

Mining Management Exploration Activities

Northern Territory of Australia – Mining Management Act 2001

It is recommended that the Mining Management Plan (MMP) is completed in conjunction with the user guide available on the [Northern Territory Government website](#).

Section 1 – Project Details

Project Name Provide new or existing project name	Mountain Home
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Authorisation Number Insert existing authorisation number, where applicable	NEW
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Operator Name Use ASIC-ABR registered name (if a company), or name of the applicant	Redbank Operations Pty Ltd
Operator ABN and ACN numbers	ABN 58 109 362 165 ACN 109 362 165

Location and Access Details Include brief description of the location, access details, and distance to nearest town or community	The project area is located approximately 130km south-southeast of Borroloola and approximately 50 km east of Kiana Downs homestead. The area of proposed work occurs within the Kiana Downs Pastoral Lease with access to the project via Wollogorang Road, and a series of station tracks.
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Target Commodity Details Include target mineral commodities (i.e. gold, copper etc.)	Copper, Gold
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Mining Activities Summarise the mining activities (exploration) to be the subject of the proposed Authorisation or Variation. Drilling programs over a maximum of four years are supported and encouraged and can be staged. Please refer to the guidelines for further information.	An exploration drilling program comprising 34 RC/DD drill holes is proposed within the polygon work area. 34 drill holes are proposed using a combination of RC and DD drilling methods with hole depths of up to 400m. Approximately 4.5km of new tracks will be required to access the work area and the proposed drillholes.
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<p>Proposed Schedule Include start and finish dates of ground disturbing work</p>	<p>Exploration is expected to commence in August 2024 and continue throughout the dry season months until November 2025.</p>
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Mining Interest and Land Ownership

List the mining interests (titles), the title holder name/s, the title expiry date and the Property name/Land holder (e.g. pastoralist or Aboriginal land trust) for each title.

Title Number	Title Holder	Expiry Date	Underlying Property Name or Land Holder
EL32470	Redbank Operations Pty Ltd	29/03/2027	<p>NT Portion 1164, Kiana Downs Station (PPL); and NT Portion 4412, (CLP)</p> <p>Mining activities under this MMP occur within NT Portion 1164, Kiana Downs Station.</p>

Please note a Land Access Agreement (LAA) is required for disturbance proposed on Pastoral Properties on Exploration Licence (EL).

Organisational Structure

Position Title	Name
Managing Director	Malcolm James
Senior Geologist	Brent Simpson

Section 2 – Operator Self-Assessment of the Environmental Risk

The purpose of this self-assessment is to ensure Operators complete a project risk assessment of potential environmental impacts and are aware of other legislative obligations from various Agencies. As a result of this self-assessment, further information may be required in the form of a management plan to enable full assessment of the MMP. If you have any queries please contact a Mining Officer prior to submitting the MMP. Useful resources to assist with this self-assessment are provided in the User Guide.

Environmental considerations

ASSESSMENT ASPECT	YES or NO	ACTIONS REQUIRED (if answered YES)	APPENDED INFORMATION (e.g. evidence of consultation with DEPWS and/or management plan where required).
<p>Step 1: Are there any threatened flora and fauna species or habitats of significance that may occur in the proposed work area?</p>	<p>Yes</p>	<p>The Operator must assess the likelihood of threatened species or their habitats occurring at or near the site. If the likelihood is high, then a “Significant Impact Assessment” must be undertaken and appended to this document.</p> <p>NR Maps show no records of threatened flora or fauna species within the vicinity of the project area. The Protected Matters Search Tool (PMST) indicates 18 threatened species could occur within the broader project area. NR Maps records and the results of the PMST are reviewed in Attachment A.</p> <p>In summary, 18 species listed as threatened under the Commonwealth EPBC Act were revealed, including three Critically Endangered species, the Northern Blue-tongued Skink, Mitchell’s Water Monitor and coastal shorebird (and sometimes found at inland wetlands) Curlew Sandpiper. The likelihood of encountering the Mitchell’s Water Monitor or the Curlew Sandpiper in the project work area is considered low due to the work area being located well away from waterways/water bodies. There is potential for the Northern Blue-tongued Skink to occur in the broader project area, however the proposed works are not expected to impact the species given the small disturbance footprint and the environmental management protocols outlined in Section 6 which will be employed for the proposed works.</p>	<p>e.g.</p> <ul style="list-style-type: none"> - Consulted EPBC Protected Matters Search Tool and appended it to this document. - Consulted EPBC Protected Matters Search Tool.

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	<p>A further six Endangered species have potential to occur in the broader project area. The likelihood of encountering three of these species, including the Gulf Snapping Turtle, Mertens' Water Monitor and the Australian Painted Snipe is considered low given their preferred water habitat. Of the remaining three species, the Northern Quoll, which prefers a rocky habitat is not expected to be encountered given the topography of low rolling hills and limited rocky outcrop. The Gouldian Finch, which is known to inhabit wood hills with hollow-bearing Snappy Gums or Salmon Gums for nesting during the dry season, and the Red Goshawk with a preferred habitat of tall open eucalypt forest and riparian areas could occur. Given the small disturbance footprint and the proposed use of minimal blade up method clearing and the avoidance of mature and/or hollow bearing trees, the species are not expected to be impacted by proposed works.</p> <p>Works are also planned to occur exclusively during the dry season which will limit encounters with water habitat. The proposed route to the work area has also been deliberately chosen to avoid permanent water bodies and associated riparian vegetation. Drill pad construction will be situated away from watercourses, and drill site runoff will be managed through the implementation of sumps.</p> <p>The following measures will be implemented to mitigate / manage potential impacts of proposed works on species or habitats including:</p> <ul style="list-style-type: none"> - Utilise existing tracks where possible. - Tracks routes to avoid permanent water courses and associated riparian vegetation. - Clearing wherever possible will be raised blade to prevent unnecessary disturbance and erosion. - Clearing will work around vegetation wherever possible, including mature and/or hollow bearing trees. - Erosion will be carefully monitored in where raised blade clearing is not possible and remedial action put in place. - All exploration activities will be conducted during the dry season. - Caves and deep cracks in rocks (escarpment country) will be avoided. - Avoid disturbance to sensitive vegetation. 	
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ASSESSMENT ASPECT	YES or NO	ACTIONS REQUIRED (if answered YES)	APPENDED INFORMATION <small>(e.g. evidence of consultation with DEPWS and/or management plan where required).</small>
Step 2: Are there any known declared weeds within the proposed work area?	No	Seek advice from DEPWS – Weed Management Branch to determine if weeds are present on site and ensure management measures are appropriate for the level of activity proposed and attach a Weed Management Plan (if required). A search of NR Maps shows that there are no known declared weeds within the project or broader work area, however risk reduction measures such as the cleaning of vehicles for weeds / seeds before entering the work area will be implemented to ensure the possibility of spreading weeds during the program is avoided (refer Attachment 1).	
Step 3: Will you be using water from bores or other sources for the operation?	No	Water related matters on mineral titles are no longer exempt from the <i>Water Act 1992</i> . Please consult with DEPWS Water Resources and/or familiarise yourself with the <i>Water Act</i> to ensure compliance under this Act when undertaking exploration activities. RC drilling is the likely drill method to be employed for the duration of the work program. If DD method is employed, water for drilling purposes will be transported to site.	

Environmental assessment and cultural considerations

ASSESSMENT ASPECT	YES or NO	MANAGEMENT REQUIREMENTS
Step 4: Is your project likely to have a significant impact on the environment?	No	Refer to the NTEPA Environmental Factors and Objectives Guideline. Ground disturbance will be limited to vehicle access for heavy machinery such as a drill rig, as well as clearing for drill pads. Existing tracks will be used wherever possible and raised blade clearing implemented where applicable.

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ASSESSMENT ASPECT	YES or NO	MANAGEMENT REQUIREMENTS
<p>Step 5: Are there Aboriginal sacred sites in the Project area?</p>	Yes	<p>Sacred Sites are protected under the NT <i>Aboriginal Sacred Sites Act 1989</i> and administered by the Aboriginal Areas Protection Authority (AAPA). It is recommended that advice be sought from AAPA in relation to sacred site protection.</p> <p>An AAPA Abstract of Records was obtained for the area of EL32470 in July 2020. A copy is provided as Attachment 2. The abstract shows no registered or recorded sacred (or other) sites located in the vicinity of the proposed work area. There are however recorded (and other) sites located some 18km to the northwest of the works area.</p> <p>AAPA Authority Certificate requirements are also currently being investigated for the project area.</p>
<p>Step 6: Are there archaeological and heritage sites in the Project area?</p>	No	<p>Heritage and archaeology sites are protected in the NT. NT Department of Territory Families, Housing and Communities (DTFHC) administers the <i>Heritage Act 2011</i>.</p> <p>A search of the NT Heritage Register did not reveal any declared heritage places or objects within Kiana Pastoral Station. Further advice has been sought from the Heritage Branch of DTFHC as to whether there are any known Aboriginal and Macassan archaeological places or objects within the proposed works or broader area.</p> <p>In the event that an Aboriginal or Macassan archaeological place or object or other heritage place or object is discovered during the proposed work activities, activities in that area of work will cease, and the Department of Territory Families, Housing and Communities (DTFHC) advised as soon as practicable after discovery.</p>

Section 3 – Amendments

As per Section 41(3) of the *Mining Management Act*, an MMP reviewed and amended under Section 41(1)(a) is to have amendments made since the previous MMP submission clearly identified.

Section	Amendment

Section 4 –

Activities Proposed for this MMP only

Mining Interests (i.e. titles)	EL32470
Number and type of proposed exploration drill holes	34 RC/DD
Maximum depth of proposed holes (m)	400m
Number and size of drill pads to be cleared (Length: 40m x Width: 20)	800m ² x 34 =27,200m ²
Total area of drill pads to be cleared (ha)	2.72ha
Number of proposed water bores	N/A
Is drilling likely to encounter groundwater in multiple or confined aquifers? (Y, N, unsure) If answering yes, please provide the number of exploration holes where this is likely to occur	Unsure, no previous drilling in this location.
Number of costeans	N/A
Volume to backfill costeans (Length: m x Width: m x Depth: m)	N/A
Number of bulk sample pits	N/A
Volume to backfill bulk sample pits (Length: m x Width: m x Depth: m)	N/A
Bulk sample pits approved under <i>Mineral Titles Act</i> ? (Y or N). If Yes provide approval	N/A
Line/track clearing: (length m x width m)	4500m x 3m =13,500m ²

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Mining Interests (i.e. titles)	EL32470
Area of proposed line/track clearing (ha)	1.35ha
Camp area to be cleared (ha)	N/A
Camp Infrastructure (i.e. demountable, tents) Please provide a complete list with measurements as required in the security calculation	N/A
Other	N/A
Total proposed area of disturbance (ha)	4.07ha

Section 5 – Previous Disturbance (for existing Authorisations only)

The 'Disturbance Tracking' spreadsheet must be completed and attached to the MMP submission to complete this section. The spreadsheet is available on the departmental web page where this template is located.

Section 6 – Environmental Management

By checking these shaded boxes, you are agreeing to implement the following minimum environmental management standards on the project area. Where boxes have been left unchecked, justification is required.

6.1	✓	Blade-up approach for clearing will be used (i.e. no windrows, leave root stock and topsoil)
6.2	✓	Significant vegetation will be avoided during clearing (i.e. large trees, specimens providing habitat or food sources, riparian vegetation, and threatened species)
6.3	✓	Vegetation clearing during, and immediately after rainfall events, will be avoided
6.4	✓	Vegetation clearing will be kept to the minimum required to safely traverse vehicles and drill rigs along tracks and drill pads
6.5	✓	Where blade-up techniques cannot be employed, topsoil and vegetation will be stockpiled appropriately for rehabilitation purposes
6.6	✓	All employees and contractors will be trained and inducted in relation to the management of environmental risks in the work area, including weeds, waterways, threatened species, soil erosion, sacred sites and heritage areas
6.7	✘	Sumps will be lined or tanks of appropriate size to contain water, sediment and drilling fluids encountered during drilling, will be used. Sumps will not be lined but allowed to drain and dry out naturally before being backfilled post drilling. Only biodegradable drilling fluids will be used.
6.8	✓	Sumps, drill holes, and fuel stores will be located away from environmentally significant areas and water courses
6.9	✓	Excavations (sumps, costeans and pits) will be appropriately ramped to allow fauna egress
6.10	✓	Drill holes will be securely capped immediately after drilling
6.11	✓	Vehicle hygiene measures will be employed to prevent the introduction and spread of invasive species and pathogens when mobilising vehicles and equipment from one location to another
6.12	✓	Hydrocarbon spills will be minimised using liners and drip trays under machinery, and appropriately sized spill-kits available in the event of a spill
6.13	✓	Hazardous substances (including hydrocarbons) will be stored and handled in accordance with relevant Australian Standards
6.14	✓	Hydrocarbons will be stored in lined and bunded areas
6.15	✓	Waste will be stored securely while on-site to minimise windblown rubbish and access by feral animals
6.16	✓	Waste will be removed off-site and disposed of at an appropriate waste management facility
6.17	✓	All environmental incidents will be reported to the Department in accordance with Section 29 of the <i>Mining Management Act</i> .

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6.18	✓	Acid and Metalliferous Drainage (AMD) and Potentially Acid Forming (PAF) material derived from drilling cuts will be managed to avoid AMD and PAF related issues on site.
6.19	✓	Radioactive/NORM drill cuttings will be managed to avoid radiation related issues on site.
6.20	✓	Dust management will be implemented on site.

Justification and alternative management measures:

See point 6.7.

Section 7 – Rehabilitation and Closure

By checking these shaded boxes, you are agreeing to implement the following minimum rehabilitation standards on the project area. Where boxes have been left unchecked, justification is required.

A refund of security related to completed rehabilitation on site requires the submission of a rehabilitation report including photographs, an updated security calculation and updated disturbance tracking spreadsheet to the Department.

7.1	✓	Drill holes will be plugged below ground level at a minimum depth of 0.4 metres and soil mounded to prevent subsidence, within 6 months of completion of drilling.
7.2	✓	Drill holes encountering multiple or confined aquifers will be grouted with concrete.
7.3	✓	Drill samples/spoil will be returned down drill holes, buried in sumps, or removed from site.
7.4	✓	All drill hole and access markers including flagging tape, wooden markers and star pickets will be removed from site.
7.5	✓	Cut and fill drill pads will be re-contoured to be consistent with the surrounding terrain.
7.6	✓	Drill pads and compacted areas along the contour (on sloping ground) will be ripped/scarified of and tracks will be cross-ripped (zig-zag).
7.7	✓	Tracks will be rehabilitated, including pushing in all windrows, unless otherwise agreed in writing by the land holder or appropriate third party.
7.8	✓	Appropriate erosion and sediment controls will be installed where erosion is evident or likely to occur.
7.10	✓	Access through watercourses will be removed and banks restored.
7.11	✓	All previously disturbed areas will be stable, with no evidence of active soil erosion.
7.12	✓	All excavations will be backfilled within 6 months of their completion.
7.13	✓	All water bores will be decommissioned unless otherwise agreed in writing by the land holder or appropriate third party.
7.14	✓	All rubbish and infrastructure will be removed from site.
7.15	✓	Topsoil will be replaced and vegetation re-established.
7.16	✓	Contaminated soils (e.g. hydrocarbon or hazardous chemicals) will be rehabilitated or removed from site.
7.17	✓	Monitoring will be undertaken following the wet season or a significant rainfall event.

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Justification and alternative management measures:

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Section 8 – Required Attachments

8.1	✓	Initial Application for Authorisation or variation of Authorisation (only if details on the form have subsequently changed).
8.2	N/A	Nomination of Operator Form, where required
8.3	✓	Security Calculation Spreadsheet
8.4	✓	Evidence of Land Access Agreement if operating on an Exploration Licence (EL) on Pastoral Lease (e.g. two-ways exchange of email)
8.5	✓	Disturbance tracking spreadsheet (for existing Authorisations)
8.6	✓	Spreadsheet with coordinates of proposed drill holes or polygons of target areas
8.7	✓	KML/shape files/track logs of proposed tracks, camp sites and proposed drill holes or polygons of target areas
8.8	✓	Map(s) of the work area(s) showing: <ul style="list-style-type: none"> 1. title boundaries and title numbers 2. current and proposed drill holes, or polygons of target areas 3. current and proposed tracks 4. heritage sites or significant environmental areas 5. environmental constraints
8.10	N/A	Radiation Management Plan (if applicable)
8.12	✓	Document(s) being appended in relation to Section 2 (if any): <p>Attachment 1 – Redbank Operations Pty Ltd - Mountain Home Threatened Species Assessment Mitigation and Management</p> <p>Attachment 2 – AAPA Abstract of Records for EL32470</p>