



EPBC 2016/7648
Annual Compliance Report
July 1 2024 – June 30 2025

Thunderbird Mineral Sands Project

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AUTHORISATION

| Revision Number | Reason for Issue | Prepared | Approved | Date |
|-----------------|------------------------|---------------|---------------|------------|
| 1 | Requirement under EPBC | Micaela Green | Chris Cottier | 30/06/2025 |
| | | | | |

1. INTRODUCTION

1.1 Project Overview

Kimberley Mineral Sands (KMS) is a 50:50 Joint Venture between Sheffield Resources Ltd (SFX) and YGH Australia Investment Pty Ltd (Yansteel) for the development of the Thunderbird Mineral Sands Project ('Thunderbird') in the West Kimberley.

Thunderbird is one of the largest and highest-grade zircon mineral sands deposits in the world and contains valuable minerals including ilmenite, zircon, leucoxene, and rutile, which are extracted and exported via the Port of Broome to our global offtake partners.

Thunderbird is located on the Dampier Peninsula within the West Kimberley region of Western Australia (Figure 1), approximately 75 km west southwest of Derby and 95 km northeast of Broome. It is accessed from the Great Northern Highway via a 30 km Site Access Road.

The project is located within the Mt Jowlaenga Pastoral Lease currently held by the Yeeda Pastoral Company Pty Ltd. The Site is situated within the Joombarn-buru native title determination, and a Coexistence Agreement is in place between Joombarn-buru traditional owners and the Thunderbird mine. The Site Access Road intersects the Great Northern Highway approximately halfway between Broome and Derby.

Thunderbird was developed on a greenfield site and comprises:

- Mining of heavy mineral sands over a 36 plus year period from the Thunderbird deposit
- Onsite primary and secondary processing of heavy mineral sands to produce a range of saleable products
- Abstraction and reinjection of groundwater from the Broome Sandstone Aquifer to allow mining and supply ore processing needs
- Mine operations infrastructure including power generation facilities, accommodation village, administration and maintenance buildings, internal roads, communications infrastructure, and waste storage and disposal facilities
- A 30km site access road from the Great Northern Highway to access the mine site
- Transport of mineral sands products from the mine site via the Site Access Road and Great Northern Highway to the Port of Broome for storage prior to export
- Export of bulk mineral sands products from the Port to international customers

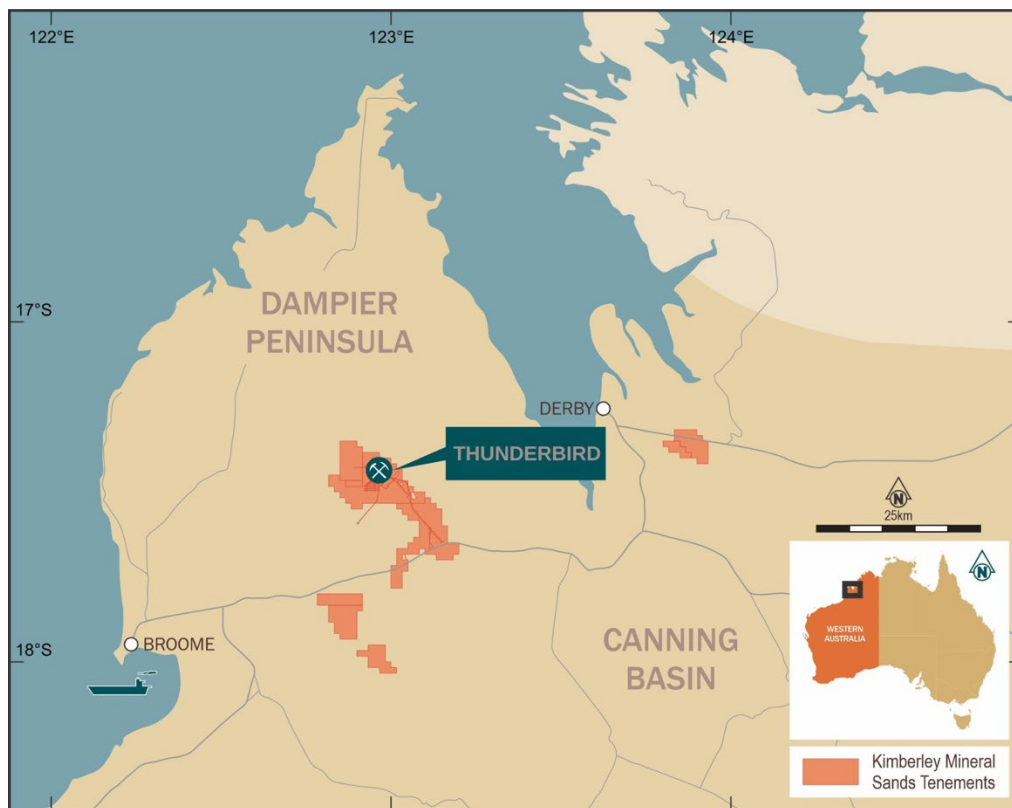


Figure 1. Locality Map

1.2 Objective

This report addresses condition 8 of EPBC 2016/7648, as stipulated:

By 30 June of each year after the commencement of the action, the approval holder must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of approved plans or strategies specified in the conditions. Non-compliance with any of the conditions of this approval must be reported to the Minister at the same time as the compliance report is published.

The Project commenced the action on 11 August 2021. The Department was notified of commencement of the action on 16 December 2021. As of Q1 2024 the Project moved into operational phase, with the first shipment of product sent on 28 January 2024. The reporting period as covered by this report (1 July 2024 to 30 June 2025) has seen operations continue under EPBC Approval 2016/7648 including mining, processing and exporting of mineral sands (namely Zircon and Ilmenite).

1.3 Scope

This report details the commitments outlined within EPBC 2016/7648 (issued on 27 September 2018) and assessment of compliance against conditions 1-12 for the reporting period 1 July 2024 to 30 June 2025.

2. STATEMENT OF COMPLIANCE

2.1 Proposal and Proponent

Table 1. Company and Proposal Details

| | |
|---|---|
| Proposal Title | Thunderbird Mineral Sands Project |
| Location of the Project | West Kimberley Region, approximately 75 km west southwest of Derby and 95 km northeast of Broome. It is accessed from the Great Northern Highway via a 30 km long Site Access Road. |
| Approved Action Number | EPBC 2016/7648 |
| Proponent Name | Thunderbird Operations PTY LTD |
| Proponent's Australian Company Number (where relevant) | 611 351 743 |

2.2 Proponent Declaration

In making this declaration, I am aware that section 490 and 491 of the Environmental 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.

Signed



Full Name (please print)

Chris Cottier

Position (please print)

Manager Environment, Community & Public Relations

Organisation (please print including ABN/ACN if applicable)

Thunderbird Operations PTY LTD ACN 611 351 743
Kimberley Mineral Sands ABN 11 611 351 743

Date

30/06/2025

3. DESIGNATIONS TO RECORD FINDINGS

3.1 Assessment of Compliance

The terminology used to record findings in the compliance report (Table 2) is consistent with that used by the DCCEE Annual Compliance Report Guidelines (2014).

Table 2. Compliance Status Terminology

| Status | Description |
|-----------------------|---|
| Compliant | 'Compliance' is achieved when all the requirements of a condition have been met, including the implementation of management plans or other measures required by those conditions. |
| Non-compliant | A designation of 'non-compliance' should be given where the requirements of a condition or elements of a condition, including the implementation of management plans and other measures, have not been met. |
| Not Applicable | A designation of 'not applicable' should be given where the requirements of a condition or elements of a condition fall outside of the scope of the current reporting period. For example, a condition which apprise to an activity that has not yet commenced. |

4. COMPLIANCE ASSESSMENT

4.1 Audit Assessment

In accordance with condition 8 of the EPBC Act approval (Approval Reference EPBC 2016-7648), this report provides an update of Thunderbird's compliance against the relevant approval conditions (Table 3).

Table 3. Thunderbird Mineral Sands Project EPBC 2016/7648 Audit Assessment

| EPBC 2016/7648 | | | |
|------------------|--|--|---|
| Condition Number | Condition | Compliant/Non-Compliant/Not Applicable | Evidence/Comments |
| 1 | For the protection of the Greater Bilby , the approval holder must not clear more than 1,961.1 ha and must not clear any area outside the development envelope . | Compliant | <p>At the time of reporting, a total 551.16 ha of land across the Thunderbird Development Envelope had been cleared (see Appendix A).</p> <p>Records are maintained via an 'Area of Disturbance' database which is regularly updated (Appendix B). Supporting survey and spatial data is retained as part of the assurance procedure to verify compliance against State and Commonwealth clearing allocations.</p> <p>No clearing occurred outside of the development envelope during the reporting period.</p> <p><i>Supporting Documents:</i></p> <p><i>Appendix A; Greater Bilby Pre-Clearance Survey Areas</i></p> <p><i>Appendix B; Thunderbird Operations - Area of Disturbance Records</i></p> |
| 2 | <p>For the protection of the Greater Bilby, the approval holder must submit a Terrestrial Fauna Environmental Management Plan (TFEMP) to the Minister for approval. The TFEMP must:</p> <p>a) Detail the protocol/s that will be implemented during pre-clearance surveys, including to identify Greater Bilby burrows and for Greater Bilby capture and translocation into suitable habitat; and</p> | Non-Compliant | <p>The Terrestrial Fauna Environmental Management Plan for The Thunderbird Mineral Sands Project dated 24 October 2018 was approved by the Minister on 20 November 2018 (Appendix C).</p> <p>a) All clearing was conducted using internal permit to clear procedures (Appendix D), and in accordance with the Greater Bilby disturbance protocols stipulated within the Terrestrial Fauna Environmental Management Plan. All</p> |

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| | <p>b) Comply with conditions 6-1,6-2,6-3,6-4,6-5,6-6,6-7 and 6-8 of the Western Australian Approval.</p> <p>The approval holder must not commence the action until the Minister has approved the TFEMP. The approved TFEMP must be implemented.</p> | | <p>Greater Bilby activity was recorded and documented in the internal Greater Bilby survey database (Appendix E) and through GIS Database.</p> <p>b) The Compliance Annual Report (CAR) documents compliance with the Western Australian Ministerial Approval (MS1080). The latest CAR covers the reporting period of August 10th 2023 to August 9th 2024, due on the 11th November each year. As per the latest report, the Project was shown as being generally compliant with the MS1080 approval. With regards to conditions 6-1 to 6-8, all were reported within compliance with the exception of Condition 6-7</p> <p>Condition 6-7 states that: <i>'In the event of failure to implement management actions, the proponent shall meet the requirements in condition 4 (Compliance Reporting) and shall implement the measures outlined in the Plan, including, but not limited to, actions and investigations to be undertaken, and reporting to the CEO'</i></p> <p>The Management Action reported to be in non-compliance was <i>'Travel on the Site Access Road between dusk and dawn restricted to essential vehicles being product trucks or emergency vehicles'</i>.</p> <p>Access to/from the Great Northern Highway to the Thunderbird Site Access Road is restricted via a boom gate and stationed with a 24/7 security guard. The security guard on duty records and notifies all vehicle's entering and exiting the site. A register is kept for any after-hours travel (exclusive of product trucks and emergency vehicles).</p> <p>After-hours travel occurred (with exception of that provided for under the action) in isolated events due to personnel procedural breach, as well as to urgent provide access / supplies due to safety concerns or for the management of critical infrastructure.</p> <p>The TFEMP is currently in review in order to expand the list of permitted vehicles to ensure the safe operation and management of critical infrastructure is maintained. A revision of the TFEMP at this time is a rational process as operational and logistical constraints have only just been realised as the Project has progressed into full operation. The amended TFEMP will be provided to DCCEEW along with DWER for review and comment.</p> <p><i>Supporting Documents:</i></p> <p><i>Appendix C; Thunderbird Mineral Sands Project (EPBC 2016/7648): Terrestrial Fauna Environmental Management Plan and Offset Strategy Approval Letter (2018)</i></p> <p><i>Appendix D; Permit to Clear Example</i></p> <p><i>Appendix E; Greater Bilby Survey Summary</i></p> |
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| 3 | <p>The approval holder must within twelve months of the date of this approval submit to the Minister for approval an Offset Strategy that will compensate for the residual impacts to the Greater Bilby. The Offset Strategy must be consistent with the principles of the EPBC Act Environmental Offsets Policy, and must:</p> <ul style="list-style-type: none"> a) Provide offsets for 1,961.1 ha of Greater Bilby habitat to be cleared as a result of the action; b) Prioritise land management activities with direct benefit for Greater Bilby habitat over research activities; c) Consistently with relevant approved conservation advice, recovery plans and threat abatement plans and/or regional conservation plans, identify threats to Greater Bilby, and nominate priorities for offset projects that are likely to realise a conservation benefit for Greater Bilby; d) Specify a financial commitment to offset projects based on a rate of at least \$2,500 (excluding GST) per hectare of Greater Bilby habitat cleared. The contributions rate must be amended quarterly to match inflation measured through CPI, taking the date of this approval as the starting point for adjustments; e) Specify milestones for Greater Bilby habitat clearing and for expenditure on offset projects, with a staged process for developing and submitting offset projects for approval by the Department; f) Specify the process for reporting on expenditure on offset projects, and conservation outcomes achieved; and g) Outline the circumstances whereby the approval holder may request from the Minister an acquittal of a portion of the area of Greater Bilby habitat specified in Condition 3(a) as a result of implementing rehabilitation activities. <p>The approval holder must not commence the action until the Minister has approved the Offset Strategy. The approval holder must implement the approved Offset Strategy.</p> | Compliant | <p>The Offset Strategy for The Thunderbird Mineral Sands Project dated 13 October 2018 was approved by the Minister on 20 November 2018 (Appendix C). A revision to the Offset Strategy was approved on 7 October 2020 (Appendix F).</p> <p>A Subsequent revision to the Offset Strategy was submitted to DCCEEW and DWER on 17 April 2023 (Appendix G). This revision of the Offset Strategy is subject to Bilateral assessment by the Western Australian Department of Water and Environmental Regulation (DWER) as well as DCCEEW. The requirement for bilateral assessment is prompted by the amalgamation of the Greater Bilby Research and Conservation Plan (GBRCP) into the Offset Strategy. The GBRCP is a requirement of Condition 10 of WA EPA Ministerial Statement 1080, as such, assessment of the revised Offset Strategy will be coordinated by DWER with DCCEEW to align approval for the purposes of both Ministerial Statement 1080 and EPBC Act Approval 2016/70648.</p> <p>At the time of reporting, correspondence had been received from DWER requesting amendments to the document, however DCCEEW are yet to comment on the revised plan. Once revisions have been made in line with DWER recommendations the amended document will be provided to both DCCEEW and DWER.</p> <p>Thunderbird notified commencement of offset payments for the entirety of clearing related to the project on 16 December 2021. The first payment was then processed on 1 June 2022.</p> <p>At the time of reporting, offsets had been paid up until the end of Q1 2025 – accounting for 548.227 cleared hectares (Appendix H).</p> <p><i>Supporting Documents:</i></p> <p><i>Appendix C; Thunderbird Mineral Sands Project (EPBC 2016/7648): Terrestrial Fauna Environmental Management Plan and Offset Strategy Approval Letter (2018)</i></p> <p><i>Appendix F; Thunderbird Mineral Sands Project (EPBC 2016/7648) – revised Offset Strategy Approval Letter (2020)</i></p> <p><i>Appendix G; Ministerial Statement 1080 Thunderbird Mineral Sands Project, Condition 10 – Greater Bilby Research and Conservation Plan Submission</i></p> <p><i>Appendix H; Proof of Payment to Greater Bilby Offset Fund</i></p> |
| 4 | <p>Offset project proposals submitted for approval in accordance with Condition 3(e) must:</p> <ul style="list-style-type: none"> a) Specify the location and nature of offset project activities; | Not Applicable | <p>The GBRCP/Offset Strategy revision highlighted the most significant threats to the Greater Bilby population within The Dampier Peninsula. The priorities with regards to conservation and management were also discussed, with this information being used as a benchmark to assess potential offset projects that would have the greatest impact on the future Bilby population.</p> |

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| | <ul style="list-style-type: none"> b) Include project goal/s, budget, and a detailed offset project description, including timeframes for implementing the offset project, and reporting and publishing offset project results; c) Identify and manage all risks (including but not limited to environmental, administrative, financial, and governance risks) associated with implementing the offset project; d) Demonstrate how the offset project is consistent with the Offset Strategy; e) Outline consultations associated with developing the offset project, including the outcomes of those consultations; and f) Outline how the offset project complies with the principles of the EPBC Act Environmental Offsets Policy and, if relevant, how the offset project meets the criteria for research and educational programs identified in Appendix A of the EPBC Act Environmental Offsets Policy. <p>The approval holder must not undertake, begin to undertake, or commit to a third party to undertake, an offset project until that offset project has been approved in writing by the Department. The approved offset project must be implemented unless otherwise agreed in writing by the Department</p> | | <p>The most beneficial of the proposed offset projects was targeted at feral cat control and fire management across the Dampier Peninsula.</p> <p>Submission of Offset projects will occur following approval of the revised Offset Strategy/GBRCP.</p> |
| 5 | <p>To protect Humpback Whales (<i>Megaptera novaeangliae</i>), the approval holder must ensure that shipping vessels it controls, and those which are under commercial arrangement between the approval holder and other parties, must:</p> <ul style="list-style-type: none"> a) Comply with Part 8, Division 8.01, Regulations 8.05 and 8.06 of the EPBC Regulations, and implement all mitigation and management measures specified therein; and b) Within State coastal waters, operate as though the mitigation and management measures specified in Part 8, Division 8.01, Regulations 8.05 and 8.06 of the EPBC Regulations apply, and comply with and implement those measures, as per Condition 5(a). | Compliant | <p>The first shipment of product sailed from Broome Port on the 28 January 2024. A total of 30 vessels sailed from Broome Port during the reporting period. This accounts for 38 vessels total over the life of Thunderbird Operations that have exported product from the Port of Broome.</p> <p>KMS contracted vessels trafficking the Port of Broome are under the direct operational control of the Kimberley Ports Authority (KPA). Upon entering port waters, vessels are piloted by an experienced marine Pilot, as stipulated by the KPA.</p> <p>KPA has policies in place to ensure the protection of cetaceans and directs piloted vessels to take all safe and practicable steps to minimise impact to the surrounding environment. Under KPA standards and procedures all impacts to marine life are to be reported through their Safety Management System. To date, there have been no reported fauna strikes in Broome Port Waters by KMS contracted vessels.</p> <p><i>Supporting Evidence:</i></p> <p><i>Appendix I; Humpback Whale Migration – July to October; Kimberley Ports Authority Environment Bulletin</i></p> |

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| 6 | Within 30 days after the commencement of the action, the approval holder must advise the Minister in writing of the actual date of commencement . | Non-Compliant | <p>Commencement was notified on 16 December 2021, however the action had officially commenced on 11 August 2021, therefore exceeding the 30 day notification period (Appendix J).</p> <p>This has been addressed in previous compliance reports.</p> <p><i>Supporting Documents:</i></p> <p><i>Appendix J; Commencement of the Action – Thunderbird Mineral Sands Project, WA, EPBC 2016/7648</i></p> |
| 7 | The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the strategy and plans required by this approval, and make them available upon request to the Minister . Such records may be subject to audit by the Minister or an independent auditor in accordance with section 458 of the EPBC Act , or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media. | Compliant | <p>Thorough record keeping and data management practices are maintained in order to satisfy compliance with approval conditions on the Thunderbird Mineral Sands Project. The 'Permit to Clear', documents compliance actions completed for each area prior to clearing (Appendix D). Supporting survey and spatial data is retained as part of the assurance procedure to verify compliance against clearing allocations. Post clearance survey data is collected for each area of disturbance with records being maintained via an 'Area of Disturbance' database that is regularly updated (Appendix B). This ensures appropriate implementation of the TFEMP and accurate tracking of Offset payments.</p> <p>All database and records in relation to compliance to the conditions stated in this approval are available upon request.</p> <p><i>Supporting Documents:</i></p> <p><i>Appendix D; Permit to Clear Example</i></p> <p><i>Appendix B; Thunderbird Operations - Area of Disturbance Records</i></p> |
| 8 | By 30 June of each year after the commencement of the action, the approval holder must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of approved plans or strategies specified in the conditions. Non-compliance with any of the conditions of this approval must be reported to the Minister at the same time as the compliance report is published. | Compliant | <p>Publication of this report on or before 30 June 2025 represents compliance with condition 8 of EPBC 2016/7648.</p> <p>Non-compliance with Condition 2(b) has been documented in a letter to the Minister and submitted at the same time as this report has been published.</p> |
| 9 | Upon the direction of the Minister , the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister . The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be | Not Applicable | No independent audit has been requested by the minister. |

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| | agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister . | | |
| 10 | If, at any time after five years from the date of this approval, the approval holder has not commenced the action, then the approval holder must not commence the action without the written agreement of the Minister . | Compliant | <p>The action has commenced (Appendix J).</p> <p><i>Supporting Documents:</i></p> <p><i>Appendix J; Commencement of the Action – Thunderbird Mineral Sands Project, WA, EPBC 2016/7648</i></p> |
| 11 | <p>The approval holder may choose to revise the plan approved by the Minister under Condition 2 without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised plan would not be likely to have a new or increased impact. If the approval holder makes this choice they must notify the Department in writing that the approved plan has been revised and provide the Department, at least four weeks before implementing the revised plan, with:</p> <ul style="list-style-type: none"> a) An electronic copy of the revised plan; b) An explanation of the differences between the revised plan and the approved plan; and c) The reasons the approval holder considers that the taking of the action in accordance with the revised plan would not be likely to have a new or increased impact. | Not Applicable | <p>The TFEMP is currently in review to accommodate greater understanding around operational and logistical restraints realised through the progress into full operation. Any amendments to the plan will involve an internal assessment as to the potential for a new or increased impact to the Greater Bilby. The amended plan and this review will be provided to the Minister at least four weeks prior to implementation.</p> |
| 11A | The approval holder may revoke its choice under Condition 11 at any time by giving written notice to the Department . If the approval holder revokes the choice to implement the revised plan, without approval under section 143A of the EPBC Act , the plan approved by the Minister must be implemented. | Not Applicable | No revision to the approved plan has been made to date. |
| 11B | <p>If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the action in accordance with the revised plan would be likely to have a new or increased impact, then:</p> <ul style="list-style-type: none"> a) Condition 11 does not apply, or ceases to apply, in relation to the revised plan; and b) The approval holder must implement the plan approved by the Minister. <p>To avoid any doubt, this condition does not affect any operation of Conditions 11 and 11A in the period before the day the notice is given.</p> | Not Applicable | No revision to the approved plan has been made to date. |

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| | At the time of giving the notice, the Minister may also notify that for a specified period of time Condition 11 does not apply for the plan required under the approval. Conditions 11, 11A and 11B are not intended to limit the operation of section 143A of the EPBC Act which allows the approval holder to submit a revised plan to the Minister for approval. | | |
| 12 | If the approval holder wishes to carry out the action otherwise than in accordance with the Offset Strategy approved by the Minister under Condition 3, the approval holder may submit a revised Offset Strategy for the Minister's approval. If the Minister approves the revised Offset Strategy, the approval holder must implement that strategy instead of the Offset Strategy as originally approved. | Compliant | <p>The latest approved revision of the Offset Strategy was formally accepted on 8 September 2020 (Appendix F). A revision to the approved strategy was submitted on 17 April 2023 and, at the time of drafting this report, was awaiting approval (Appendix G). At the time of reporting, correspondence had been received from DWER requesting amendments to the document, however DCCEEW are yet to comment on the revised plan. Once revisions have been made in line with DWER recommendations the amended document will be provided to both DCCEEW and DWER. The later revision of the Offset Strategy is to wait approval prior to implementation.</p> <p><i>Supporting Documents:</i></p> <p><i>Appendix F; Thunderbird Mineral Sands Project (EPBC 2016/7648) – revised Offset Strategy Approval Letter (2020)</i></p> <p><i>Appendix G; Ministerial Statement 1080 Thunderbird Mineral Sands Project, Condition 10 – Greater Bilby Research and Conservation Plan Submission</i></p> |
| 13 | Unless otherwise agreed to in writing by the Minister , the approval holder must publish the plan or strategy referred to in these conditions of approval on their website. Each plan or strategy must be published on the website within 1 month of being approved by the Minister or from expiry of the four-week period in Condition 11. | Compliant | <p>Both the Terrestrial Fauna Environmental Management Plan and Offset Strategy are available on the Kimberley Mineral Sands Website.</p> <p><i>Evidence:</i></p> <p>https://www.kmsands.com.au/site/esg/environment</p> |

4.2 Definitions

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| Acquittal | Means reduction in the amount payable for the offset. |
| Clear/Cleared/Clearing | Means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of native vegetation, but does not include measures for weed and pest management. |
| Construction | Includes any preparatory works required to be undertaken including clearing vegetation, the erection of any onsite temporary structures and the use of heavy-duty equipment for the purpose of breaking the ground for buildings or infrastructure. |
| Commence, commenced or commencement | The first instance of any construction works for any infrastructure, excluding fences and signage, associated with the proposed action. |
| CPI | 'Consumer Price Index' (or successor index) as a measure of inflation in Australia, as measured by the Reserve Bank of Australia. |
| Department ('s) | The Australian Government Department or any other agency administering the EPBC Act from time to time. |
| Development Envelope | The Boundary of the action as defined in Appendix B, where it is depicted as 'Thunderbird Minesite Development Envelope' and marked with a blue outline. |
| EPBC Act | The Environment Protection and Biodiversity Conservation Act 1999 (Cth). |
| EPBC Act Environmental Offsets Policy | The Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (October 2012), or subsequent revision, including the Offsets Assessment Guide. Available at: http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy |
| EPBC Regulations | The Environment Protections and Biodiversity Conservation Regulations 2000 (Cth). |
| Greater Bilby | The EPBC Act listed Greater Bilby (<i>Macrotis lagotis</i>). |
| Independent expert | A scientist with relevant qualifications and expertise appointed and funded by the approval holder whose appointment is approved by the Department. |
| Mine pits | As defined in Appendix B, where it is depicted as 'mine pits' and highlighted in orange. |
| Minister | The Minister administering the EPBC Act and includes a delegate of the Minister. |
| Plan(s) | All plans specified in these conditions and/or those defined in the Offset Strategy. |
| Recovery Plan/s | A recovery plan made or adopted by the Minister under the EPBC Act. |

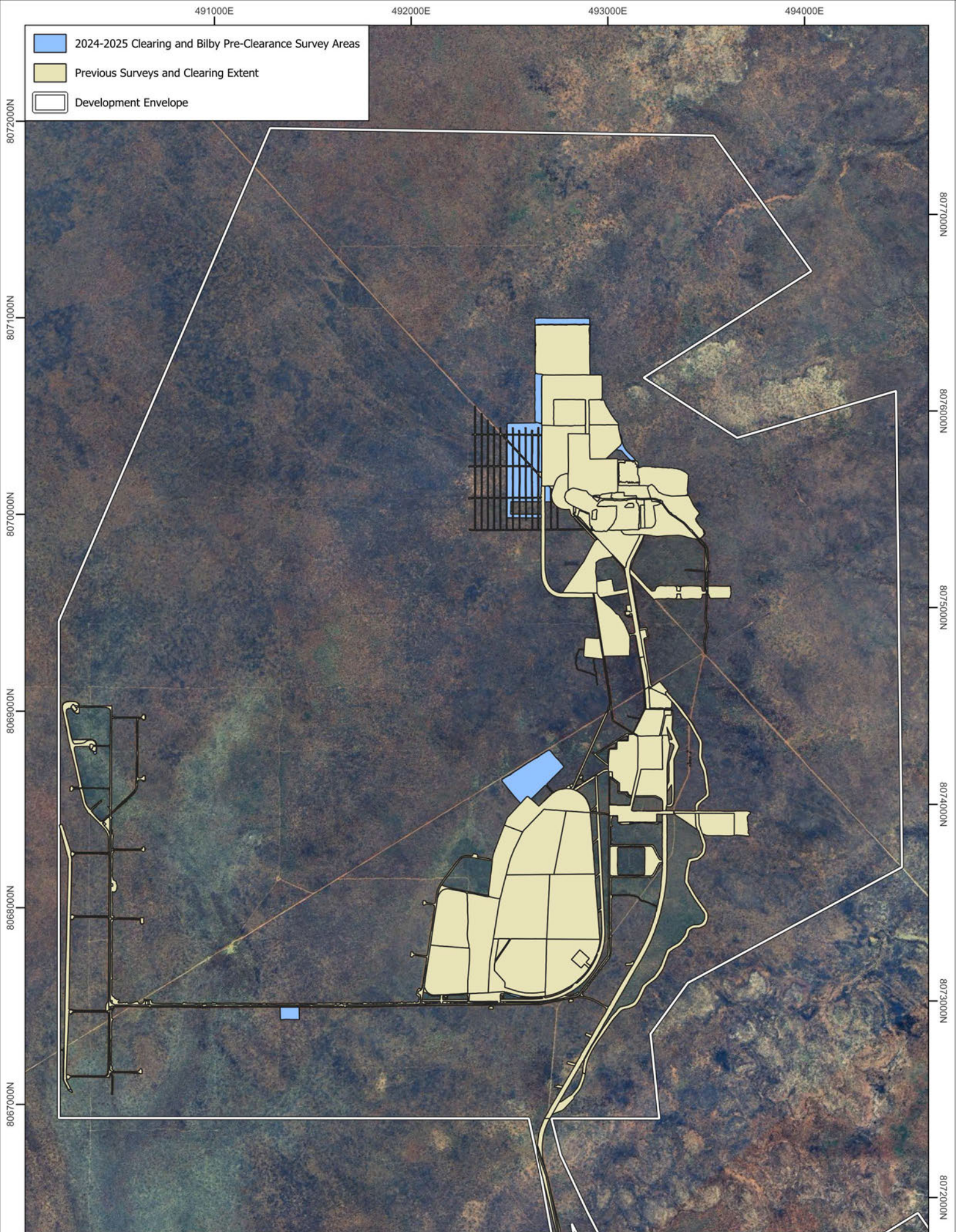
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| Threat abatement plans | A threat abatement plan made or adopted by the Minister under the EPBC Act. |
| Western Australian Approval | Ministerial Statement No.1080 - Thunderbird Mineral Sands Project published on 10 August 2018 under the Environmental Protections Act 1986 (WA). |

5. REFERENCES

Department of Agriculture, Water and the Environment. 2014. *Annual Compliance Report Guidelines*.
Department of Environment, Canberra ACT. 2014.

6. APPENDICES

6.1 Appendix A: Greater Bilby Pre-Clearance Survey Areas



6.2 Appendix B: Thunderbird Operations – Area of Disturbance Records

| PTC # | Date Cleared | Tenement | Site Description | Permit Area (ha) | L04/82 | L04/83 | L04/84 | L04/85 | L04/86 | L04/92 | L04/93 | M04/459 Infrastructure | M04/459 Mining Area | E04/129 | Permit AOD Total | POW AOD Total | |
|---------------|--------------|----------|---|------------------|-----------------------|--------|--------|--------|--------|--------|--------|------------------------|---------------------|---------|------------------|---------------|--|
| | | | | | Surveyed Areas (ha) | | | | | | | | | | | | |
| POW #58560 | 24/02/2016 | L04/86 | Drill Access Track (Original MAR) | N/A | 5.27 | | | | | | | | | | | 5.27 | |
| POW #58560 | 24/02/2016 | M04/459 | Drill Access Track (Original MAR) | | 2.746 | | | | | | | | | | | 2.746 | |
| PTC007 Audit | 1/07/2023 | L04/82 | Mine Access Road (MAR) - 2023 Audit | | 0.172 | | | | | | | | | | | 0.172 | |
| PTC007 Audit | 1/07/2023 | L04/86 | | | 2.324 | | | | | | | | | | | 2.324 | |
| POW # PTC0001 | 1/12/2017 | L04/85 | 60 person Village - Stage 1 | 10 | 2.614 | | | | | | | | | | | 2.614 | |
| POW # PTC0002 | 1/12/2017 | L04/85 | 60 person Village - Stage 1 | N/A | 0.121 | | | | | | | | | | | 0.121 | |
| POW # PTC0003 | 1/11/2017 | L04/85 | Village Road - Stage 1 - POW | | 2.84 | | | | | | | | | | | 2.84 | |
| PTC0003 Audit | 1/07/2023 | L04/85 | Village Road - Stage 1 - 2023 Audit | N/A | 0.797 | | | | | | | | | | | 0.797 | |
| PTC0003 Audit | 1/07/2023 | L04/86 | Village Road - Stage 1 - 2023 Audit | | 0.125 | | | | | | | | | | | 0.125 | |
| POW # PTC0004 | 1/04/2018 | L04/86 | MAR Turkey Nest 1 | N/A | 0.202 | | | | | | | | | | | 0.202 | |
| POW # PTC0005 | 1/04/2018 | L04/86 | MAR Turkey Nest 2 | N/A | 0.1 | | | | | | | | | | | 0.1 | |
| PTC0005 | 1/07/2023 | L04/86 | MAR Turkey Nest 2 - 2023 Audit | | 0.111 | | | | | | | | | | 0.111 | | |
| POW # PTC0006 | 1/04/2018 | L04/86 | Mine Access Road (MAR) turn around | N/A | 0.11 | | | | | | | | | | | 0.11 | |
| POW # PTC0006 | 1/07/2023 | L04/86 | Mine Access Road (MAR) turn around - 2023 Audit | | 0.004 | | | | | | | | | | | 0.004 | |
| PTC0008 | 1/07/2018 | L04/86 | Borrow Pit 1 | 0.65 | 0.492 | | | | | | | | | | 0.492 | | |
| PTC0009 | 28/08/2018 | L04/86 | Laydown area for mobile batching plant | 0.69 | 0.751 | | | | | | | | | | 0.751 | | |
| PTC0010 | 1/09/2018 | L04/85 | WWTP Sprayfield fence boundary | 0.5 | 0.4 | | | | | | | | | | 0.400 | | |
| PTC0011 | 4/09/2018 | L04/86 | Extension to Borrow pit 1 | 0.5 | 0.473 | | | | | | | | | | 0.473 | | |
| PTC0012 | 10/09/2018 | L04/86 | Checking for gravels along MAR | Unknown | | | | | | | | | | | 0.000 | | |
| PTC0013 | 9/10/2020 | M04/459 | Trial mining programme safety bunds | 9.74 | | | | | | | | | | | 8.616 | | |
| PTC0014 | 20/10/2020 | L04/86 | Gravel Investigations | 0.67 | 0 | | | | | | | | | | 0.000 | | |
| PTC0015 | 30/10/2020 | L04/86 | Spoon drains for MAR | Unknown | 0 | | | | | | | | | | 0.000 | | |
| PTC0016 | 1/06/2021 | M04/459 | Trial Mining V2 | 5.96 | | | | | | | | | | | 5.769 | | |
| PTC0017 | 22/07/2021 | L04/82 | Re-clear of mine access road | N/A re-clear | 341.39 | | | | | | | | | | | 341.395 | |
| PTC0018 | NOT ISSUED | L04/86 | MAR S-Bends | 0 | 0 | | | | | | | | | | 0.000 | | |
| PTC0019 | NOT ISSUED | L04/85 | Village Access Road | 0 | 0 | | | | | | | | | | 0.000 | | |
| PTC0020 | 11/08/2021 | L04/82 | New MAR alignment Y junction to fraser | 8.2 | 0.553 | | | | | | | | | | | 0.553 | |
| PTC0020 | 11/08/2021 | L04/86 | New MAR alignment Y junction to fraser | | 6.092 | | | | | | | | | | 6.092 | | |
| PTC0021 | 7/08/2021 | M04/459 | 5 ways to Kilito fire break maintenance | N/A re-clear | 0 | | | | | | | | | | 0.000 | | |
| PTC0022 | 5/08/2021 | M04/459 | Northern Bore rd fire break maintenance | N/A re-clear | 0 | | | | | | | | | | 0.000 | | |
| PTC0023 | 4/08/2021 | L04/85 | Existing road from homestead to village fire break maintenance | N/A re-clear | 0 | | | | | | | | | | 0.000 | | |
| PTC0024 | 9/08/2021 | L04/85 | Village Fire break Maintenance | N/A re-clear | 0 | | | | | | | | | | 0.000 | | |
| PTC0025 | 15/08/2021 | L04/86 | New MAR Alignment Fraser river to village | 18 | 15.579 | | | | | | | | | | 15.579 | | |
| PTC0026 | 18/08/2021 | L04/84 | New MAR Alignment Village road to plant site | | 1.11 | | | | | | | | | | 1.110 | | |
| PTC0026 | 18/08/2021 | L04/86 | New MAR Alignment Village road to plant site | 16.7 | 4.466 | | | | | | | | | | 4.466 | | |
| PTC0026 | 18/08/2021 | M04/459 | New MAR Alignment Village road to plant site | | 9.891 | | | | | | | | | | 9.891 | | |
| PTC0027 | NOT ISSUED | M04/459 | Start of Borefield Track | 0 | 0 | | | | | | | | | | 0.000 | | |
| PTC0028 | NOT ISSUED | M04/459 | Borefield Track - MAR to Central Rd | 0 | 0 | | | | | | | | | | 0.000 | | |
| PTC0029 | 18/09/2021 | M04/459 | Access track for production bores TP803 and 15 and monitoring bores TMB11 and 12 | 1.6 | 0 | | | | | | | | | | 0.000 | | |
| PTC0030 | 18/09/2021 | M04/459 | Drill pads for production bores TP803 and 15 and monitoring bores TMB11 and 12 | 0.3 | 0.269 | | | | | | | | | | 0.269 | | |
| PTC0031 | 8/09/2021 | M04/459 | Topsoil storage area and access track | 3.1 | 3.067 | | | | | | | | | | 3.067 | | |
| PTC0032 | 4/09/2021 | M04/459 | Vegetation stockpile area within the TSF footprint to store vegetation from roads | 1.1 | 1.098 | | | | | | | | | | 1.098 | | |
| PTC0033 | 9/10/2021 | M04/459 | Partial clearing of the plant site and access | 11 | 9.989 | | | | | | | | | | 9.989 | | |
| PTC0034 | 16/10/2021 | M04/459 | Northern gravel occurrence. Soil investigation using 22 test pits to a maximum of 2.5 mBGL | 0.2 | 0 | | | | | | | | | | 0.000 | | |
| PTC0035 | 22/10/2021 | M04/459 | Northern gravel occurrence. Progressive excavation of pindan and gravels for MAR construction | 0 | 6.172 | | | | | | | | | | 6.172 | | |
| PTC0036 | 17/10/2021 | M04/459 | Diversion bund part 1 of 2 for site drainage | 11 | 9.252 | | | | | | | | | | 9.252 | | |
| PTC0037 | 19/10/2021 | L04/86 | MBE road clearing connecting meteorstone to new MAR | 0.068 | 0.086 | | | | | | | | | | 0.086 | | |
| PTC0038 | 21/10/2021 | L04/86 | Fraser river laydown area for culvert installation | 0.16 | 0.124 | | | | | | | | | | 0.124 | | |
| PTC0039 | 29/10/2021 | M04/459 | Diversion bund part 2 of 2 for site drainage | 1.48 | 1.426 | | | | | | | | | | 1.426 | | |
| PTC0040 | 28/10/2021 | M04/459 | Northern gravel occurrence. Progressive excavation of pindan and gravels for MAR construction | 6.91 | *Combine with PTC0035 | | | | | | | | | | 0.000 | | |
| PTC0041 | 29/10/2021 | M04/459 | Spoon drains along MAR | 0.7 | 0.497 | | | | | | | | | | 0.497 | | |
| PTC0042 | 6/11/2021 | L04/85 | 300 person village | 10.9 | 8.887 | | | | | | | | | | 8.887 | | |
| PTC0043 | 10/11/2021 | M04/459 | Extension to existing topsoil storage area (PTC0031) for additional topsoil storage capacity | 6 | 5.826 | | | | | | | | | | 5.826 | | |
| PTC0044 | 10/11/2021 | M04/459 | Northern gravel occurrence. Progressive excavation of pindan and gravels for MAR construction | 6.8 | 6.118 | | | | | | | | | | 6.118 | | |
| PTC0045 | 30/11/2021 | M04/459 | Construction water pipeline and access track | 8.23 | 8.499 | | | | | | | | | | 8.499 | | |
| PTC0046 | NOT ISSUED | M04/459 | Borefield Pipeline Road | 0 | | | | | | | | | | | 0.000 | | |
| PTC0047 | 18/11/2021 | L04/82 | Logue Culvert Stream Training | 0 | 0 | | | | | | | | | | | 0.000 | |
| PTC0047 | 18/11/2021 | L04/86 | Fraser Culvert Stream Training | 0 | 0 | | | | | | | | | | | | |
| PTC0048 | 17/12/2021 | L04/86 | Spoon drains along MAR | 0.37 | 0.22 | | | | | | | | | | 0.220 | | |
| PTC0049 | 10/02/2022 | M04/459 | Extension to Turkey nest area for machine access and fire break | 0.1 | 0.141 | | | | | | | | | | 0.141 | | |
| PTC0050 | 9/02/2022 | L04/86 | Extension to existing KMS gravel pit to win gravels for village construction | 0.037 | 0.11 | | | | | | | | | | 0.110 | | |
| PTC0051 | 10/02/2022 | M04/459 | Diversion of existing water corridor due to TSF design change | 0.74 | 0.77 | | | | | | | | | | 0.770 | | |
| PTC0052 | 22/02/2022 | M04/459 | Plant site comms tower | 0.48 | 0.412 | | | | | | | | | | 0.412 | | |
| PTC0053 | 22/02/2022 | M04/459 | LOM Landfill | 8.73 | 3.997 | | | | | | | | | | 3.997 | | |
| PTC0054 | 10/03/2022 | M04/459 | Southern Gravel Borrow pit, stage 1 clearing | 6.98 | 6.871 | | | | | | | | | | 6.871 | | |
| PTC0055 | 22/03/2022 | L04/85 | Linen shed, dry mess maintenance track, drains and north pad extension | 0.898 | 0.706 | | | | | | | | | | 0.706 | | |
| PTC0056 | 22/03/2022 | M04/459 | Create 1 way track between southern occurrence and plant | 1 | 0.186 0.925 | | | | | | | | | | 1.111 | | |
| PTC0057 | 22/03/2022 | L04/85 | Access track to village WWTP | 0.223 | 0.208 | | | | | | | | | | 0.208 | | |
| PTC0058 | 8/04/2022 | M04/459 | Southern Gravel Borrow pit, stage 2 clearing | 8.49 | 8.439 | | | | | | | | | | 8.439 | | |
| PTC0059 | 25/10/2022 | M04/459 | Southern Gravel Stage 3 | 2.17 | 2.126 | | | | | | | | | | 2.126 | | |
| PTC0060 | 26/04/2022 | M04/459 | Process Plant Extension B | 14.36 | 14.652 | | | | | | | | | | 14.652 | | |
| PTC0061 | 18/04/2022 | L04/82 | Upgrade Mt Jolaenga Intersection | 0.46 | 0.425 | | | | | | | | | | | 0.425 | |
| PTC0062 | 18/03/2022 | L04/85 | Village culvert realignment | 0.0166 | 0.019 | | | | | | | | | | 0.019 | | |

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|--------------|------------|---------|---|--------------|--------|--------|-------|
| PTC0063 | 18/05/2022 | L04/85 | New Village access road | 5.7 | 5.415 | 5.415 | |
| PTC0064 | 25/04/2022 | L04/82 | Haul Road main gate turnaround | N/A re-clear | 0 | 0.000 | |
| PTC0065 | 18/05/2022 | M04/459 | Borefield road extension and pad installation | 4.458 | 3.33 | 3.330 | |
| PTC0066 | 11/05/2022 | M04/459 | Required to construct separated road for moxy access to southern occurrence | 0.1 | 0.054 | 0.054 | |
| PTC0067 | 28/07/2022 | M04/459 | Process Plant Extension C | 8.08 | 7.154 | 8.645 | |
| PTC0067 rev1 | 29/07/2022 | M04/459 | Process Plant Extension C | 2.1 | 1.491 | | |
| PTC0068 | 31/05/2022 | L04/85 | Village sediment traps and drainage | 1.33 | 0.381 | 0.381 | |
| PTC0069 | 5/06/2022 | L04/85 | New Village road culvert installation | 0.14 | 0.125 | 0.125 | |
| PTC0070 | 17/06/2022 | M04/459 | TSF Stage 1, fence line, bore access and stockpile area | 10.02 | 9.661 | 9.661 | |
| PTC0071 | 21/06/2022 | M04/459 | TSF construction and access roads | 10.3 | 9.878 | 9.878 | |
| PTC0072 | 29/06/2022 | M04/459 | SSP construction | 12.2 | 11.658 | 11.658 | |
| PTC0073 | 6/07/2022 | M04/459 | Borefield realignment for flood mitigation | 5.66 | 5.306 | 5.306 | |
| PTC0074 | 8/07/2022 | M04/459 | SW portion of SSP | 12.4 | 12.384 | 12.384 | |
| PTC0075 | 8/07/2022 | M04/459 | TSF construction offices and laydown yard | 1.87 | 1.738 | 1.738 | |
| PTC0076 | 25/07/2022 | M04/459 | Clearing for grade control drilling | 14.3 | 13.778 | 13.778 | |
| PTC0077 | 5/08/2022 | E04/129 | Jillian Ridge Fire Breaks | 1.18 | 1.045 | | |
| PTC0078 | 15/07/2022 | M04/459 | Re-alignment of borefield road | 2.68 | 2.307 | 2.307 | |
| PTC0079 | 15/07/2022 | M04/459 | NE SSP Clearing | 14.9 | 15.216 | 15.216 | |
| PTC0080 | 15/07/2022 | M04/459 | NE corner of TSF | 12.8 | 12.776 | 12.776 | |
| PTC0081 | 15/07/2022 | M04/459 | NW corner of TSF | 16.2 | 16.283 | 16.283 | |
| PTC0082 | 26/07/2022 | M04/459 | Centre Portion of TSF | 39.8 | 39.767 | 39.767 | |
| PTC0083 | 28/07/2022 | M04/459 | Widening Borefield road | 1.49 | 1.484 | 1.484 | |
| PTC0084 | 28/07/2022 | L04/85 | Culverts installation | 0.132 | 0.187 | 0.187 | |
| PTC0085 | NOT ISSUED | M04/459 | Process Plant Spray Field | 0 | 0 | 0.000 | |
| PTC0086 | 15/08/2022 | M04/459 | Borefield Southern Diversion Drain | 6.1 | 5.949 | 5.949 | |
| PTC0087 | 5/08/2022 | M04/459 | South eastern corner of TSF | 12.8 | 12.788 | 12.788 | |
| PTC0088 | 5/08/2022 | L04/85 | Village culvert and additional VAR clearing | 0.056 | 0.11 | 0.110 | |
| PTC0089 | 23/08/2022 | M04/459 | TSF Diversion Drain | 6.93 | 6.443 | 6.443 | |
| PTC0090 | 23/08/2022 | M04/459 | TSF stage 11 embankments | 3.89 | 3.889 | 3.889 | |
| PTC0091 | 8/09/2022 | M04/459 | Plant Site to TSF Corridor | 0.61 | 0.574 | 0.574 | |
| PTC0092 | 8/09/2022 | M04/459 | Temporary comms corridor through TSF stage 11 | 0.23 | 0.178 | 0.178 | |
| PTC0093 | 13/09/2022 | M04/459 | Borefield Pad Drainage | 0.47 | 0.423 | 0.423 | |
| PTC0094 | 13/09/2022 | M04/459 | Stage 1 of MUP road | 0.61 | 0.427 | 0.532 | 0.105 |
| PTC0095 | 5/10/2022 | M04/459 | Borefield RMU Pads | 0.28 | 0.312 | 0.312 | |
| PTC0096 | 13/10/2022 | M04/459 | TSF Monitoring Bore Pads | 0.3 | 0.252 | 0.252 | |
| PTC0097 | 14/10/2022 | M04/459 | Northern Diversion Drain Stilling Basin | 0.73 | 0.687 | 0.696 | 0.010 |
| PTC0098 | 20/11/2022 | M04/459 | Work zones around SSP walls | 1 | 0.904 | 0.904 | |
| PTC0099 | 15/10/2022 | M04/459 | MUP road stage 2 | 0.84 | 0.861 | 0.861 | |
| PTC0099 rev1 | 20/01/2023 | M04/459 | MUP Road Stage 2b | 0.1 | 0.059 | 0.059 | |
| PTC0100 | 11/11/2022 | M04/459 | MUP road stage 3 | 4.93 | 0.098 | 4.623 | 4.525 |
| PTC0101 | 24/10/2022 | M04/459 | Southern Occurrence stage 4 test pits | 0.47 | 0.349 | 0.349 | |
| PTC0102 | 11/11/2022 | M04/459 | One way track SO to TSF | 1.27 | 0.66 | 1.231 | 0.571 |
| PTC0103 | 25/11/2022 | M04/459 | Stage 11 of TSF | 14.4 | 15.467 | 15.467 | |
| PTC0104 | 20/01/2023 | M04/459 | MUP Stage 4 | 0.37 | 0.402 | 0.402 | |
| PTC0105 | 27/03/2023 | M04/459 | TSF Skid Pad | 0.068 | 0.067 | 0.067 | |
| PTC0106 | 30/03/2023 | M04/459 | MUP Booster Pad & Corner Ext | 0.232 | 0.229 | 0.229 | |
| PTC0107 | 6/04/2023 | M04/459 | MUP Booster Pad Extension | 0.020 | 0.003 | 0.020 | 0.017 |
| PTC0108 | 4/05/2023 | M04/459 | MUP RMU Pad | 0.001 | 0.001 | 0.001 | |
| PTC0109 | 2/06/2023 | M04/459 | Carey Mining Week 1 - Stockpile and Access | 10.53 | 10.25 | 10.250 | |
| PTC0110 | 13/06/2023 | M04/459 | Carey Mining Week 2 - Access Road and Starter Pit | 7.584 | 7.285 | 7.285 | |
| PTC0111 | 15/06/2023 | M04/459 | TSF Skid Pad Extension | 0.072 | 0.07 | 0.070 | |
| PTC0112 | 21/07/2023 | M04/459 | Carey Mining Week 3 - Pit and Topsoil Dumps #2 | 2.244 | 1.972 | 1.972 | |
| PTC0113 | 20/07/2023 | M04/459 | Carey Laydown | 2.194 | 2.033 | 2.039 | 0.006 |
| PTC0114 | 16/07/2023 | L04/82 | GNH Intersection Upgrade | 0.608 | 0.608 | 0.608 | |
| PTC0115 | 18/09/2023 | M04/459 | SO Access Road Widening | 0.353 | 0.347 | 0.347 | |
| PTC0116 | 30/08/2023 | M04/459 | MUP Services Infrastructure | 0.832 | 0.752 | 0.752 | |
| PTC0117 | 7/09/2023 | M04/459 | Turkey Nest piping and Road corridor | 1.111 | 1.056 | 1.056 | |
| HX580 | 13/09/2023 | L04/85 | Diesel Spill Cleanup | N/A | 0.021 | 0.021 | |
| PTC0119 | 4/10/2023 | M04/459 | T1 Oversized Stockpile | 1.84 | 1.84 | 1.840 | |
| PTC0118 | 11/10/2023 | M04/459 | Power Station & Landfill fire breaks | 1.472 | 1.383 | 1.800 | |
| PTC0118 | 12/10/2023 | L04/85 | Village and Sprayfield fire breaks | 1.236 | 0.417 | | |
| HX730 | 18/10/2023 | M04/459 | Fire Breaks | N/A | 9.818 | 10.091 | 0.273 |
| PTC0122 | 30/10/2023 | M04/459 | MUP Turkey Nest | 0.225 | 0.201 | 0.201 | |
| PTC0120 | 18/12/2023 | M04/459 | Oversized Stockpiles | 7.774 | 7.262 | 7.262 | |
| PTC0121 | 21/12/2023 | M04/459 | North Pit | 3.25 | 0.82 | 0.820 | |
| PTC0121 v2 | 4/01/2024 | M04/459 | North Pit v2 | 2.435 | 2.435 | 2.435 | |
| PTC0123 | 4/02/2024 | M04/459 | Mining Topsoil Blocks 2 | 12.577 | 12.105 | 12.105 | |
| PTC0124 | 11/02/2024 | M04/459 | Mining Blocks | 10.328 | 10.062 | 10.062 | |
| PTC0125 | FUTURE | M04/459 | Landfill Stage 2 | 4.716 | 4.716 | 4.716 | |
| PTC0126 | NOT ISSUED | L04/86 | Village T Junction | 0.387 | | 0.000 | |
| PTC0127 | 3/05/2024 | M04/459 | Oversized North | 17.7 | 17.085 | 17.085 | |
| PTC0128 | 24/04/2024 | M04/459 | Mining Haul Road | 7.04 | 6.781 | 6.781 | |
| PTC0129 | 19/04/2024 | M04/459 | Mining Block Stage 4 | 8.67 | 8.543 | 8.543 | |
| PTC0130 | 29/04/2024 | M04/459 | Exploration Drilling Tracks | 12 | 9.666 | 9.666 | |
| PTC0131 | 13/05/2024 | M04/459 | North Pit | 6.07 | 5.923 | 5.923 | |

| | | | | | | | | | | | | | | | | |
|------------|------------|---------|------------------------------|--------|-------------------------|------|------|-------|-------|------|------|--------|--------|------|---------|-------|
| PTC0128 v2 | NOT ISSUED | M04/459 | Haul Road extension | 0.0139 | | | | | | | | 0.000 | | | | |
| PTC0132 | 25/06/2024 | M04/459 | Ilmenite Stockpile | 0.3 | 0.23 | | | | | | | 0.230 | | | | |
| PTC0133 | 16/08/2024 | M04/459 | Mining Ring Road | 0.66 | 0.602 | | | | | | | 0.602 | | | | |
| PTC0134 | 23/08/2024 | M04/459 | TSF Borrow Pit | 10.34 | 10.02 | | | | | | | 10.020 | | | | |
| PTC0204 | 28/10/2024 | M04/459 | 2024 Drone Clearing Audit | N/A | 1.27 0.325 | | | | | | | 1.595 | | | | |
| PTC0204 | 28/10/2024 | L04/85 | 2024 Drone Clearing Audit | N/A | 0.029 | | | | | | | 0.029 | | | | |
| PTC0135 | 16/11/2024 | M04/459 | Magazine Laydown | 1.511 | 1.474 | | | | | | | 1.474 | | | | |
| PTC0136 | 30/11/2024 | M04/459 | Topsoil Stockpile Stage 6 | 4.532 | 4.202 | | | | | | | 4.202 | | | | |
| PTC0137 | 11/12/2024 | M04/459 | Mining Stage 7 | 15.665 | 15.381 | | | | | | | 15.381 | | | | |
| INX3649 | 6/01/2025 | M04/459 | 5-ways Overclearing Incident | N/A | 0.039 | | | | | | | 0.039 | | | | |
| PTC0138 | 10/01/2025 | M04/459 | TSF to SO Rd ext. | 0.018 | 0.007 | | | | | | | 0.007 | | | | |
| PTC0139 | 22/03/2025 | M04/459 | Mining Corner Fillet | 0.017 | 0.028 | | | | | | | 0.028 | | | | |
| PTC0140 | 26/05/2025 | M04/459 | TSF3A Embankments | 0.386 | 0.025 | | | | | | | 0.025 | | | | |
| N/A | 9/06/2025 | 45817 | Kaynar Intersection | 0.011 | 0.011 | | | | | | | 0.011 | | | | |
| PTC0141 | 13/06/2025 | M04/459 | Mining Blocks 21 and 22 | 2.31 | 1.832 | | | | | | | 1.832 | | | | |
| | | | | | 0.00 | 0.00 | 1.11 | 23.28 | 36.65 | 0.00 | 0.00 | 294.36 | 202.03 | 1.05 | 551.160 | 14.01 |
| | | | | | AOD Total (minus POW's) | | | | | | | | | | 537.153 | |

6.3 Appendix C: Thunderbird Mineral Sands Project (EPBC 2016/7648): Terrestrial Fauna Environmental Management Plan and Offset Strategy Approval Letter (2018)



Mr Wayne Groeneveld
Sustainability Manager
Thunderbird Operations Pty Ltd
PO Box 205
WEST PERTH WA 6872

Thunderbird Mineral Sands Project (EPBC 2016/7648): *Terrestrial Fauna Environmental Management Plan and Offset Strategy*

Dear Mr Groeneveld

Thank you for submitting the Terrestrial Fauna Environmental Management Plan and Offset Strategy in accordance with Conditions 2 and 3 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval for EPBC 2016/7648.

Officers of this Department have advised me on the above, and the requirements of Conditions 2 and 3 of the approval for EPBC 2016/7648. On this basis, and as a delegate of the Minister for the Environment and Energy, I have decided to approve:

- the *Terrestrial Fauna Environmental Management Plan*, Version 5, dated 24 October 2018 as meeting the requirements of Condition 2 of the approval; and
- the *Offset Strategy*, dated 13 November 2018 as meeting the requirements of Condition 3 of the approval.

The approved Plan and Strategy must now be implemented.

Please note that the conditions of approval for EPBC 2016/7648 require, unless otherwise agreed in writing by the Minister, that the approved Plan and Strategy be published on your website within one month of the date of this approval.

The Department has an active monitoring program which includes monitoring inspections, and desktop document reviews and audits. Please ensure that you maintain accurate records of all activities associated with the conditions of approval, including implementation of the approved Plan and Strategy, so that they can be made available to the Department on request.

Should you require further information regarding my decision please contact Vaughn Cox on 02 6274 2005, or by email: post.approvals@environment.gov.au.

Yours sincerely

Greg Manning
Assistant Secretary
Assessments (WA, SA, NT) & Post Approvals Branch
Environment Standards Division

20 November 2018

6.4 Appendix D: Permit to Clear Example

TOPL PERMIT TO CLEAR

This form must be completed by the Permit Owner, signed by the Site Senior Executive or delegate and then emailed to the Environmental Team along with the clearing JHA before any area of soil or vegetation is disturbed. Once clearing has finished, permits must be completed and hard copies given to the Environmental Team for filing. **PTC #0123**

| | |
|--|---|
| Issued Date: 21/01/24 Permit Expiry Date: 04/02/24 | Permit Owner (KMS): Mark Bevan A. DUREAU |
| Description of location and tenement: Attach Map Northwest of the Current Mining Area | Location Grid Co-ordinates (GDA only): 495017 mE 8073956 mN |
| Purpose of the clearing: Clear space for the topsoil and vegetation stockpile | Temporary (<3 months) or Permanent (>3 months): Permanent |
| Current clearing on tenement (ha): 175.13 | Approved clearing allowance on tenement (ha): 233.46 |
| Land use: Topsoil Stockpiles & Transport | Is this land use approved on this tenement? Yes |
| Estimated area to be cleared (ha): 12.58 | Actual area cleared (ha): 12.105 |
| Proposed start date: 22/01/24 Proposed completion date: 29/01/24 | Actual start date: 1/2/24 Actual completion date: 4/2/24 |
| Topsoil volume (m³): 25160 2000 m³ per ha | How will the area be marked out prior to clearing? GPS in machinery, survey to flag boundary, continuous flags at corners at min. |

| CHECKS PRIOR TO COMMENCING | | | | CLEARING PROCEDURE |
|---|-------------------------------------|--|-------------------------------------|--|
| ITEM | ✓ | ITEM | ✓ | |
| Has TOPL-ENV-PRO Land Clearing Procedure been referred to and followed? | <input checked="" type="checkbox"/> | Has proposed clearing been kept to a minimum and avoided marked trees? | <input checked="" type="checkbox"/> | <ul style="list-style-type: none">Take photos of area PRE-CLEARANCE for rehabilitation purposesCheck topsoil is dry and mark out areaComplete a JHAWalk the dozer around any boundariesClear and stockpile vegetationClear and stockpile topsoil (up to 2 m high, single level, paddock dumped stockpiles)Store stockpiles away from traffic for rehabilitation purposesTo reduce weed invasion, ensure that no weed affected soil, mulch or fill is introduced |
| Has the proposed clearing area been compared against tenement boundaries, development envelope and clearing allowances? | <input checked="" type="checkbox"/> | Has the permit been signed and approved prior to commencing clearing? | <input checked="" type="checkbox"/> | |
| Is the Bilby pre-clearance survey completed for this area? Attach evidence | <input checked="" type="checkbox"/> | Has the area been clearly marked out prior to clearing? | <input checked="" type="checkbox"/> | |
| Have Heritage Monitors completed a pre-clearance survey? Attach evidence | <input checked="" type="checkbox"/> | Do operators understand the clearing required? | <input checked="" type="checkbox"/> | |

Please answer these questions:

Where will the topsoil be stockpiled?

No topsoil removal from stockpile areas, topsoil from road clearing will be placed on topsoil location cleared in this permit

Topsoil to be removed and stockpiled (paddock dumped) no greater than 2m high. DO NOT DRIVE ON TOPSOIL STOCKPILES.

Where will the vegetation be stockpiled?

Vegetation stockpiles placed on stockpile areas clearing within this permit

Separate vegetation and topsoil stockpiles.


Cost \$\$ - Have you considered the rehabilitation and ongoing costs to Thunderbird and whether this clearing necessary?

~\$48,000 to \$1,350,000 per hectare to rehabilitate cleared land at Thunderbird. Ongoing MRF Annual Levy cost of \$200/hectare.





Permit to Clear Conditions/Comments:

A Heritage Exclusion Zone is present to the north of the clearing boundary - 20m at the closest point. Extreme caution is to be taken with the clearing of this permit, to such a point that a spotter must be present during clearing along the northern edge. GPS file must be loaded into the machine prior to clearing and calibrated/checked prior to commencement. Permit Owner must walk entire clearing boundary and all sign-offs completed beforehand. No vegetation is to be pushed outside of clearing boundary. Continuous flagging installed at corners at minimum. Bilby pre-clearance completed on the 20/01/24, this permit expires on the 04/02/24.

Bilby and Heritage Pre-Clearance Survey Evidence Attached:

| ROLE | FULL NAME | SIGNATURE | DATE |
|-----------------------|-------------|---|------------|
| Environmental Advisor | Molly Ahern |  | 21/01/2024 |

Approvals to be signed **PRIOR** to clearing

| ROLE | FULL NAME | SIGNATURE | DATE |
|---------------------------|--|--|---------------|
| Permit Owner | Mark Bevan A. DUREAU |  | 1/2/24 |
| Machinery Operator #1 | WALTER SCOTT |  | 1/2/24 |
| Machinery Operator #2 | | | |
| Contractor Superintendent | A. DUREAU |  | 1/2/24 |
| Site Senior Executive | Shaun Higgins |  | 1/2/24 |

6.5 Appendix E: Greater Bilby Survey Summary

| Survey Area | Start Date | Start Coordinates | | Survey Area (ha) | Habitat Surveys Complete | Fauna Recording Complete | Bilby Activity Observed |
|---|------------|-------------------|----------|------------------|--------------------------|--------------------------|-------------------------|
| | | Easting | Northing | | | | |
| M2 Trial Mining Stage 2 | 28/5/21 | 496070 | 8073830 | 11 | YES | YES | NO |
| 18-30km New Mine Access Road | 14/7/21 | 505546 | 8064063 | 90.8 | YES | YES | YES |
| Fire Breaks | 4/8/21 | 502461 | 8071552 | 48 | YES | YES | YES |
| D4 Portion of Borefield and Service Corridor | 20/8/21 | 498769 | 8070926 | 3.74 | YES | YES | NO |
| D1-3 Portion of Borefield and Service Corridor | 25/8/21 | 496553 | 8068341 | 13.9 | YES | YES | YES |
| T1 Topsoil Stockpile Area | 30/8/21 | 498089 | 8072447 | 25.5 | YES | YES | NO |
| D5 Portion of Borefield | 30/8/21 | 498223 | 8071730 | 13.4 | YES | YES | NO |
| E1 TSF Vegetation Stockpile Area | 3/9/21 | 498451 | 8071349 | 18.9 | YES | YES | NO |
| D8 Portion of Borefield | 7/9/21 | 496740 | 8067820 | 118 | YES | YES | NO |
| B1 Partial Plant Area | 8/9/21 | 497733 | 8072880 | 30.2 | YES | YES | NO |
| D7 Portion of Borefield | 15/9/21 | 494409 | 8069492 | 7.41 | YES | YES | NO |
| B1b Partial Plant Site Survey #2 | 23/9/21 | 498153 | 8072374 | 20 | YES | YES | NO |
| B1c Partial Plant Site Survey #3 | 23/9/21 | 498153 | 8072374 | 20.5 | YES | YES | NO |
| A7 MBE Access Road | 7/10/21 | 502872 | 8067288 | 0.45 | YES | YES | NO |
| G1 Northern Gravel Occurance | 7/10/21 | 496045 | 8073828 | 27.2 | YES | YES | NO |
| A8 Fraser River Laydown | 8/10/21 | 504216 | 8065532 | 0.88 | YES | YES | NO |
| B1c Partial Plant Site Survey #4 | 8/10/21 | 498153 | 8072374 | 24 | YES | YES | NO |
| D9 Plant Diversion Drain | 14/10/21 | 499273 | 8070258 | 26.5 | YES | YES | YES |
| G2 Northern Gravel Occurrence North | 21/10/21 | 496571 | 8073960 | 11 | YES | YES | NO |
| C2 Village and Drains | 4/11/21 | 502445 | 8071426 | 25.4 | YES | YES | NO |
| G3 Northern Gravel Occurrence | 5/11/21 | 496096 | 8073884 | 15.4 | YES | YES | NO |
| T2 Topsoil Stockpile B | 9/11/21 | 498374 | 8072735 | 10.3 | YES | YES | NO |
| Fraser and Little Logue River Stream Trainings | 16/11/21 | 515161 | 8049658 | <0.5 | YES | YES | NO |
| Borefield Service Corridor | 23/11/21 | 494430 | 8069325 | 39.3 | YES | YES | YES |
| G4 KMS Gravel Pit Extension | 8/12/21 | 502657 | 8067484 | 2.11 | YES | YES | NO |
| MAR Spoon Drains North | 8/12/21 | 500418 | 8069379 | 2.1 | YES | YES | NO |
| MAR Spoon Drains South | 15/12/21 | 504011 | 8065830 | 0.4 | YES | YES | NO |
| KMS Gravel Pit Extension B | 25/1/22 | 502580 | 8067515 | 0.1 | YES | YES | NO |
| Plant Turkey Nest Extension | 25/1/22 | 497889 | 8072044 | 0.52 | YES | YES | NO |
| D10 Construction Water Service Corridor Extension B | 8/2/22 | 498684 | 8070787 | 17.1 | YES | YES | NO |
| Plant Turkey Nest Extension v2 | 9/2/22 | 497889 | 8072044 | 0.45 | YES | YES | NO |
| Landfill | 16/2/22 | 498442 | 8072007 | 12 | YES | YES | NO |
| Plant Communication Tower | 16/2/22 | 497575 | 8072710 | 1.68 | YES | YES | NO |
| Southern Gravel Occurrence A | 9/3/22 | 496053 | 8073330 | 11.2 | YES | YES | NO |
| Village Dry Mess Track, Drains, Linen Shed & Pad Ext. | 9/3/22 | 502133 | 8071438 | 1 | YES | YES | NO |
| Village WTP Road and Dry Mess | 21/3/22 | 502149 | 8071429 | 1 | YES | YES | NO |
| Southern Gravel Access Track | 22/3/22 | 496379 | 8073058 | 6.11 | YES | YES | NO |
| Southern Gravel Occurrence B | 6/4/22 | 496370 | 8073053 | 12.4 | YES | YES | NO |
| Process Plant Stage 2 | 13/4/22 | 497458 | 8072583 | 44.9 | YES | YES | NO |
| Mount Jowlaenga Intersection | 14/4/22 | 505540 | 8064110 | 1.37 | YES | YES | NO |
| Village Culverts | 14/4/22 | 502136 | 8071425 | <0.5 | YES | YES | NO |
| Haul Road Truck Turnaround | 20/4/22 | 515647 | 8049248 | 0.5 | YES | YES | NO |
| Borefield Stage 2 | 10/5/22 | 496600 | 8068245 | 12 | YES | YES | NO |
| Moxy Offshoot | 10/5/22 | 497158 | 8072517 | 0.19 | YES | YES | NO |
| New Village Access Road | 12/5/22 | 501113 | 8069372 | 9.97 | YES | YES | NO |
| Process Plant Extension C | 13/5/22 | 497422 | 8072558 | 12.8 | YES | YES | NO |
| New Village Road Culverts | 3/6/22 | 501342 | 8069676 | >0.5 | YES | YES | NO |
| TSF Stage 1 | 8/6/22 | 497981 | 8069901 | 21.8 | YES | YES | YES |
| TSF Stage 2 | 22/6/22 | 497782 | 8072029 | 15 | YES | YES | YES |

| Survey Area | Associated Clearing Permit | Start Date | Survey Coordinates | | Survey Area (ha) | Habitat Surveys Complete | Fauna Recording Complete | Bilby Activity Observed |
|--|----------------------------|------------|--------------------|----------|------------------|--------------------------|--------------------------|-------------------------|
| | | | Easting | Northing | | | | |
| Borefield Re-alignment Rev1 | PTC0073 | 04/07/22 | 495481 | 8068821 | 16.7 | YES | YES | NO |
| TSF Stage 4 | PTC0074 | 07/07/22 | 497930 | 8070483 | 14.3 | YES | YES | YES |
| TSF Offices | PTC0075 | 08/07/22 | 498195 | 8070220 | 1.86 | YES | YES | NO |
| Exploration Grade Control Drilling | PTC0076 | 13/07/22 | 495876 | 8073671 | 14.3 | YES | YES | NO |
| TSF Stage 5 | PTC0079 | 13/07/22 | 497724 | 8070908 | 19.6 | YES | YES | NO |
| Borefield Road Extension Stage 2&3 | PTC0078 | 14/07/22 | 497900 | 8069788 | 3 | YES | YES | NO |
| TSF Stage 7 | PTC0081 | 14/07/22 | 497886 | 8071353 | 20 | YES | YES | YES |
| TSF Stage 6 | PTC0080 | 15/07/22 | 497600 | 8071827 | 10.3 | YES | YES | NO |
| TSF Stages 8 & 9 | PTC0082 | 21/07/22 | 498094 | 8071646 | 45 | YES | YES | NO |
| Additional VAR | PTC0084 | 27/07/22 | 502387 | 8071425 | 0.46 | YES | YES | NO |
| Borefield Stage 5 | PTC0083 | 27/07/22 | 496705 | 8068363 | 3.89 | YES | YES | NO |
| Process Plant Ext C Rev1 | PTC0067 | 28/07/22 | 497624 | 8072227 | 6 | YES | YES | NO |
| Jillian Ridge Fire Breaks | PTC0077 | 02/08/22 | 504279 | 804498 | 1.38 | YES | YES | NO |
| TSF Stage 10 | PTC0087 | 04/08/22 | 498614 | 8070669 | 17.1 | YES | YES | NO |
| Village Culvert 5 & VAR Extra | PTC0088 | 05/08/22 | 501971 | 8071446 | <0.5 | YES | YES | NO |
| Borefield Stage 4 - Southern Diversion Drain | PTC0086 | 15/08/22 | 495287 | 8068552 | 11.4 | YES | YES | NO |
| TSF Stage 12 | PTC0089 | 20/08/22 | 498547 | 8071327 | 12.9 | YES | YES | YES |
| TSF Stage 11a | PTC0090 | 21/08/22 | 498345 | 8070422 | 8.74 | YES | YES | NO |
| TSF to Process Plant Corridor | PTC0091 | 06/09/22 | 497506 | 8072240 | 2 | YES | YES | NO |
| TSF Comms Corridor Stage 11b | PTC0092 | 08/09/22 | 498039 | 8070721 | 0.7 | YES | YES | NO |
| Borefield Realignment 1b | PTC0093 | 12/09/02 | 495349 | 8068903 | 1 | YES | YES | NO |
| MUP Stage 1 | PTC0094 | 12/09/22 | 497218 | 8072909 | 1.59 | YES | YES | NO |
| RMU Pads | PTC0095 | 02/10/22 | 496526 | 8068164 | 1 | YES | YES | NO |
| TSF&SSP Monitoring Bore Pads | PTC0096 | 12/10/22 | 498739 | 8070855 | 1.1 | YES | YES | NO |
| North Diversion Drain Western Stilling Basin | PTC0097 | 10/10/22 | 497233 | 8073015 | 2.48 | YES | YES | NO |
| Southern Occurence Stages 3&4 | PTC0059 & PTC0101 | 22/10/22 | 496673 | 8072848 | 6.85 | YES | YES | NO |
| TSF Zone 2 | PTC0098 | 20/11/22 | 497363 | 8070638 | 1.49 | YES | YES | NO |
| MUP Stage 2 | PTC0099 | 15/10/22 | 497215 | 8072931 | 3.5 | YES | YES | NO |
| MUP Stage 3 | PTC0100 | 11/11/22 | 496075 | 8073861 | 13 | YES | YES | NO |
| TSF to South Occurrence Corridor | PTC0102 | 11/11/22 | 496809 | 8072787 | 6.18 | YES | YES | NO |
| TSF Stage 11c | PTC0103 | 24/11/22 | 498537 | 8070723 | 14.4 | YES | YES | NO |
| MUP Stage 4 & 2B | PTC0104 | 17/01/23 | 496371 | 8073360 | 1.7 | YES | YES | NO |
| TSF Skid Pad | PTC0105 | 21/03/23 | 497458 | 8071985 | 0.33 | YES | YES | NO |
| MUP Booster Pad | PTC0106 | 26/03/23 | 496626 | 8073207 | 0.5 | YES | YES | NO |
| MUP Extra Corner | PTC0107 | 30/03/23 | 496377 | 8073352 | <0.5 | YES | YES | NO |
| MUP Booster Pad Ext & Corner | PTC0106 | 06/04/23 | 495782 | 8073350 | <0.5 | YES | YES | NO |
| MUP Corner2 | PTC0107 | 18/04/23 | 497332 | 8072772 | <0.5 | YES | YES | NO |
| MUP RMU Pad | PTC0108 | 04/05/23 | 495848 | 8073345 | <0.5 | YES | YES | NO |
| Mining Schedule Week 1 | PTC0109 | 02/06/23 | 496388 | 8073364 | 15.2 | YES | YES | NO |
| Mining Schedule Week 1-3 | PTC0110 | 09/06/23 | 495768 | 8073334 | 10 | YES | YES | NO |
| TSF Skid Pad Extension | PTC0111 | 09/06/23 | 497431 | 8071961 | 0.2 | YES | YES | NO |

| Survey Area | Associated PTC | Survey Date | Survey Coordinates | | Area to Clear (ha) | Area Surveyed (ha) | Habitat Surveys Complete | Fauna Recording Complete | Bilby Activity Observed |
|-----------------------------|----------------|-------------|--------------------|----------|--------------------|--------------------|--------------------------|--------------------------|-------------------------|
| | | | Easting | Northing | | | | | |
| Mining Wk 1 | PTC0109 | 2/06/2023 | 496456 | 8073486 | 10.38 | 15.20 | YES | YES | NO |
| Mining Schedule Wk1-3 | PTC0110 | 9/06/2023 | 495872 | 8073500 | 5.52 | 12.70 | YES | YES | NO |
| TSF Skid Pad Ext | PTC0111 | 9/06/2023 | 497415 | 8071907 | 0.07 | 0.50 | YES | YES | NO |
| Mining Topsoil Stockpiles 2 | PTC0112 | 9/07/2023 | 496965 | 8073777 | 2.24 | 4.50 | YES | YES | NO |
| Carey Laydown | PTC0113 | 9/07/2023 | 497355 | 8072895 | 2.24 | 2.50 | YES | YES | NO |
| GNH Upgrade | PTC0114 | 11/07/2023 | 515606 | 8048568 | 3.29 | 11.80 | YES | YES | NO |
| MUP Turkey Nest | PTC0117 | 25/08/2023 | 497049 | 8073013 | 0.84 | 1.37 | YES | YES | NO |
| M2 Road | PTC0116 | 27/08/2023 | 495873 | 8073372 | 0.75 | 0.75 | YES | YES | NO |
| MUP Turkey Nest | PTC0117 | 3/09/2023 | 496993 | 8073054 | 1.11 | 2.01 | YES | YES | NO |
| SO Widening | PTC0115 | 17/09/2023 | 495931 | 8073322 | 0.35 | 0.68 | YES | YES | NO |
| SO Widening | PTC0115 | 17/09/2023 | 495931 | 8073322 | 0.35 | 0.68 | YES | YES | NO |
| T1 Oversized | PTC0119 | 2/10/2023 | 496170 | 8073791 | 1.84 | 1.84 | YES | YES | NO |
| Oversized Stockpile | PTC0120 | 12/10/2023 | 496044 | 8074053 | 7.77 | 9.50 | YES | YES | NO |
| MUP Turkey Nest Ext. | PTC0122 | 23/10/2023 | 496870 | 8073157 | 0.23 | 0.50 | YES | YES | NO |
| Landfill Firebreak | PTC0118 | 9/11/2023 | 498219 | 8071954 | 1.15 | 2.68 | YES | YES | NO |
| Power Plant Firebreak | PTC0118 | 9/11/2023 | 497685 | 8072212 | 0.33 | 0.79 | YES | YES | NO |
| Village Firebreak | PTC0118 | 11/11/2023 | 502252 | 8071787 | 0.53 | 1.36 | YES | YES | NO |
| Oversized Stockpile | PTC0120 | 17/12/2023 | 496044 | 8074053 | 7.77 | 9.77 | YES | YES | NO |
| North Pit | PTC0121 | 17/12/2023 | 495812 | 8073864 | 3.25 | 3.85 | YES | YES | NO |
| North Pit v2 | PT0121 v2 | 4/01/2024 | 495814 | 8073870 | 2.44 | 2.44 | YES | YES | NO |
| Mining Topsoil Block 2 | PTC0123 | 20/01/2024 | 495033 | 8073912 | 12.58 | 18.52 | YES | YES | NO |
| Mining Blocks | PTC0124 | 7/02/2024 | 495375 | 8073645 | 15.39 | 18.20 | YES | YES | NO |

| Survey Area | Associated PTC | Survey Date | Survey Coordinates | | Area to Clear (ha) | Area Surveyed (ha) | Habitat Surveys Complete | Fauna Recording Complete | Bilby Activity Observed |
|-------------------------------|----------------|-------------|--------------------|----------|--------------------|--------------------|--------------------------|--------------------------|-------------------------|
| | | | Easting | Northing | | | | | |
| Ilmenite Stockpile | PTC0132 | 14/06/2024 | 497880 | 8072342 | 0.220 | 0.4 | YES | YES | NO |
| Mining Ring Road | PTC0133 | 1/08/2024 | 495670 | 8073957 | 0.651 | 1.3 | YES | YES | NO |
| TSF Burrow Pit | PTC0134 | 18/08/2024 | 497171 | 8071748 | 10.336 | 13.2 | YES | YES | NO |
| Magazine Laydown | PTC0135 | 9/11/2024 | 497400 | 8069150 | 1.511 | 2.5 | YES | YES | NO |
| Mining - Topsoil Stage 6 | PTC0136 | 17/11/2024 | 494727 | 8073976 | 4.301 | 5.5 | YES | YES | NO |
| Mining Block Stage 7 | PTC0137 | 11/12/2024 | 495249 | 8073293 | 15.651 | 23.751 | YES | YES | NO |
| SO to TSF 3-Way | PTC0138 | 9/01/2025 | 497123 | 8072578 | 0.018 | 0.08 | YES | YES | NO |
| Corner Fillet_South Ring Road | PTC0139 | 22/03/2025 | 495466 | 8072951 | 0.023 | 0.017 | YES | YES | NO |
| TSF3A_Embankments | PTC0140 | 24/05/2025 | 498515 | 8070185 | 0.387 | 0.465 | YES | YES | NO |
| Mining Blocks 21 and 22 | PTC0141 | 11/06/2025 | 495727 | 8073217 | 2.310 | 2.74 | YES | YES | NO |

6.6 Appendix F: Thunderbird Mineral Sands Project (EPBC 2016/7648) – revised Offset Strategy Approval Letter (2020)



Australian Government

Department of Agriculture, Water and the Environment

Mr Stuart Pether
Chief Operating Officer
Thunderbird Operations Pty Ltd
PO Box 205
WEST PERTH WA 6872

Thunderbird Mineral Sands Project (EPBC 2016/7648) – revised Offset Strategy

Dear Mr Pether

Thank you for submitting the revised Offset Strategy for approval in accordance with condition 11C of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval EPBC 2016/7648.

Officers of the Department have advised me on the revised strategy and on the requirements of the EPBC Act conditions of approval for this project. On this basis, and as a delegate of the Minister for the Environment, I have decided to approve the Offset Strategy, Rev 1, dated 8 September 2020. The approved strategy must now be implemented in place of the strategy originally approved on 20 November 2018.

As you are aware, the Department has an active monitoring program which includes monitoring inspections, desk top document reviews and audits. Please ensure that you maintain accurate records of all activities associated with, or relevant to, the conditions of approval including the implementation of the approved Offset Strategy, so that they may be made available to the Department on request.

Should you require any further information please contact Thomas Smith at Thomas.Smith@awe.gov.au or postapproval@awe.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Dwaine McMaugh', with a long horizontal flourish extending to the right.

Dwaine McMaugh
Director, Post Approvals
Environment Assessments (Vic, Tas) and Post Approvals Branch

7 October 2020

6.7 Appendix G: Ministerial Statement 1080 Thunderbird Mineral Sands Project, Condition 10 – Greater Bilby Research and Conservation Plan Submission

17 April 2023

Senior Manager
Environmental Compliance
Compliance and Enforcement
Department of Water and Environmental Regulation

By email: compliance@dwer.wa.gov.au

Attention: Senior Manager, Environmental Compliance

RE: Ministerial Statement 1080 THUNDERBIRD MINERAL SANDS PROJECT, Condition 10 – Greater Bilby Research and Conservation Plan Submission

On behalf of Thunderbird Operations Pty Ltd ('TOPL'), I am writing to formally submit the Greater Bilby Research and Conservation Plan ('GBRCP') in accordance with Condition 10 of Ministerial Statement 1080 (MS1080).

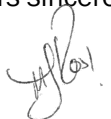
TOPL's correspondence to the Department of Water and Environmental Regulation (DWER) on 8 November 2022, provided an update on the Thunderbird Mineral Sands Project ('the Project') and confirmed the 'substantial commencement' date for the purposes of MS1080 of 7 October 2022 being the date the Financial Investment Decision for the Project was announced. Further to this correspondence, a meeting was then held with representatives of DWER and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and TOPL via Teams on 16 March 2023. The purpose of the meeting was to specifically discuss the GBRCP and its interrelationship with Greater Bilby offset requirements under EPBC Act Approval 2016/7648 for the Project.

The GBRCP has been prepared in accordance with the outcomes of this meeting. In short, it was agreed that due to the need to further revise the already approved Offset Strategy under EPBC Act Approval 2016/7648, the revised Offset Strategy would satisfy the MS1080 condition 10 requirement for a GBRCP. The Offset Strategy was originally approved on 12 September 2018 with a revised version approved on 7 October 2020. The combining of the Offset Strategy and GBRCP is also in the interests of harmonisation of the ongoing implementation of approval conditions, consistent with the principles of the Bilateral Assessment undertaken for the Project. It was also agreed in the meeting that in TOPL submitting the combined GBRCP/revised Offset Strategy to DWER, copy DCCEEW, that DWER would also coordinate with DCCEEW to align approval of the document for the purposes of both MS1080 and EPBC Act Approval 2016/70648.

TOPL subsequently advised via email on 27 March 2023 that due to the timing of availability of revised mine plan information, the GBRCP would instead be submitted on 17 April 2023 rather than the previously advised date of early April 2023.

If you have any questions regarding this letter and the attached GBRCP, please do not hesitate to contact Gayle Williams on 043 8189 286 or gayle@envirominded.pro.

Yours sincerely



Michael Rose
Chief Operating Officer
Kimberley Mineral Sands

Cc: DCCEEW – Director, Post Approvals Section

6.8 Appendix H: Proof of Payment to Greater Bilby Offset Fund



Account details

Account name

Bilby Guarantee

Account number

Currency

AUD

Account balance summary

Opening balance:

Total credits:

Total debits:

Closing balance:

Date from:

01 January 2025

Date to:

11 June 2025

Transaction details

| Date | Narrative | Reference number | Debit amount | Credit amount | EOD balance |
|------------|--|------------------|--------------|---------------|-------------|
| 02/01/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 02/01/2025 | MISCELLANEOUS CREDIT AS AT 02/01/2025 YOUR VARIABLE CR INTEREST RATE IS 1.800% | | | | |
| 31/01/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 845.23 CR | |
| 03/02/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 03/02/2025 | MISCELLANEOUS CREDIT AS AT 03/02/2025 YOUR VARIABLE CR INTEREST RATE IS 1.800% | | | | |
| 28/02/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 764.60 CR | |
| 28/02/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 28/02/2025 | MISCELLANEOUS CREDIT PLEASE NOTE FROM TODAY YOUR DR INTEREST RATE IS 15.160% | | | | |
| 28/02/2025 | MISCELLANEOUS CREDIT AS AT 28/02/2025 YOUR VARIABLE CR INTEREST RATE IS 1.550% | | | | |
| 03/03/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |

Transaction History Report (Continued)

| Date | Narrative | Reference number | Debit amount | Credit amount | EOD balance |
|------------|---|------------------|--------------|---------------|-------------|
| 03/03/2025 | MISCELLANEOUS CREDIT AS AT 03/03/2025 YOUR VARIABLE CR INTEREST RATE IS 1.550% | | | | |
| 31/03/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 729.96 CR | |
| 01/04/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 01/04/2025 | MISCELLANEOUS CREDIT AS AT 01/04/2025 YOUR VARIABLE CR INTEREST RATE IS 1.550% | | | | |
| 30/04/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 707.34 CR | |
| 01/05/2025 | MISCELLANEOUS CREDIT AS AT 01/05/2025 YOUR VARIABLE CR INTEREST RATE IS 1.550% | | | | |
| 01/05/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 23/05/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 23/05/2025 | MISCELLANEOUS CREDIT AS AT 23/05/2025 YOUR VARIABLE CR INTEREST RATE IS 1.350% | | | | |
| 30/05/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 686.91 CR | |
| 30/05/2025 | MISCELLANEOUS CREDIT PLEASE NOTE FROM TODAY YOUR DR INTEREST RATE IS 14.910% | | | | |
| 02/06/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 02/06/2025 | MISCELLANEOUS CREDIT AS AT 02/06/2025 YOUR VARIABLE CR INTEREST RATE IS 1.350% | | | | |
| 11/06/2025 | TRANSFER CREDITS NABCONNECT 290539811 Jan-Mar 25 CPI | | | 4,915.04 CR | |
| 11/06/2025 | TRANSFER CREDITS NABCONNECT 290516901 Oct-Dec 24 CPI | | | 3,795.62 CR | |
| 11/06/2025 | TRANSFER CREDITS NABCONNECT 290517288 Jan-Mar 25 Gntee | | | 87.50 CR | |

End of report



Account details

Account name

Bilby Offset

Account number

Currency

AUD

Account balance summary

Opening balance:

Total credits:

Total debits:

Date from:

Date to:

23,467.46 CR

CR

01 January 2025

11 June 2025

Transaction details

| Date | Narrative | Reference number | Debit amount | Credit amount | EOD balance |
|------------|--|------------------|--------------|---------------|-------------|
| 02/01/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 02/01/2025 | MISCELLANEOUS CREDIT AS AT 02/01/2025 YOUR VARIABLE CR INTEREST RATE IS 1.800% | | | | |
| 31/01/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 1,604.96 CR | |
| 03/02/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 03/02/2025 | MISCELLANEOUS CREDIT AS AT 03/02/2025 YOUR VARIABLE CR INTEREST RATE IS 1.800% | | | | |
| 28/02/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 1,451.86 CR | |
| 28/02/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 28/02/2025 | MISCELLANEOUS CREDIT PLEASE NOTE FROM TODAY YOUR DR INTEREST RATE IS 15.160% | | | | |
| 28/02/2025 | MISCELLANEOUS CREDIT AS AT 28/02/2025 YOUR VARIABLE CR INTEREST RATE IS 1.550% | | | | |
| 03/03/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |

Transaction History Report (Continued)

| Date | Narrative | Reference number | Debit amount | Credit amount | EOD balance |
|------------|---|------------------|--------------|---------------|-------------|
| 03/03/2025 | MISCELLANEOUS CREDIT AS AT 03/03/2025 YOUR VARIABLE CR INTEREST RATE IS 1.550% | | | | |
| 31/03/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 1,386.08 CR | |
| 01/04/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 01/04/2025 | MISCELLANEOUS CREDIT AS AT 01/04/2025 YOUR VARIABLE CR INTEREST RATE IS 1.550% | | | | |
| 30/04/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 1,343.13 CR | |
| 01/05/2025 | MISCELLANEOUS CREDIT AS AT 01/05/2025 YOUR VARIABLE CR INTEREST RATE IS 1.550% | | | | |
| 01/05/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 23/05/2025 | MISCELLANEOUS CREDIT AS AT 23/05/2025 YOUR VARIABLE CR INTEREST RATE IS 1.350% | | | | |
| 23/05/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 30/05/2025 | CREDIT INTEREST INTEREST CA INTEREST THUNDER OPER | | | 1,304.35 CR | |
| 30/05/2025 | MISCELLANEOUS CREDIT PLEASE NOTE FROM TODAY YOUR DR INTEREST RATE IS 14.910% | | | | |
| 02/06/2025 | MISCELLANEOUS CREDIT WHEN YOUR BALANCE IS \$10,000 OR MORE | | | | |
| 02/06/2025 | MISCELLANEOUS CREDIT AS AT 02/06/2025 YOUR VARIABLE CR INTEREST RATE IS 1.350% | | | | |
| 11/06/2025 | TRANSFER CREDITS NABCONNECT 290539859 Jan-Mar 25 CPI | | | 9,185.58 CR | |
| 11/06/2025 | TRANSFER CREDITS NABCONNECT 290516839 Oct-Dec 24 CPI | | | 7,094.00 CR | |
| 11/06/2025 | TRANSFER CREDITS NABCONNECT 290517211 Jan-Mar 25 Offset | | | 97.50 CR | |

End of report

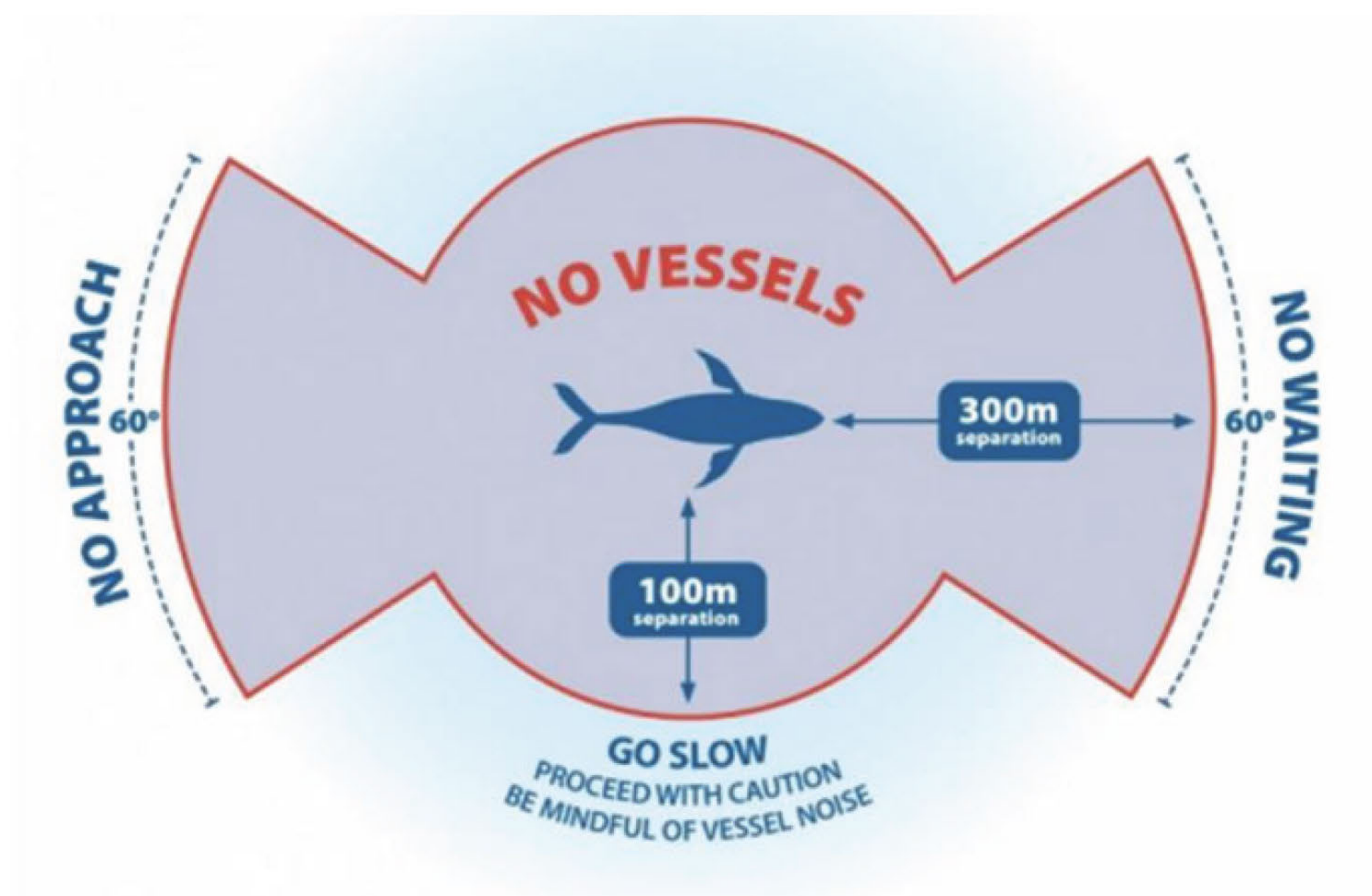
6.9 Appendix I: Humpback Whale Migration – July to October; Kimberley Ports Authority Environment Bulletin

ENVIRONMENT BULLETIN

HUMPBACK WHALE MIGRATION – July to October

The Western Australian coastline is a known migration route for the Western Australian Humpback whale population. The migration occurs between July to October with their migration to breeding grounds in the Kimberley occurring between July and August and their southward migration back to the Antarctic feeding areas between August and October. Humpback whales typically travel along the coastline, sometimes swimming in waters as shallow as 200 meters during their migration.

Vessel operators are reminded to maintain a safe distance from whales of 100m from either side or 300m from in front.



These rules are designed to protect whales from an unacceptable level of impact from human activities.

What to do if there is an incident involving a Humpback Whale?

If your vessel is involved in an incident you are required to report the event to the Department of Biodiversity, Conservation and Attractions (DBCA) and to work with them to determine the best course of action.

Contact the **DBCA Wildcare Helpline** on **9474 9055** to report a sick, injured, or deceased whale or marine fauna.

If there is a hazard or incident involving a Humpback whale or **ANY** marine fauna in port waters, please contact info@kimberleyports.wa.gov.au and provide the following information (where possible):

- Time and exact location the marine fauna was encountered (provide coordinates if possible).
- Type of marine fauna and assumed maturity (i.e. juvenile or mature). Where safe and practicable, take photographs.
- Condition of the marine fauna, including physical condition (i.e. wounds etc.) and behavioural response (i.e. flighty, lethargic/non-responsive, etc.).
- If the marine fauna could pose a navigation hazard; and
- DBCA Wildcare incident report number (if applicable).



6.10 Appendix J: Commencement of the Action – Thunderbird Mineral Sands Project, WA, EPBC 2016/7648



Australian Government
**Department of Agriculture,
Water and the Environment**

Ref: EPBC 2016/7648
Email: epbcmonitoring@awe.gov.au

Stuart Pether
Chief Executive Officer
Kimberley Mineral Sands
Level 2, 41-47 Colin Street,
WEST PERTH WA 6005

Dear Mr Pether,

**Commencement of the Action – Thunderbird Mineral Sands Project, WA,
EPBC 2016/7648**

I refer to your letter on 16 December 2021 on behalf of Thunderbird Operations Pty Ltd notifying the Department of Agriculture, Water and the Environment (the department) of commencement of the action for Thunderbird Mineral Sands Project, WA in accordance with condition 6 of the *Environment Protection and Biodiversity Conservation Act 1999* (the Act) approval EPBC 2016/7648.

I note that the action commenced on 11 August 2021.

Condition 8 – Annual Compliance Reporting

Condition 8 of the approval states that the approval holder must prepare an Annual Compliance Report for each 12-month period preceding 30 June annually, following the commencement of the action. The approval holder must continue to publish each report and notify the Department of publication until the expiry of this approval on 30 June 2073. The reports must be published on the website by 30 June each year.

Please notify the department of publication of the reports by email, including a link to where the report is publicly available to epbcmonitoring@awe.gov.au. Please note the first Annual Compliance Report is due by 30 June 2022.

When preparing the report please refer to the department's Annual Compliance Report Guidelines available on the department's website at <http://www.environment.gov.au/epbc/publications/annual-compliance-report-guidelines>

I note that the notification of commencement was made outside the timeframe stipulated in condition 6 of the approval. I note that this delay may constitute a breach of section 142 of the EPBC Act. On this occasion, I consider it appropriate that no further compliance action is taken in response to this matter. This matter may be noted in your compliance history under the EPBC Act.

Please note that the conditions of approval require the approval holder to maintain accurate records of all activities associated with, or relevant to, the approval conditions so that they can be made available to the department on request. These documents may be

subject to audit and be used to verify compliance. Summaries of audits may be published by the department.

More information about the department's Monitoring and Audit program is available on the department's website at <http://www.environment.gov.au/epbc/compliance-and-enforcement/auditing>.

Section 142 of the Act requires an approval holder to comply with conditions attached to an approval. Penalties may apply to approval holders who contravene conditions.

If you would like to discuss this matter further, please contact Olivia Moore at epbcmonitoring@awe.gov.au

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Th' followed by a stylized flourish.

Thomas Long
Assistant Director
Environmental Audit Section
18 January 2022

Kimberley Mineral Sands Pty Ltd ACN 623 201 507 | Thunderbird Operations Pty Ltd ACN 611 351 743

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