RioTinto

Environment Protection and Biodiversity Conservation Act 1999 Annual Compliance Report

EPBC Approval: 2018/8341

Project: Greater Paraburdoo Iron Ore Hub, Pilbara, WA

Report period: 1 January – 31 December 2023

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1 Description of activities

EPBC approval number:	2018/8341
Project name:	Greater Paraburdoo Iron Ore Hub, Pilbara, WA
Approval holder:	Hamersley Iron Pty Limited
Approval holder's Australian Business Number:	49 004 558 276
Approved action:	To develop a new mine and associated infrastructure at Western Range and extend existing mining operations and associated infrastructure at Paraburdoo and Eastern Range, Pilbara region, Western Australia.
Location of the project:	Pilbara Region, Western Australia
Reporting period:	1 January 2023 to 31 December 2023
Report preparation date:	30 April 2024
Implementation phase(s) during reporting period:	Construction and Operations

2 Audit table

Details of compliance with each condition under EPBC approval 2018/8341 are presented in Table 1.

Table 1: EPBC Approval Conditions Compliance Table – EPBC 2018/8341 – Greater Paraburdoo Iron Ore Hub

Condition Number	Condition	Compliance status	Evidence/Comments
1	To avoid and mitigate impacts to protected matters, the approval holder must not clear more than 4,300 ha, and in addition not: a. clear outside the development envelope b. clear or impact within the Mining Exclusion Zones from proposal activities except for activities associated with the implementation of the Environmental Management Plan. c. clear within the development envelope more than the following critical habitat types: i. 7 hectares of Riverine habitat ii. 36 hectares of Breakaway habitat iii. 257 hectares of Gorge/Gully habitat d. clear more than a total combined 4,000 ha within the development envelope of any of the following supporting habitat types: i. Rocky Hill habitat ii. Drainage Line habitat iii. Alluvial Plain habitat	Compliant	Aerial photography was collected during the reporting period to reconcile ground disturbance and the prescribed clearing limits were not exceeded. Clearing within the Development Envelope totalled: • 678 hectares within the Development Envelope Including: • 0 hectares of Riverine habitat • 0.30 hectares of Breakaway habitat • 3.57 hectares of Gorge/Gully habitat • 69.09 hectares of combined Rocky Hill, Drainage Line and Alluvial Plain habitat
2	 For the life of the approval, the approval holder must: a. Undertake the measures specified in condition 4-2(2) of the Western Australian Approval to minimise impacts to protected matters from dust emissions and fire. b. Minimise noise, vibration, and artificial lighting impacts to protected matters by only undertaking construction, clearing and/or blasting during daylight hours. c. Ensure that if any protected matter(s) are spotted during clearing, the clearing activity that may impact the protected matter(s) must cease until the protected matter(s) moves out of the way of clearing by its own accord. If the protected matter(s) does not move on its own accord, then a fauna handler shall relocate the protected matter(s) away from clearing before recommencing clearing. d. Ensure that no vehicle travels faster than 60 kilometres per hour on unsealed roads, and no more than 60 kilometres per hour at night within 1 kilometre of Mining Exclusion Zones and Mining 	Not compliant	The Greater Paraburdoo Environmental Management Plan (EMP) (our ref: RTIO-HSE-0336947) contains the required environmental outcomes and objectives. The EMP was approved by OEPA and DoCCEEW on 20 January 2023 (OEPA ref: DWERVT11092; our ref; RTIO-0981203). • Condition 4-2(2) does not specify any measures, however where practicable the proponent avoided impacts to protected matters from dust emissions and fire. • Construction, clearing and/ or blasting were conducted during daylight hours throughout 2023. • No protected matters were sighted during clearing activities in 2023. • Speed restrictions complied with requirements stated in 2d.

Condition Number	Condition	Compliance status	Evidence/Comments
	Restriction Zones as outlined in the speed restriction zones at Attachment H. except for an emergency incident. e. Not install any barbed wire fences within the development envelope, Mining Exclusion Zones and Mining Restriction Zones excluding the lawful requirement for the intersecting pastoral leases and where barbed wire is required by other legislation. Within 6 months of the approval date, commence the removal of all barbed wire fences from the Mining Exclusion Zones and Mining Restriction Zones. Removal of all barbed wire fences from the Mining Exclusion Zones and Mining Restriction Zones must be completed within 12-months from the date of this approval, except where there are requirements under WA Legislation. All required barbed wire under WA Legislation, within the development envelope must have the top strand replaced with single strand wire and have reflectors installed to deter bat interaction within 12-months from the date of this approval. f. Use directional and/or shielded lighting in all areas where mining is undertaken to avoid direct and permanent light spill within the Mining Exclusion Zones and Mining Restriction Zones.		Any barbed wire erected within the development envelope within 12 months of this approval was compliant to the requirements stated in condition 2e, however not all pre-existing barbed wire was able to be removed / retrofitted to bring in to compliance with Condition 2e within 12 months of the date of approval. Action plans are currently in place to bring identified pre-existing barbed wire within the development envelope into compliance with condition 2e. Light spill was managed in accordance with condition 2 throughout 2023.
3	To avoid and mitigate impacts to Ghost Bat and Pilbara Leaf-nosed Bat, the approval holder must: a. Ensure there is no clearing or impacts on the Ratty Springs Cave as a result of the action. b. Limit sound pressure levels attributed to the action to below 70 dB(Z) at the Ratty Springs Cave entrance. c. Limit clearing only to the removed Ghost Bat Caves. d. Maintain the viability of the retained Ghost Bat Caves and the viability of the Ratty Springs Cave. e. Use the findings and outcomes of findings from condition 7-6 of the Western Australian Approval to inform the Environmental Performance Report required under condition 12 of the Western Australian Approval and condition 6 of this approval.	Compliant	There was no clearing or impacts on Ratty Springs Cave as a result of the action. Closest clearing was over 1km from Ratty Springs Cave and structural integrity monitoring completed through the reporting period indicated no impacts. Noise and acoustic monitoring equipment was deployed throughout the 2023 reporting period (Oct 2022 – Sep 2023). A significant proportion of this data was compromised due to technical issues; however, there is no evidence to suggest the 70 DB(Z) criteria was exceeded due to proposal implementation, and subsequent acoustic data from the Gardagarli (Ratty) Spring Pilbara Leaf-nosed Bat (PLNB) Roost demonstrates the population at the roost is consistent with baseline, indicating that the requirement to avoid and mitigate and impacts to PLNB was achieved.

Condition Number	Condition	Compliance status	Evidence/Comments
			Mining of the Western Range pits did not commence in 2023 and therefore no Ghost Bat caves were cleared during the reporting period.
			The retained ghost bat caves and Ratty Springs cave were confirmed to continue to provide viable habitat for MNES, and populations utilising these habitats was stable and consistent with baseline.
4	To minimise impacts to protected matter(s) critical habitats and supporting habitats within the development envelope from the dewatering program, the approval holder must not impact protected matter habitats within the Mining Exclusion Zones and Mining Restriction Zones due to changes to surface and groundwater.	Compliant	Dewatering did not commence during the reporting period.
5	To mitigate impacts to protected matters, the approval holder must develop an Environmental Management Plan in accordance with condition 7 of the Western Australian Approval and Conditions 2, 3 and 4 of this approval. The Environmental Management Plan must be endorsed by the Minister. The approval holder must seek Minister endorsement of any subsequent revisions of the Environmental Management Plan where changes have been made relevant to protected matters prior to any approval by the DWER. The approval holder must implement the endorsed Environmental Management Plan and any subsequently DWER approved Environmental Management Plan for the life of the approval. The Environmental Management Plan must also include: a. Specification of a monitoring program that is suitable to enable impacts from changes to hydrology on protected matter(s) and their habitats to be mitigated. b. Commitments that, if the monitoring and predictive modelling shows that impacts to protected matters and their habitats will, or are likely to, be greater than predicted modelling presented in the Greater Paraburdoo Iron Ore Hub Proposal Environmental Review Document, or that any outcome relevant to protected matter(s) required under condition 7 of the Western Australian Approval may not be achieved, the approval holder will implement condition S(c) of this approval.	Potentially Non- Compliant	The Environmental Management Plan (EMP) (our ref: RTIO-HSE-0336947) contains the required environmental outcomes and objectives. The EMP was approved by OEPA and DoCCEEW on 20 January 2023 (our ref: RTIO-0981202). During the reporting period there was no exceedance of trigger or threshold criterion related to protected matter(s) specified in the Environmental Management Plan. The EMP requirement to undertake continuous noise and acoustic monitoring at the Gardagarli (Ratty) Spring PLNB Roost was not achieved during this reporting period due to technical issues associated with the noise monitoring equipment. Whilst the noise monitoring methodology stipulated within the EMP was not implemented, acoustic data captured in late 2023 and 2024 demonstrates the population at the roost was consistent with baseline, indicating that potential impacts to PLNB were mitigated during the 2023 reporting period consistent with the objectives of the EMP.

Condition Number	Condition	Compliance status	Evidence/Comments
Number	 c. Commitments that, in the event of any exceedance of a threshold criterion related to protected matter(s) specified in the Environmental Management Plan, the approval holder must: Notify the Department of the exceedance in the same timeframes as required by condition 7-8 (for exceedance of any threshold criterion) and/or condition 7-9 (for exceedance of any management target) of the Western Australian Approval and include in the report advice of any impact(s) to protected matters arising from the exceedance event. Within 6 months of detecting any exceedance of a threshold criterion related to protected matters, caused by implementation of the action, submit to the Department for the Minister's approval, a Remediation Plan. If approved, the Remediation Plan must be implemented. Within 6 months of detecting any exceedance of a threshold criterion related to protected matters, have an independent suitably qualified person review the Environmental Management Plan to advise how to prevent the exceedance reoccurring as detailed in the report required by conditions 7-8(5) and 7-9(3) of the Western Australian Approval. Within 10 months of detecting any exceedance of a threshold criterion related to protected matters, submit to the Department the advice of the independent suitably qualified person and a version of the Environmental Management Plan revised to address the advice of the independent suitably qualified person. If a revised Environmental Management Plan has not been endorsed by the Minister within 13 months of detecting any exceedance of a threshold criterion, and the Minister notifies the approval holder that the Environmental Management Plan is not suitable for endorsement, the Minister may, at least two months after so notifying the approval holder, endorse a version of the Environmental Management Plan revised by the Department. The approval holder must implement the endorsed Environmental Management Plan until it is subsequently approved by the DWER	status	
	vi. If the Minister informs the approval holder in writing that it is not possible to adequately remediate the impact(s) on		

Condition Number	Condition	Compliance status	Evidence/Comments
	protected matter(s) of one or more exceedance (as referred to in condition 5(c)(ii) of this approval), then the approval holder must, within 3 months of receiving such advice from the Minister, submit to the Department, an Exceedance Offset Management Plan (EOMP) addressing the exceedance(s) as specified by the Minister in writing for the Minister's approval. The EOMP must meet the requirements specified in Attachment G. vii. If the EOMP has not been approved by the Minister within 6 months of the Minister informing the approval holder in writing as described in condition 5(c)(vi) of this approval, and the Minister notifies the approval holder that the EOMP is not suitable for approval, the Minister may, at least two months after so notifying the approval holder, approve a version of the EOMP revised by the Department. The approval holder must implement the approved EOMP for the remainder of the life of this approval or a revised version of the EOMP is endorsed.		
6	The approval holder must provide the <i>Environmental Performance Report</i> as required by condition 12 of the Western Australian Approval to the Department every five (5) years commencing from the date of this approval. Should the <i>Environmental Performance Report</i> required by conditions 12-3 to 12-5 of the Western Australian Approval identify any significant change to the state of any protected matter(s) attributed to the action, the approval holder must implement conditions 5(c) of this approval. The approval holder must make each of the <i>Environmental Performance Reports</i> publicly available for the life of the approval .	Not applicable	No Environmental Performance Report was required within the reporting period. The first Environmental Performance Report will be submitted on 30 April 2028.
7	To compensate for the residual significant impacts of clearing habitat for the Northern Quoll , Ghost Bat , Pilbara Leaf-nosed Bat and Pilbara Olive Python , the approval holder must make financial contributions to the Pilbara Environmental Offsets Fund .	Not applicable	Funds were not required to be contributed to the Pilbara Environmental Offsets Fund during the reporting period.
8	In contributing to the Pilbara Environmental Offsets Fund the approval holder must: a. Contribute funds toward an offset activity or activities that: i. reduces the rate of decline of the Northern Quoll, Ghost Bat, Pilbara Leaf-nosed Bat and Pilbara Olive Python.	Compliant	Endorsement of the Greater Paraburdoo Iron Ore Hub Proposal Impact Reconciliation Procedure (our ref: RTIO-HSE-0345123) was provided by the Minister on 10 November 2022 (our ref: RTIO-0980742). The action was not commenced until after approval of the Greater Paraburdoo Iron Ore Hub Proposal Impact Reconciliation Procedure from DWER on 15 November 2022 (our ref: RTIO-0981240).

Condition Number	Condition	Compliance status	Evidence/Comments
Number	 iii. ensures a viable population of Northern Quoll, Ghost Bat, Pilbara Leaf-nosed Bat and Pilbara Olive Python remain in the Pilbara region. iiii. has specified outcomes and performance indicators. iv. timeframes and milestones for their achievement. v. includes sufficient monitoring to detect achievement of performance indicators, milestones, and the outcomes; and vi. requires regular reporting to the approval holder of the outcomes of the offset activity or activities their funding has contributed towards. b. Prior to approval of the Greater Paraburdoo Iron Ore Hub Proposal Impact Reconciliation Procedure by DWER in accordance with condition 11-5 of the Western Australian Approval, the approval holder must seek written endorsement of the Greater Paraburdoo Iron Ore Hub Proposal Impact Reconciliation Procedure from the Minister. The approval holder must not commence the action until they have been notified by the DWER that the Greater Paraburdoo Iron Ore Hub Proposal Impact Reconciliation Procedure has been approved. c. The Greater Paraburdoo Iron Ore Hub Proposal Impact Reconciliation Procedure must include the information required by 11-5 of the Western Australian Approval and the financial contributions that will be paid into the Pilbara Environmental Offsets Fund per hectare of protected matter habitat, as per the value described in Condition 8(e) of this approval for each protected matter and the schedule of contributions to be made over the life of the approval. d. Following receipt of the DWER notification of approval of the Greater Paraburdoo Iron Ore Hub Proposal Impact Reconciliation Procedure and prior to commencement of the action, the approval holder must make a payment of 10 per cent of the total contribution that may be paid into the Pilbara Environmental Offsets Fund, which will contribute towards achieving the requirements of condition 8(a) of this approval. e. Make biennial payments to the Pilbara Environmental O	status	Prior to the commencement of the action, a payment of 10 per cent of the total contribution was paid into the Pilbara Environmental Offsets Fund on 13 December 2022 (our ref: RTIO-0983725). Evidence of payment into the Pilbara Environmental Offsets Fund was provided to the Department on 16 December 2022 (our ref: RTIO-0983725). No Impact Reconciliation Report was due during the reporting period.

Condition Number	Condition	Compliance status	Evidence/Comments
	equivalent to or greater than the value of the following amounts, by adjustment in accordance with the CPI from the date of this approval decision until the end of the year during which clearing was undertaken, of: i. A minimum of \$3,306 AUD (excluding GST) per hectare of critical habitat. ii. A minimum of \$1,653 AUD (excluding GST) per hectare of supporting habitat. f. Submit evidence of each payment made to the Department within 10 business days of the date of making the payment. g. Include details of progress towards, or achievement of, the outcomes specified under Condition 8(a) of this approval for the Northern Quoll, Ghost Bat, Pilbara Leaf-nosed Bat and Pilbara Olive Python in each compliance report submitted to the Department.		
9	Write to the Minister , within 10 business days of being aware or having concerns, that the offset outcomes specified for the Pilbara Environmental Offsets Fund project(s) may not be achieved for the Northern Quoll , Ghost Bat , Pilbara Leaf-nosed Bat and Pilbara Olive Python .	Not applicable	The approval holder had no concerns regarding the offset outcomes specified for the Pilbara Environmental Offsets Fund during the reporting period.
10	Should the Minister determine that the Pilbara Environmental Offsets Fund is likely to fail for one or more protected matter(s), the Minister may write to the approval holder asking to provide evidence that failure has not occurred or is unlikely to occur and nominating a deadline by which this must be provided. If after considering any information provided by the approval holder: a. The Minister determines that the Pilbara Environmental Offsets Fund has failed for one or all species named in Condition 7 of this approval, the approval holder must submit for the Minister's approval, within 4 months of being notified by the Minister, an Offset Strategy consistent with the principles of the Environmental Offsets Policy to the satisfaction of the Minister. b. If the Offset Strategy has not been approved by the Minister in writing within 6 months of the notification by the Minister under condition IO(a) of this approval, and the Minister notifies the approval holder that the provided Offset Strategy is not suitable for approval, the Minister may, at least 2 months after so notifying the approval holder, approve a version of the Offset Strategy revised	Not applicable	No correspondence from the Minister regarding the performance of the Pilbara Environmental Offsets Fund was received during the reporting period.

Condition Number	Condition		Compliance status	Evidence/Comments
	imp the and hol the	the Department . The approval holder must commence plementation of the approved Offset Strategy within 2 months of approval of the Offset Strategy by the Minister in writing, or other time as agreed in writing by the Minister . The approval der must implement the approved Offset Strategy for the life of approval .		
	req frai app	e Offset Strategy to be provided for the Minister's approval, if quired by Condition I0(a) of this approval, must provide a mework for how the residual significant impacts from the proved action on the Northern Quoll , Ghost Bat , Pilbara Leafsed Bat and Pilbara Olive Python will be offset and must rail:		
	i.	how the strategy will achieve the outcomes required under condition 8(a) of this approval.		
	ii.	how it accounts for relevant approved conservation advices , recovery plans and threat abatement plans;		
	iii.	the party to be responsible for implementing the proposed offset(s).		
	iv.	the location and nature of the proposed offset(s).		
	٧.	objectives, outcomes, and timeframes for their achievement.		
	vi.	budget.		
	vii.	performance and completion criteria for evaluating conservation outcomes.		
	viii.	project monitoring (with indicators and measures) capable of detecting progress towards and achievement of the required outcomes.		
	ix.	reporting of specified outputs/offset activities, progress towards and achievement of the required outcomes, and evaluation of appropriateness of measures implemented.		
	х.	a description of the potential risks to the successful implementation of each proposed offset (including but not limited to environmental, administrative, financial, and governance risks).		
	xi.	a description of the measures that will be implemented to mitigate risk associated with each proposed offset and a description of the contingency actions that will be		

Condition Number	Condition	Compliance status	Evidence/Comments
	implemented if performance or completion criteria are not met. xii. processes to adaptively manage the proposed offset. xiii. how the proposed offset is consistent with the Environmental Offsets Policy; and xiv. how the approval holder will ensure that the measures to be implemented as part of the Offsets Strategy have no detrimental impact on any Matters of National Environmental Significance under the EPBC Act.		
11	The approval holder must notify the Department electronically of the date of commencement of the action , within 10 business days of commencement of the action .	Complaint	The Department was notified of the commencement of the action on 16 December 2022 (our ref: RTIO-0983725) within 10 business days of commencement of the action (14 December 2022).
12	If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister .	Not applicable	Action has commenced within 5 years from the date of approval.
13	The approval holder must maintain accurate and complete compliance records.	Compliant	Records associated with or relevant to the conditions of this approval are maintained within the Rio Tinto Iron Ore Document Management System.
14	If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request.	Not applicable	No requests received during the reporting period.
15	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and meta data required under the conditions of this approval are prepared in accordance with the Department's Guidelines for biological survey and mapped data (2018), or any subsequent official version or as otherwise specified by the Minister in writing.	Compliant	No requests received during the reporting period.
16	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the Department's <i>Guide to providing maps and boundary data for EPBC Act projects</i> (2021), or any subsequent official version or as otherwise specified by the Minister in writing.	Compliant	No monitoring data required to be submitted during the reporting period.

Condition Number	Condition	Compliance status	Evidence/Comments
17	The approval holder must submit all monitoring data (including sensitive ecological data), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the Department in accordance with the requirements of the Environmental Management Plan .	Compliant	No monitoring data required to be submitted during the reporting period.
18	The approval holder must prepare a compliance report by 30 April 2023 addressing the period from the date of issue of this approval until 31 December 2022 and annually thereafter by each 30 April in respect of the preceding calendar year date, or as otherwise agreed to in writing by the Minister .	Compliant	A compliance report addressing the period from the date of issue of this approval until 31 December 2022 (our ref: RTIO-0989979) was submitted to DCCEEW on 28 April 2023 (our ref: RTIO-0993621).
19	Each compliance report must be consistent with the Department's <i>Annual Compliance Report Guidelines</i> (2014), or any subsequent official version.	Compliant	The compliance report submitted on 28 April 2023 (our ref: RTIO-0989979) met the requirements of the Department's <i>Annual Compliance Report Guidelines</i> (2014).
20	 Each compliance report must include: Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents. One or more shapefile showing all clearing of any protected matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared. A schedule of all plans in existence in relation to these conditions and accurate and complete details of how each plan is being implemented. 	Compliant	The compliance report submitted on 28 April 2023 (our ref: RTIO-0989979) met these requirements, noting that no clearing of protected matters was undertaken in 2022 so no shapefiles were required to be submitted during the reporting period. The Environmental Management Plan (EMP) (our ref: RTIO-HSE-0336947) was approved by DoCCEEW on 20 January 2023 (our ref; RTIO-0981203) and implemented from this date. Some EMP criteria were unable to be wholly implemented throughout the reporting period due to equipment failure however no environmental impact occurred as a result. Accurate and complete details of implementation of the EMP are included in section 5.
21	The approval holder must: a. Publish each compliance report on the website by 30 April of each year immediately following the 12-month period for which that compliance report is required.	Compliant	The 2022 Annual Compliance Report for EPBC 2018/8341 – Greater Paraburdoo Iron Ore Hub (our ref: RTIO-0989979) was made publicly available on the Rio Tinto website

Condition Number	Condition	Compliance status	Evidence/Comments			
	 b. Notify the Department electronically, within 7 business days of the date of publication that a compliance report has been published on the website. c. Provide the weblink for the compliance report in the notification to the Department. d. Keep all published compliance reports required by these conditions on the website until the expiry date of this approval. e. Exclude or redact sensitive ecological data from compliance reports published on the website or otherwise provided to a member of the public. f. If sensitive ecological data is excluded or redacted from the 		(https://www.riotinto.com/en/operations/australia/pilbara) on 28 April 2023. The department was notified of this and provided with the above weblink on the same day (our ref: RTIO-0993621).			
	published version, submit the full compliance report to the Department within 5 business days of its publication on the website and notify the Department in writing what exclusions and redactions have been made in the version published on the website.					
22	The approval holder must notify the Department electronically, within 7 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan .	Not applicable	No incident or non-compliance notifications were submitted to the DCCEEW in the reporting period.			
23	 The approval holder must specify in the notification: a. Any condition or commitment made in a plan which has been or may have been breached. b. A short description of the incident and/or potential non-compliance and/or actual non-compliance. c. The location (including co-ordinates), date, and time of the incident and/or potential non-compliance and/or actual non-compliance. 	Not applicable	No incident or non-compliance notifications were submitted to the DCCEEW in the reporting period.			
24	The approval holder must provide to the Department in writing, within 21 business days of becoming aware of any incident and/or potential noncompliance and/or actual non-compliance, the details of that incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan. The approval holder must specify: a. Any corrective action or investigation which the approval holder has already taken b. The potential impacts of the incident and/or non-compliance	Not applicable	No incident or non-compliance notifications were submitted to the DCCEEW in the reporting period.			

Condition Number	Condition	Compliance status	Evidence/Comments			
	c. The method and timing of any corrective action that will be undertaken by the approval holder.					
25	The approval holder must ensure that an independent audit of compliance with the conditions is conducted for every five-year period following the commencement of the Action until this approval expires, unless otherwise specified in writing by the Minister .	Not applicable	There were no audits required during the reporting period.			
26	 For each independent audit, the approval holder must: a. Provide the name and qualifications of the nominated independent auditor, the draft audit criteria, and proposed timeframe for submitting the audit report to the Department prior to commencing the independent audit. b. Only commence the independent audit once the nominated independent auditor, audit criteria and timeframe for submitting the audit report have been approved in writing by the Department. c. Submit the audit report to the Department for approval within the timeframe specified and approved in writing by the Department. d. Publish each audit report on the website within 15 business days of the date of the Department's approval of the audit report. e. Keep every audit report published on the website until this approval expires. 	Not applicable	There were no audits required during the reporting period.			
27	Each audit report must report for the five-year period preceding that audit report.	Not applicable	There were no audits required during the reporting period.			
28	Each audit report must be completed to the satisfaction of the Minister and be consistent with the Department's Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (2019), or any subsequent official version.		There were no audits required during the reporting period.			
29	The approval holder must notify the Department electronically 60 business days prior to the expiry date of this approval, that the approval is due to expire.	Not applicable	Approval not due to expire within 60 days.			
30	Within 30 business days after the completion of the Action, and, in any event, before this approval expires, the approval holder must notify the	Not applicable	Action not completed.			

Condition Number	Condition	Compliance status	Evidence/Comments
	Department electronically of the date of completion of the Action and provide completion data .		

3 Potential Non-Compliances

3.1 Details of potential non-compliance(s)

Which implementation condition or procedure was non-compliant?					
A section of Condition 2e states "All required barbed wire, within the development envelope must have the top strand replaced with single strand wire and have reflectors installed to deter bat interaction within 12-months from the date of this approval.					
Who detected the non-compliance?					
The approval holder.					
On what date(s) did the non-compliance occur (if applicable)?					
Reporting period (ending 31 December 2023).					
Was this non-compliance reported to the Department?					
 ✓ Yes ☐ Reported to DoE verbally Date: ✓ Reported to DoE in writing Date: 22/04/2024 ✓ DoE ref: ✓ Our ref: RTIO-1049029 					
What correction measure(s), if any, were taken or are proposed to be taken in response to the non-compliance?					
The approval holder has implemented the following corrective actions:					
 Audit to identify existing barbed wire at Paraburdoo Operations. 					
 Plan in place for removal of all legacy barbed wire not required under WA legislation to be removed in 2024. 					
 Plan in place for all legacy barbed wire required under WA legislation to have top strand replaced with single strand wire and bat deflectors installed in 2024. 					
Who was/is responsible for correcting the non-compliance?					
The approval holder.					
What date did/will the correction measures commence and/or be completed or the time frame for correction?					
The corrective measures will be completed within the subsequent reporting period (ending 31 December 2024)					
What measures, if any, are in place to prevent re-occurrence of the non-compliance?					
Improvement to internal change management process.					

Which implementation condition or procedure was non-compliant?

A section of Condition 5 states "...The approval holder must implement the DWER approved Environmental Management Plan or any subsequently DWER approved Environmental Management Plan..."

The EMP requires continuous (device dependent) monitoring of ambient noise and bat call activity at the Gardagarli (Ratty Springs) maternity roost (117.54335°E 23.21269°S). Critical review indicates that representative continuous data was unable to be captured during the 2023 reporting period (January to September 2023) due to equipment failure.

Who detected the non-compliance?

The approval holder

On what date(s) did the non-compliance occur (if applicable)?

Reporting period (January – September 2023)

Was this non-compliance reported to the Department?

Date:

⊠ Reported to DoE in writing

Date: 30/04/2024

 \square No

DoE ref:

Our ref: RTIO-1049218

What correction measure(s), if any, were taken or are proposed to be taken in response to the non-compliance?

The following remedial actions were undertaken:

- Increased memory storage and associated formatting for monitoring devices
- Increased frequency of data collection & analysis
- Bat data collection scheduled to align with guidance from consultant on bat roost entry guidelines
- Complete replacement of ultrasonic bat call detector system
- Upskilling of team responsible for data collection and troubleshooting of technical equipment

The following actions are proposed and will be implemented pending feasibility:

Satellite or telemetry system for continuous data streaming

Who was/is responsible for correcting the non-compliance?

The approval holder.

What date did/will the correction measures commence and/or be completed or the time frame for correction?

Corrective measures have commenced and will be completed within the subsequent reporting period (ending 30 September 2024).

What measures, if any, are in place to prevent re-occurrence of the non-compliance?

The ability to set up the monitoring equipment to send data continuously via telemetry or satellite will be investigated.

4 New environmental risks

There are no new environmental risks that have become apparent during the reporting period.

5 Environmental Management Plan implementation

5.1 Threatened fauna

5.1.1 Environmental criteria

The below table summarises the environmental criteria associated with threatened fauna required by EPBC Decision Notice 2018/8341.

Table 2: Environmental criteria associated with threatened fauna

Key en	Key environmental factor: Threatened fauna					
Enviro	nmental outcomes, trigger and threshold criteria and management targets	Reporting period 1 January – 31 December 2023				
Trigge	criterion:	Status report:				
1.	Vibration levels exceeds 50 mm/s peak particle velocity (PPV) at retained Ghost Bat caves located within 300 m of mine pit (caves 6, 16, 17 and 18).	Criteria not exceeded				
2.	Decline in visual structural integrity of any retained Ghost Bat caves (caves 2, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17 and 18), supported by a significant step change in microclimate (temperature and humidity) data, attributable to the Proposal.	Criteria not exceeded				
3.	Disturbance within the 250 m Mining Exclusion Zone surrounding the Pilbara Leaf-nosed Bat permanent maternal roost (Gardagarli [Ratty Springs]), attributable to the Proposal.	Criteria not exceeded				
4.	Vibration levels exceed 10mm/s peak particle velocity (PPV) at the Pilbara Leaf-nosed Bat permanent maternal roost (Gardagarli [Ratty Springs]), attributable to the Proposal.	Criteria not exceeded				
5.	Decline in visual structural integrity of the Pilbara Leaf-nosed Bat permanent maternal roost (Gardagarli [Ratty Springs]), attributable to the Proposal.	Criteria not exceeded				
6. 7.	LZ10>70 dB(Z) over a one (1) hour period, at the Pilbara Leaf-nosed Bat maternity roost, attributable to the Proposal. AND Reducing call counts at, or below Lower Call Limit ⁵ for five (5) or more consecutive nights at the Pilbara Leaf-nosed Bat maternity roost, attributable to the Proposal	Criteria could not be assessed*				
Thresh	old criterion:	Status report:				
8.	Pit crest intersects a Ghost Bat Mining Restriction Zone (100 m around caves 6, 16, 17 and 18)	Criteria not exceeded				
9.	Significant damage to any retained Ghost Bat caves (caves 2, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17 and 18), supported by a significant step change in microclimate (temperature and humidity) data, attributable to the Proposal.	Criteria not exceeded				

Key environmental factor: Threatened fauna	
10. Disturbance within 250 m Mining Exclusion Zone surrounding the Pilbara Leaf-nosed Bat permanent maternal roost (Gardagarli [Ratty Springs]) which causes significant damage to the cave, attributable to the Proposal	Criteria not exceeded
11. LZ10>70 dB(Z) over a one (1) hour period, at the Pilbara Leaf-nosed Bat maternity roost, attributable to the Proposal. AND	
12. Reducing call count trend identified by the initial trigger criteria 2 remains below Lower Call Limit ⁵ for 15 consecutive nights at the Pilbara Leaf-nosed Bat maternity roost, attributable to the Proposal	Criteria unable to be assessed*

^{*}Due to equipment failure. Refer to Section 5.2.2 .

5.1.2 Results, analysis and interpretation

In line with advice from bat ecologist Robert Bullen, and to protect the EPBC listed bat species during breeding periods, the collection of data for Q4 takes place after the October to December restriction period. Therefore the reporting year for bat roost data (structural integrity, microclimate and echolocation) is offset to an October to September annual reporting period. This ensures that a full calendar year of data can be collected, analysed and reported in the annual compliance assessment report (ACAR). For this regulatory reporting period, criteria for the Threatened Fauna aspect (only) covers the October 2022 to September 2023 period. The Greater Paraburdoo Environmental Management Plan, which outlines environmental outcomes and monitoring requirements, was approved in January 2023, with criteria being assessed from February to September 2023.

Ghost Bat Roosts

Construction activities commenced at Western Range on 10 January 2023. Two of the four impact roosts were within 350m of construction activities (ghost bat roosts 6 and 18). No operational activities occurred throughout 2023 and therefore the remaining two impact roosts (caves 16 and 17) were not exposed to any construction or operational activities and were in baseline period. All remaining roosts are reference roosts.

No disturbance attributable to the project occurred within Ghost bat Mining Restriction Zones during the reporting period.

Cave Structure Assessment

Cave structure was assessed at each of the four potential impact caves. No evidence of structural damage was recorded at any cave.

Seven blasts took place within 350m of Ghost bat caves 6 and 18 during the reporting period. Blast management controls were in place, and vibration was recorded at these cave sites. The highest recorded vibration limit from any blast within 350m of Ghost bat caves was 14.73 mm/s at Cave 18. All other blast vibration records were less than 14.73 mm/s. There was no structural impact to any recorded cave sites or vibration threshold and/or trigger values exceeded during the reporting period attributable to the action.

Two of three permanent photo-monitoring points at each roost were established within the reporting period. The third photo-monitoring point, which will be positioned inside the cave, will be established during the 2024 Q1 survey following the breeding season. Although environmental outcomes were met, not all structural integrity monitoring was able to be completed;

- Structural integrity monitoring at cave 18 was not completed in Q2. Access to the cave was restricted by the EPCM contractor due to uncertainties around application of traditional owner participation requirements under the Greater Paraburdoo on Yinhawangka Country Social, Cultural and Heritage Management Plan. (Invitation to participate in survey was not taken up and so traditional owners were not present). Subsequent Q3 monitoring was conducted as per EMP requirement. No changes to structural integrity were detected at cave 18, or any monitored caves, in the reporting period. RTIO continue to provide Yinhawangka Aboriginal Corporation (YAC) with quarterly notifications advising of access requirements to sites of heritage significance, as per the SCHMP. As mentioned, cave 18 is a reference roost.
- Structural integrity monitoring at cave 2 was not completed throughout the reporting period. The roost and surrounding geotechnical stability assessment resulted in this being removed from consultant scopes of work for safety reasons (safety concerns were also documented in regulatory consultation records). Monitoring will be conducted in future reporting periods utilising remotely piloted aircraft. Cave 11, which is located 250m east of cave 2 is considered a proxy for cave 18 (also discussed during regulatory consultation) and is closer to the project. Cave 11 did not experience any impact to structural integrity in the reporting period. Cave 2 is a reference roost and the closest disturbance during the reporting period took place 5.5 kilometres to the east of the cave. As mentioned, cave 2 is a reference roost.

Refer to **Figure 3** for overview of monitoring undertaken.

Microclimate (Temperature and Humidity)

Data indicates that microclimate remained stable at impact roosts and environmental outcomes were met throughout the 2023 reporting period. **Figures 1 and 2** outline temperature and humidity data recorded at caves compared to ambient conditions in Q2 and Q3.

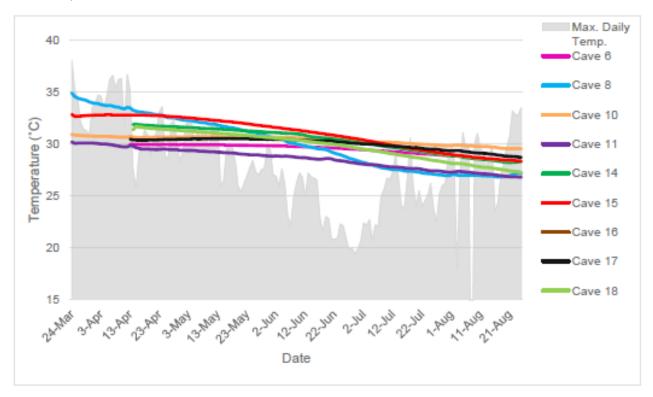


Figure 1: Average daily temperatures for each cave during Q2 and Q3 vs ambient

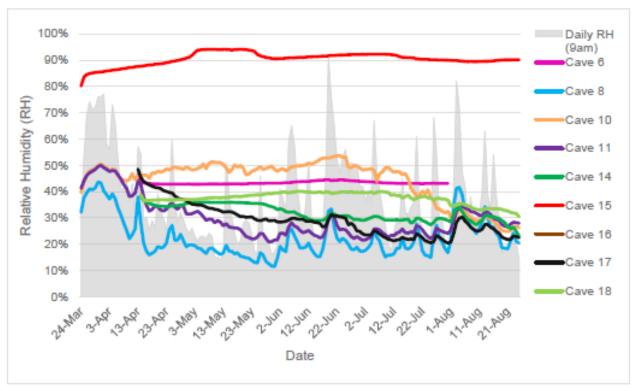


Figure 2: Average relative humidity for each cave during Q2 and Q3 vs ambient

Although environmental outcomes of condition 5-1(1) were met, not all microclimate monitoring was able to be completed – specifically;

- Data collection for caves 11, 14, 15, 16, 17 and 18 in Q1 (quarterly requirement). The Environmental Management Plan was approved by OEPA and DCCEEW on 20 January 2023 (OEPA ref: DWERVT11092, our ref; RTIO-0981203), and although a portion of the roosts were equipped during the studies phase of the project, not all roosts had monitoring equipment at the time of EMP approval or the remainder of the first quarter of 2023. Monitoring equipment was installed at caves 8, 10, 11 and 15 in March 2023 and caves 6, 14, 16, 17 and 18 in April 2023. Access constraints due to obtaining necessary approvals to enter heritage areas led to delays in commissioning of monitoring equipment.
- Data collection for caves 7, 9 and 12 for entire reporting period (bi-annual requirement). Access constraints and supply chain issues led to delays in installation and commissioning of monitoring equipment. All of these are reference caves (not within area of potential impact). This equipment has subsequently been installed during Q1 2024.
- Although monitoring equipment was in place, cave 16 experienced equipment failure due to fauna chewing cables. No data was able to be retrieved for the reporting period. Echolocation data was collected and verifies that environmental outcomes were achieved. Monitoring equipment has since been repaired.

Refer to Figure 3 for overview of monitoring undertaken.

Acoustic Monitoring

Acoustic monitoring was analysed to determine presence and estimate populations of Ghost bats at each of the four potential impact caves and five of the reference caves. No trigger or threshold criteria exceedances were recorded. Although environmental outcomes were met, not all acoustic monitoring was able to be completed – specifically;

Data collection for caves 7, 9 and 12 for entire reporting period (bi-annual requirement). Access
constraints and supply chain issues led to delays in commissioning of monitoring equipment at these
reference roosts. Access and equipment installation was prioritised for the impact roosts in proximity
to construction activities. This equipment has subsequently been installed during Q1 2024.

Refer to **Figure 3** for overview of monitoring undertaken.

			Cave S	Structur	e Assess	sment	Microclimate Analysis			Acoustic Monitoring				
Cave	Туре	Required Monitoring Frequency	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2022	Q1 2023	Q2 2023	Q3 2023
6	Potential Impact	Q/Q/Bi	NR	✓	√	✓	NR	~	✓	√	NR		√	
16	Potential Impact	Q/Q/Bi	NR	✓	✓	√	NR	NU	√ *	√ *	NR		✓	
17	Potential Impact	Q/Q/Bi	NR	✓	✓	√	NR	NU	✓	√	NR		√	
18	Potential Impact	Q/Q/Bi	NR	✓	NU	√	NR	NU	✓	✓	NR		√	
2	Reference	Bi/NA/NA	NR		NU			N	NR			N	NR	
7	Reference	Bi	NR		✓		NR		NU		NR		NU	
8	Reference	Bi	NR		✓		NR		✓		NR		✓	
9	Reference	Bi	NR		✓		NR		NU		NR		NU	
10	Reference	Bi	NR		✓		NR	NR ✓		NR		✓		
11	Reference	Bi/Q/Bi	NR		✓		NR	NU	✓	✓	NR		Υ	
12	Reference	Bi	NR		✓		NR		NU		NR		NU	
14	Reference	Bi/Q/Bi	NR		✓		NR	NU	✓	✓	NR		✓	
15	Reference	Bi/Q/Bi	NR		✓		NR	NU	✓	✓	NR		✓	

Figure 3: Monitoring undertaken in reporting year (October 2022 – September 2023)

^{✓ * -} Monitoring undertaken however data unable to be used to assess environmental criteria due to equipment failure

NU – Monitoring not undertaken

NR - Monitoring not required

Pilbara Leaf-nosed Bat Roosts

No disturbance attributable to the project occurred within Pilbara Leaf-nosed bat Mining Exclusion Zones during the reporting period.

Cave Structure Assessment

Cave structure was assessed at the Gardagarli (Ratty Springs) roost (RSR). No evidence of recent structural damage was recorded and no trigger or threshold criteria were exceeded. The Pilbara leaf nosed bat (PLNB) roost is considered a reference roost and is over 1km from any construction or operational activities.

Acoustic Monitoring

Since 2017 the available PLNB call data indicates that the activity through to late 2023 has remained approximately stable, albeit with some year-on-year variation (Figure 4). Following the dry years of 2017 to 2019, the colony activity and size trends were negative. The increasing trend thereafter corresponds to the higher rainfall in the subsequent years. The impact period commenced on 13 January 2023 when construction began at Western Range. Operational activities did not commence in 2023. During 2023, the presence and activity levels of Pilbara leaf-nosed bats (PLNB) at RSR has remained stable compared to historical ranges (Figure 4) with an approximate population of 400-450 Pilbara leaf nosed bats utilising the roost (Figure 5).

Although the environmental outcome of Condition 5 was achieved to avoid and mitigate impacts to Pilbara leaf nosed bats (PLNB) at RSR, and noise and acoustic monitoring equipment was deployed throughout the 2023 reporting period (Feb 2023 - Sep 2023), due to equipment failure there was insufficient monitoring data to conduct a thorough representative analysis against the trigger and threshold criteria. Recent acoustic data from RSR demonstrates the population at the roost are consistent with baseline and impacts to PLNB were avoided and mitigated (Figure 5).

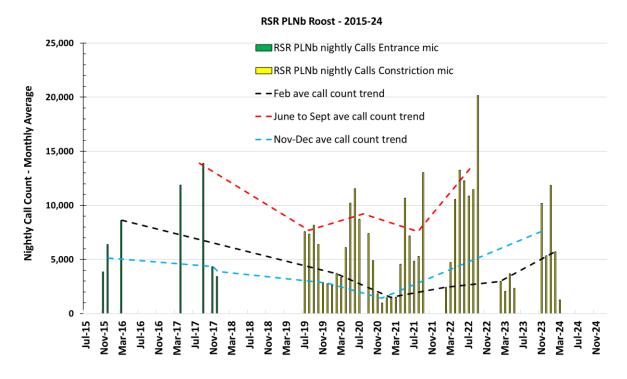


Figure 4: Average monthly PLNB calls at Gardagarli (Ratty Springs) Roost between 2015 and 2024

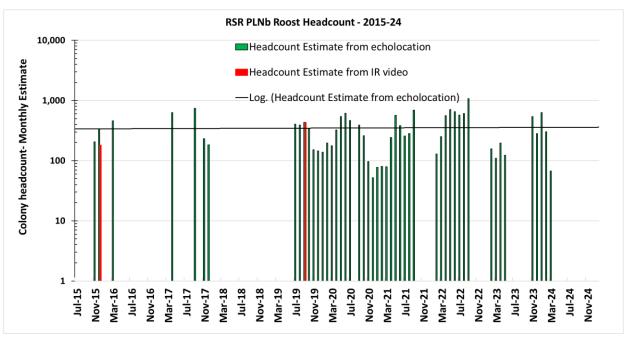


Figure 5: RSR PLNB colony head count estimate from echolocation

The 2023 reporting period experienced significant challenges with equipment effectiveness and data availability and appropriateness.

A synopsis of equipment challenges and remedial and/ or corrective actions prior, during and after the reporting period:

- As the Song meter 4 (SM4) became inoperable 21st September 2022 (and bat roost entry is not allowed through breeding season) it was visited 25th February 2023 and repaired. Data was recording through to the 4th June.
- Upon review, the data from February to June was deemed questionably low by Robert Bullen (Bat Call) who was the bat ecologist analysing the data. Even with the predicted reduction of PLNb calling due to the presence of the RFID system, this reduction was not well understood and equipment failure was probable.
- A team was mobilised to check the equipment to determine the cause of bat call declines and the battery was found to be faulty possibly due to lightning strike. The battery was replaced.
- Subsequent data collection at the roost and troubleshooting found further equipment failure/ data issues requiring two more mobilisations and replacement of the microphone and troubleshooting of the equipment.
- A final mobilisation in November 2023 where the entire equipment monitoring system was replaced resulted in a correction of the ongoing faults and data issues, and subsequent data has shown no further failures or problems.

The Ratty Spring PLNB roost is over 1km from the closest construction or operational activities and was considered to be a reference roost throughout the approvals consultation and is not expected to be impacted from the Greater Paraburdoo proposal. It is monitored due to its regional significance. It is located within a large rocky gully (protected on all sides by high rocky walls) within the Gardagarli Spring. The roost is unable to obtain reception, and therefore the equipment has not had live monitoring with telemetry to date. This challenge combined with traditional owner consultation requirements for monitoring activities under the SCHMP resulted in significant challenges with troubleshooting the equipment. A high priority for 2024 will be to resolve challenges associated with radio/satellite connectivity and identify options to have live data streaming from the roost equipment via telemetry.

Noise Monitoring

Environmental criteria associated with noise monitoring was unable to be assessed for the reporting period as stated in Section 4.2.1. Although recording equipment was in-situ throughout the reporting period and periods of data were recorded, the setup of the memory device combined with the size of the noise data resulted in it recording over itself, and data being lost and corrupted. The data that was captured was unable to be analysed against EMP criteria and be appropriately representative of the reporting period. This was not recognized until after the reporting period. This issue has since been addressed and data will be available from Q2 2024. As call counts indicate PLNB activity has since been consistent with previous years data, overall the environmental outcome of avoiding and mitigating impact to PLNB was met.

Regional bat monitoring

A regional monitoring program for Pilbara Leaf nosed Bats and Ghost Bats has been initiated by the Pilbara Environment and Cultural Knowledge (PECK) Team at Rio Tinto. This includes surveys to locate new significant roost sites for both Pilbara Leaf nosed Bats and Ghost Bats, including on conservation listed tenure, such as Karijini National Park. It is anticipated that this regional data will feed into the ecology knowledge of these two species, and also provide contextual information such as how Pilbara Leaf nosed Bats and Ghost Bats use caves within the Greater Paraburdoo area and regionally. Two (likely) Category 2 Ghost Bat caves have been established with ongoing acoustic monitoring at Turee Syncline to date (data not yet collected), and roost searches have occurred within Karijini National Park, to locate additional Category 2 Ghost Bat caves, with ongoing acoustic monitoring to be established after discussions with relevant stakeholders. Acoustic monitoring has not been able to be established at Panhandle to date, due to cultural sensitivities of this area. GPS tracking of four Ghost Bats was conducted in 2022 by internal Rio Tinto biologists and consulting bat expert Robert Bullen. It is likely this data will be presented in a peer reviewed scientific paper in the future (expanding on the results presented in Bullen. R., , Reiffer. S. & Trainer. J. (2023) Satellite tracking Ghost bats (Macroderma gigas) in the Pilbara, Western Australia.)

5.2 Inland waters and terrestrial fauna

5.2.1 Environmental criteria

The below table summarises the environmental criteria associated with inland waters and terrestrial fauna required by EPBC Decision Notice 2018/8341

Table 3: Environmental criteria associated with inland waters and terrestrial fauna

Key environmental factor: Inland waters and terrestrial fauna					
Environmental outcomes, trigger and threshold criteria and management targets as per MS1195	Reporting period 1 January – 31 December 2023				
Trigger criterion:	Status report:				
13. Persistent groundwater fed pool surface water level fall below historically recorded natural range during wet-season or dry-season monitoring at (Gardagarli [Ratty Springs]), attributable to the Proposal	Not yet applicable				
14. Greater proportion of overstorey indicator stands within the Gardagarli (Ratty Springs) capture zone of Pirraburdu Creek show a significant declining trend in MSAVI since baseline, and/or greater average rate of decline, in comparison to reference areas, attributable to the Proposal.	Not yet applicable				
15. Significant decline in number and/ or change in composition of native perennial species within Gardagarli (Ratty Springs) monitoring areas since baseline, in comparison to reference areas, attributable to the Proposal.	Not yet applicable				
16. Groundwater level changes in the riparian zone of Seven Mile Creek are greater than predicted during wet-season or dry-season monitoring, attributable to the Proposal. Specifically, water levels in any of the bores fall below respective trigger criteria water levels, attributable to the Proposal	Not yet applicable				
17. Greater proportion of overstorey indicator stands ⁶ within zone 1 of Seven Mile Creek shows a significant declining trend in MSAVI since baseline, and/or greater average decline, in comparison to reference areas	Not yet applicable				
18. Persistent groundwater fed pools (Gardagarli (Ratty Springs) and Gurungu (Doggers Gorge)) surface water levels fall below historically recorded natural range during wet or dry season monitoring, attributable to the Proposal.	Not yet applicable				
 Persistent surface water fed gorge pools (WR01-W01, WR01-W03, WR01-W06) are dry during a wet season or dry season monitoring event, attributable to the Proposal 	Criteria not exceeded				
 Non-persistent surface water fed gorge pools (ERP3 and ERP 4) are dry during a wet season monitoring event, attributable to the Proposal. 	Criteria not exceeded				

^{5.} Lower Call Limit to be set, after collection of data over baseline phase, at 1.5 standard deviations below long-term baseline nightly call count average

⁶ The proportion of stands (e.g., group of at least 20 trees) that show a negative slope in trend of MSAVI with time that is significantly (α=0.05) from the baseline trend, compared to reference areas. The criterion will be updated as knowledge develops based on empirical observations of tree health and/or improvements in methodology. MSAVI is the current proposed index, however subject to alternative index to align with advances in remote sensing.

Key en	vironmental factor: Inland waters and terrestrial fauna	
21.	Pool water quality change is greater than predicted ⁷ at WR01-W01, WR01-W03, WR01-W06, ERP3, ERP 4, Gardagarli (Ratty Springs) and Gurungu (Doggers Gorge) during wet-season or dry-season monitoring, attributable to the Proposal	Criteria not exceeded
Thresh	nold criterion:	Status report:
1.	Persistent groundwater fed pool surface water levels fall below historically recorded natural range during wet or dry season monitoring at Gardagarli (Ratty Springs), during two (2) consecutive wet season or dry season monitoring events, attributable to the Proposal	Not yet applicable
2.	More than one monitoring site within Gardagarli (Ratty Springs) monitoring areas displays significant structural or compositional change to key species since baseline, attributable to the Proposal.	Not yet applicable
3.	The area of decline below the MSAVI baseline 5th percentile for overstorey canopy area within zone 1 of Seven Mile creek is 10%8 greater than reference areas, trend continues over two or more consecutive dry season monitoring events with no evidence of seasonal recovery, is outside of historical baseline variation, and attributable to the Proposal	Not yet applicable
4.	Vegetation community within zone 1 of Seven Mile Creek displays structural or compositional change since baseline and trends attributable to the Proposal and different to reference areas.	Not yet applicable
5.	Persistent groundwater fed pools (Gardagarli (Ratty Springs) and Gurungu (Doggers Gorge)) surface water levels fall below historically recorded natural range during wet or dry season monitoring, during two (2) consecutive wet season or dry-season monitoring events ⁹ attributable to the Proposal	Not yet applicable
6.	Persistent surface water fed gorge pools (WR01-W01, WR01-W03, WR01-W06) are dry during two (2) consecutive wet season monitoring events attributable to the Proposal.	Not yet applicable

⁷ Baseline surface water quality data from Western Range gorges (WR01-W01, WR01-W03, WR01-W06), Eastern Range Pools (ERP3 and ERP4), Gardagarli (Ratty Springs) and Gurungu (Doggers Gorge) will continue to be collected during the baseline phase prior to commencement of substantial ground disturbing activities within the upstream catchment at each of the respective surface water fed pools. The Proponent will update the predicted pool water quality data for each relevant pool after the relevant baseline phase monitoring is complete. The predicted pool water quality data will be submitted as an attachment to the Annual Compliance Assessment Report (ACAR) in the subsequent reporting year and become an addendum to this EMP.

⁸ A 10% margin above reference is considered reasonable in order to detect a decline in canopy condition that may be beyond natural variation and reflect a potential impact from dewatering. Refer to Appendix 3 for baseline values. The Proponent will update the criteria after baseline monitoring is complete, and as knowledge develops based on observations of tree health and/or improvements in monitoring methodology. Improvements to calibrations and methodology may be applied to historical data where appropriate. MSAVI is the current index used, an alternative index may be used in the future subject to advances in remote sensing. Canopy decline evident from satellite imagery will be confirmed and further investigated with ground-truthing 12 Change from baseline of i) one or more structural formation classes applied to National Vegetation Information System (NVIS) Level IV sub-formation, classes (ESCAVI 2003 and see Appendix 3), due to decreased or increased cover of native or weed species or ii) loss of species listed as dominant at baseline within any of the ground, mid or upper vegetation strata (dominant species listed in Appendix 3) across greater than 20% of quadrats representing groundwater dependent vegetation within riparian transects

⁹ A period of two consecutive monitoring events (dry or wet) has been selected as suitable timeframe to assess whether condition is under threat of long-term impacts due to Proposal and to differentiate natural variation from Potential impacts from groundwater abstraction.

Key en	Key environmental factor: Inland waters and terrestrial fauna					
7.	Non-persistent surface water fed gorge pools (ERP3 and ERP 4) are dry during two (2) consecutive wet season monitoring events, attributable to the Proposal.	Not yet applicable				
8.	Pool water quality change is greater than predicted at WR01-W01, WR01-W03, WR01-W06, ERP3, ERP 4, Gardagarli (Ratty Springs) and Gurungu (Doggers Gorge) during two (2) consecutive wet season and dry season monitoring events attributable to the Proposal	Not yet applicable				

5.2.2 Results, analysis and interpretation

Groundwater and Surface water

As dewatering under the proposal did not take place during the reporting period, aspects relating to groundwater are still in baseline period and assessment of environmental criteria is not yet applicable.

Although environmental outcomes were achieved for all criteria relating to surface water not all monitoring commitments were fulfilled in the reporting period.

Photo monitoring at sites WR05 and WR06 was not completed in Q2. Access to the pools was restricted by Worley (construction contractor) due to uncertainties around application of traditional owner participations requirements under the Greater Paraburdoo on Yinhawangka Country Social, Cultural and Heritage Management Plan. Invitation to participate in survey was not taken up and so traditional owners were not present. Subsequent Q3 and Q4 monitoring was conducted as per EMP requirement. No impacts to water levels or quality attributable to the project were detected.

Depth reading at ERP3 was not completed in Q3 due to a fault with monitoring equipment. Photo monitoring took place as scheduled confirming no exceedance to trigger or threshold criteria.

Riparian Vegetation

As dewatering has not commenced under the proposal during the reporting period, aspects relating to riparian vegetation are still in the baseline period and assessment of environmental criteria is not yet applicable.

Table 4: Environmental factors associated with threatened flora, threatened fauna and inland waters

Key environmental factors: Threatened flora, threatened fauna and inland waters	
Environmental outcomes and objectives with associated criteria as per MS1195	Reporting period 1 January – 31 December 2023
Management Targets	Status report:
1. Provision and maintenance of firefighting equipment in accordance with the relevant fire safety standards	Management target met.
2. Firefighting emergency response procedures are in place	Management target met.
3. No incidents of vehicles being used off designated roads outside operational areas unless in the case of emergency or for necessary activities, that result in significant impacts to high value MNES habitat.	Management target met.
4. Implementation of speed limits in areas identified as having high value for MNES fauna.	Management target met.
5. Records of all EPBC Act listed threatened species observed are appropriately maintained	Management target met.
6. Fauna handling is undertaken in accordance with Rio Tinto's Wildlife Interaction Guidelines and the requirements of the BC Act.	Management target met. No threatened fauna encounters occurred within the reporting period. All fauna handling is undertaken in accordance with the Rio Tinto's Wildlife Interaction Guidelines (our ref: RTIO-HSE-0013116).
7. No incidents of native fauna feeding, hunting or keeping of firearms or pets on site.	Management target met Firearm kept on site, however for use in pastoral management activities which is permitted under the Greater Paraburdoo Environment Management Plan (our ref: RTIO-HSE-0336947).
8. Access to the MEZs/MRZs (which potentially contain significant roosts or caves) is restricted to authorised personnel and there are no incidents of unauthorised access.	Management target met.
9. No use of barbed wire on site, except in the case of statutory requirements	Management target met.
10. Where barbed wire is used in accordance with statutory requirements, reflectors are installed	Management target met. Any barbed wire erected within the development envelope since commencement of proposal is compliant. An audit was completed in 2023 and management plans are currently in place to ensure all preexisting legacy barbed wire is removed or has bat deflectors installed.
11. No disturbance, other than existing and authorised clearing, in the MEZ or MRZ.	Management target met.
12. Implementation of blast management controls for Ghost Bat caves within 300 m of proposed pits (caves 6, 16, 17 and 18).	Management target met.
13. Implementation of blast management controls for Pilbara Leaf-nosed Bat maternal roost within 300 m of proposed blast.	Not applicable.
14. No blasting undertaken outside of daylight hours	Management target met.
15. Lighting and dust management actions are implemented	Management target met.
16. No clearing undertaken outside of daylight hours.	Management target met.

6 Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

