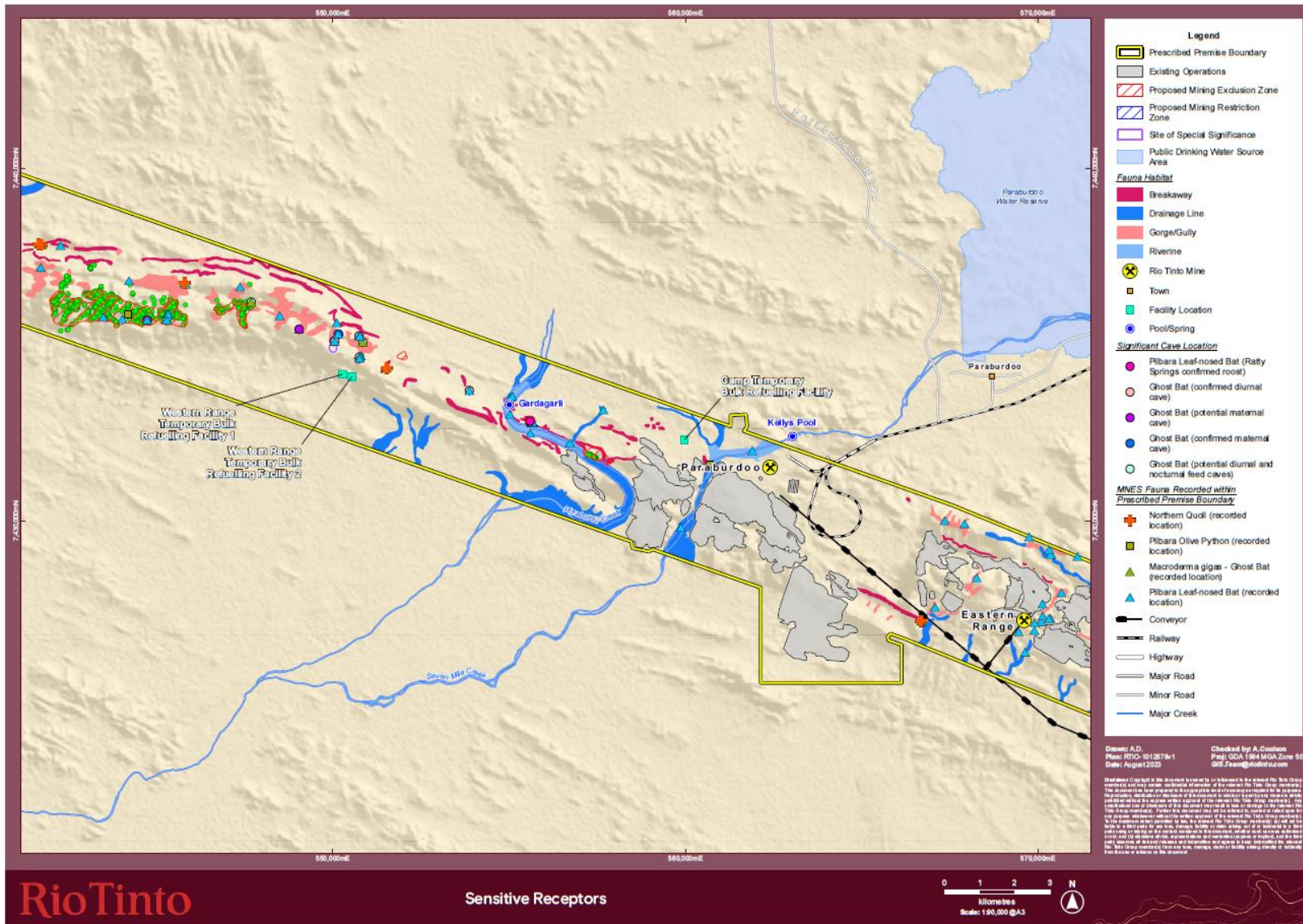


Figure 1: Distance to sensitive receptors

Licence: L5275/1972/12

IR-T15 Amendment report template v3.0 (May 2021)

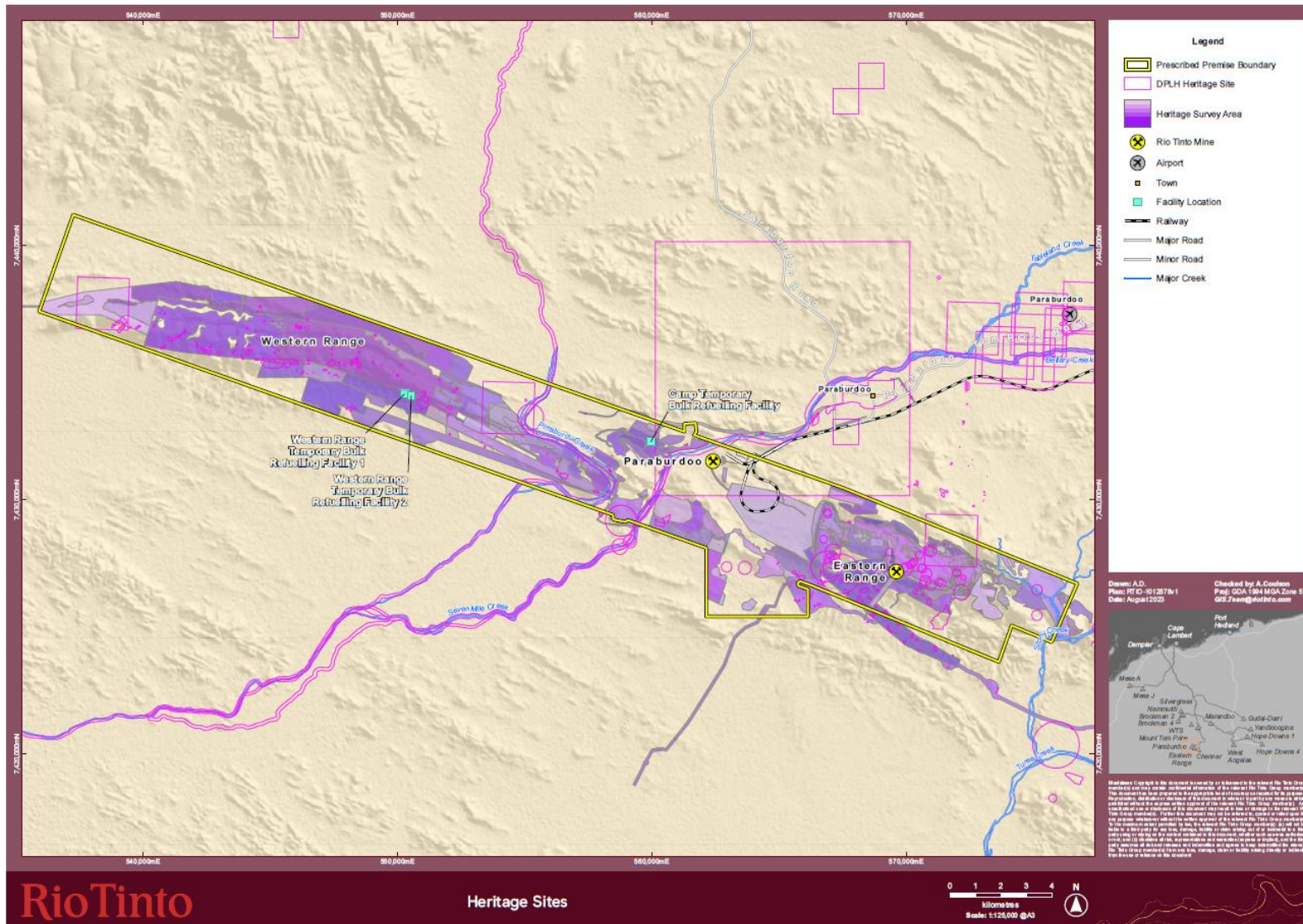


Figure 2: Aboriginal Sites and Heritage (Source: Rio Tinto 2023b)

Licence: L5275/1972/12

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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 4.

The Revised Licence L5275/1972/12 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises.

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

Table 4. Risk assessment of potential emissions and discharges from the Premises during operation of the refuelling facilities

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				
Operation								
Refuelling facilities	Accidental discharge of hydrocarbons	Direct Seepage of hydrocarbon spill to groundwater causing contamination	Seven Mile Creek – 0.950 km south-east of the Camp fuel facility	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 3 – Inclusion of operational requirements for the bulk refuelling facilities. Existing conditions 5, 6 and 7 on the licence relating to waste management and ancillary operations.	NA
	Contaminated stormwater (sediment, hydrocarbons etc)	Overland flow Direct infiltration impacting surrounding soil, groundwater and native vegetation	Minor surface water lines in the vicinity of the refuelling hub Aboriginal Heritage sites related to water sources	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Existing conditions 12 and 13 on the licence relating to stormwater management and surface water discharge outfall including a total recoverable hydrocarbon limit of 30 mg/L.	NA

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

Table 5: Consultation

Consultation method	Comments received	Department response
Licence Holder was provided with draft amendment on 13 October 2023	Comments received on 8 November 2023	Refer to Appendix 1

5. Conclusion

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

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
Page 1	DWER file number amended Premises name changed from Paraburdoo Iron Ore Mine and Eastern Range Project to Greater Paraburdoo Iron Ore Operations Category 73 design capacity changed from 5,903 to 6,578 cubic metres in aggregate
Licence History	This amendment was added
Condition 3, Table 2	Infrastructure location (Figure) for the Paraburdoo TSF corrected Operational requirements for the temporary bulk refuelling facilities added
Condition 12c	Changed from refuelling areas to permanent refuelling areas
Previous condition 14	Removed
Condition 14, Table 3	Previous condition 14 added to Table 3 as 'authorised discharge point' for the power station emission points
Condition 16, Table 4	BioMAX WWTP, Sampling frequency for flow rate amended by removing daily Flow meter is continuous, but the monthly cumulative volumes need to be reported in the Annual Environmental Report (condition 21)
Schedule 1, Figure 7	Inclusion of figure showing the location of the temporary refuelling facilities

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. DWER 2022, *W6643/2021/1 Decision Report*, Perth, Western Australia.
5. Rio Tinto 2023, *Licence Amendment Supporting Documentation Paraburdoo & Eastern Range Iron Ore Mine*, Perth, Western Australia (L5275/1972/12) (REF: A2196483).
6. Rio Tinto 2023b, *Request for further information response* (REF: DWERDT834566).
7. Rio Tinto 2023c, *Amendment to Licence L5275/1972/12 – RTIO Comments on Draft Licence* (REF: DWERDT864102).

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

Condition	Summary of Licence Holder's comment	Department's response
Licence history –Pg. 2 Decision report: Section 2.2 – Pg. 1; Appendix 2 – Pg.13,	Administrative: W6643 is mis-numbered as W6443	Changed.
12(c)	The Licence Holder has stated that “Only at the <u>permanent</u> refuelling areas is contaminated stormwater treated prior to disposal”. “As per W6643 application, approval and environmental construction compliance reports (ECR), any potentially contaminated surface water at the temporary refuelling facilities is directed to installed grates and sumps which will be pumped out periodically and removed offsite to a licensed facility. “	The department has updated the condition 12(c) to Permanent refuelling areas.
Decision report: Section 3.1.1 – Pg. 2 (Table 2)	The Licence Holder has stated that “There is no oily water collection and treatment systems at the three temporary bulk re-fuelling facilities.” The Licence Holder has proposed the wording be changed to - Potentially contaminated surface water is collected in sumps and directed to the oily water collection and treatment system (Rio Tinto 2023) directed to installed grates and sumps which will be pumped out periodically and removed offsite to a licensed facility.	The department has made the requested change.

Appendix 2: Application validation summary

Application type				
Works approval	<input type="checkbox"/>			
Licence	<input type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date Report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input type="checkbox"/>	Current works approval number:		
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L5275/1972/12	
		Relevant works approval number:	W6643/2021/1	N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:	None	<input type="checkbox"/>
Date application received	16/08/2023			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Pilbara Iron Company (Services) Pty Ltd			
Premises name	Paraburdoo Iron Ore Mine and Eastern Range Project			
Premises location	AML70/246, AML70/4, AG70/4, AG70/14 and L47/326			
Local Government Authority	Ashburton Shire			
Application documents				
HPCM file reference number:	DER2014/000429-1~5			
Key application documents (additional to application form):	<ul style="list-style-type: none"> -Mine tenements summary -ASIC Extract - Authorisation to Act as a Representative of the Occupier -Fee Calculator -Siting and Location Stakeholder and Community Consultation -Other approvals -Environmental Compliance Reports -Answer to RFI (DWERDT834566) 			

Scope of application/assessment		
Summary of proposed activities or changes to existing operations.	Licence amendment -Operation of three temporary bulk refuelling facilities (Category 73) constructed under W6643/2021/1 -Increase Category 73 design capacity	
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
Category 73: Bulk storage of chemicals, etc: premises on which acids, alkalis or chemicals	5,903 cubic metres in aggregate	6,578 cubic metres to account for the new refuelling facilities
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"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input checked="" type="checkbox"/> MS 1195
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: MS 1195 EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Reference No: EPBC 2018/8341
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input checked="" type="checkbox"/> Expiry: -AML70/246 [ML246SA, granted pursuant to the Iron Ore (Hamersley Range) Agreement Act 1968] – Expires on 02/06/2033 -AML70/4 (ML70/4, granted pursuant to the Iron Ore (Hamersley Range) Agreement Act 1968] – Expires on 24/03/2028 -AG70/4 (General Purpose Lease) – Expires on 18/04/2038 -AG70/14 (General Purpose Lease) – Expires on 31/01/2023 -L47/326 (Miscellaneous Licence) – Expires on 25/03/2031 L3116/4589 has been replaced by L47/326. Other evidence <input 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"/>	Approval: Expiry date: If N/A explain why? Mining tenure
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: CPS 5090 and Ministerial Statement 1195 including EPBC 2018/8341)
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 checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: Licence/permit No: GWL109318
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: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: P1 / P2 / P3 / N/A 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"/>
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>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Rights in Water and Irrigation Act 1914 Mining Act 1978 Dangerous Goods Safety (Storage and Handling of Non-Explosives) Regulations 2007.
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

<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:</p> <ul style="list-style-type: none"> - Site ID: 6038, 2020, Possibly contaminated - investigation required, TRIM 2011/3314, DER2017/1999 - Site ID: 12425, Awaiting Classification, TRIM DWERT11875 -Site ID: 6385, 2012, Contaminated - restricted use -Site ID: 8961, 2015, Possibly contaminated - investigation required -Site ID: 9203, Awaiting Classification
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