

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	Burnside Regional Project
Authorisation Number Insert existing authorisation number, where applicable	1090-01
Operator Name Use ASIC-ABR registered name (if a company), or name of the applicant	PNX Metals Limited
Operator ABN and ACN numbers	67 127 446 271
Location and Access Details Include brief description of the location, access details, and distance to nearest town or community	<p>C6 Prospect (EL31893, EL10012) is located approximately 100 km southeast of Darwin on Mount Ringwood pastoral lease.</p> <p>Bartons Prospect (EL31099) is located approximately 100 km southeast of Darwin on Bridge Creek pastoral lease.</p> <p>Access to both prospects is via the Ringwood Road to Mount Ringwood Station and then good station tracks to each prospect. No new tracks are required.</p>
Target Commodity Details Include target mineral commodities (i.e. gold, copper etc.)	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.	Drilling (aircore to maximum depth of 30m): C6 Prospect - 200 aircore drill holes (6000 metres) Bartons - 36 aircore drill holes (1080 metres) Costeans (2m wide to maximum of 2m deep): C6 Prospect – 6 x 100m long (600 metres) Bartons Prospect – 2 x 100m long (200 metres)
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Proposed Schedule Include start and finish dates of ground disturbing work	Late June 2023 – Nov 2023
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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
EL31893	PNX Metals Limited	5/03/2025	Mount Ringwood Station
EL10012	PNX Metals Limited	27/11/2023	Mount Ringwood Station
EL31099	PNX Metals Limited	3/08/2024	Bridge Creek Station
EL25748	PNX Metals Limited	30/09/2024	Bridge Creek Station
EL25748	PNX Metals Limited	30/09/2024	Ban Ban Springs Station

Delete or add rows as required

*Renewal Lodged

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	James Fox
Exploration Manager	Michael Green
Senior Geologist	Paige Sawley
Consultant Geologist	Arvid Buskas
Tenement Manager	Elke Hodge

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).
Step 1: Are there any threatened flora and fauna species or habitats of significance that may occur in the proposed work area?	Yes	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.	Appendix 4 – Burnside Regional NRM_EPBC SearchResults Appendix 9 – Threatened Species Likelihood Report
Step 2: Are there any known declared weeds within the proposed work area?	Yes	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).	Appendix 4 – Burnside Regional NRM_EPBC SearchResults
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.	

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.
Step 5: Are there Aboriginal sacred sites in the Project area?	No	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.
Step 6: Are there archaeological and heritage sites in the Project area?	No	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> . Seek advice in relation to protection of heritage and archaeological sites.

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
1	Authorisation number added
1	Locations updated
1	Mining activities updated
1	Tenement details updated
1	Organisational structure updated
2, Step 6	No known heritage or archaeological sites in new proposed areas
4	Table updated with new drill holes and costeans
6	Justification for no pads or tracks required for aircore drilling

Delete or add rows as required

Section 4 – Activities Proposed for this MMP only

Provide relevant EL numbers

Mining Interests (i.e. titles)	EL10012	EL31839	EL31099	EL
Number and type of proposed exploration drill holes	60 aircore	140 aircore	36 aircore	
Maximum depth of proposed holes (m)	30m	30m	30	
Number and size of drill pads to be cleared (Length: 20m x Width:15m)	Not required for aircore drilling	Not required for aircore drilling	Not required for aircore drilling	
Total area of drill pads to be cleared (ha)	Nil	Nil	Nil	
Number of proposed water bores				
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	No, aircore drilling only penetrates to base of weathered zone	No, aircore drilling only penetrates to base of weathered zone	No, aircore drilling only penetrates to base of weathered zone	
Number of costeans	1	5	2	
Volume to backfill costeans (Length: m x Width: m x Depth: m)	100m long x 2m deep x 2m wide = 400m ³	100m long x 2m deep x 2m wide = 2000m ³	100m long x 2m deep x 2m wide = 800m ³	
Number of bulk sample pits				
Volume to backfill bulk sample pits (Length: m x Width: m x Depth: m)				
Bulk sample pits approved under <i>Mineral Titles Act</i> ? (Y or N). If Yes provide approval				
Line/track clearing: (length m x width 5 m)	Not required for aircore	Not required for aircore	Not required for aircore	

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Mining Interests (i.e. titles)	EL10012	EL31839	EL31099	EL
Area of proposed line/track clearing (ha)	0	0	0	
Camp area to be cleared (ha)				
Camp Infrastructure (i.e. demountable, tents) Please provide a complete list with measurements as required in the security calculation				
Other				
Total proposed area of disturbance (ha)	0.02	0.1	0.04	

Staging approach based on disturbance can be proposed and will be considered by the Department.

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	Y	Blade-up approach for clearing will be used (i.e. no windrows, leave root stock and topsoil)
6.2	Y	Significant vegetation will be avoided during clearing (i.e. large trees, specimens providing habitat or food sources, riparian vegetation, and threatened species)
6.3	Y	Vegetation clearing during, and immediately after rainfall events, will be avoided
6.4	Y	Vegetation clearing will be kept to the minimum required to safely traverse vehicles and drill rigs along tracks and drill pads
6.5	Y	Where blade-up techniques cannot be employed, topsoil and vegetation will be stockpiled appropriately for rehabilitation purposes
6.6	Y	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	Y	Sumps will be lined or tanks of appropriate size to contain water, sediment and drilling fluids encountered during drilling, will be used
6.8	Y	Sumps, drill holes, and fuel stores will be located away from environmentally significant areas and water courses
6.9	Y	Excavations (sumps, costeans and pits) will be appropriately ramped to allow fauna egress
6.10	Y	Drill holes will be securely capped immediately after drilling
6.11	Y	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	Y	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	Y	Hazardous substances (including hydrocarbons) will be stored and handled in accordance with relevant Australian Standards
6.14	Y	Hydrocarbons will be stored in lined and bunded areas
6.15	Y	Waste will be stored securely while on-site to minimise windblown rubbish and access by feral animals
6.16	Y	Waste will be removed off-site and disposed of at an appropriate waste management facility
6.17	Y	All environmental incidents will be reported to the Department in accordance with Section 29 of the <i>Mining Management Act</i> .
6.18	Y	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

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6.19	Y	Radioactive/NORM drill cuttings will be managed to avoid radiation related issues on site.
6.20	Y	Dust management will be implemented on site.

Justification and alternative management measures:

The areas where drilling is planned are open savannah with easy vehicle access. Aircore drilling has been selected as it uses a small drill rig and does not require tracks or pads to be cleared. Individual trees can be easily avoided. Aircore drilling only penetrates to the base of the weathered zone.

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

Justification and alternative management measures:

Section 8 – Required Attachments

8.1	Y	Initial Application for Authorisation or variation of Authorisation (only if details on the form have subsequently changed).
8.2		Nomination of Operator Form, where required
8.3	Y	Security Calculation Spreadsheet
8.4	Y	Evidence of Land Access Agreement if operating on an Exploration Licence (EL) on Pastoral Lease (e.g. two-ways exchange of email)
8.5	Y	Disturbance tracking spreadsheet (for existing Authorisations)
8.6	Y	Spreadsheet with coordinates of proposed drill holes or polygons of target areas
8.7	Y	KML/shape files/track logs of proposed tracks, camp sites and proposed drill holes or polygons of target areas
8.8	Y	Map(s) of the work area(s) showing: <ol 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. rehabilitated areas 5. camp sites 6. heritage sites or significant environmental areas 7. environmental constraints
8.10		Radiation Management Plan (if applicable)
8.12		Document(s) being appended in relation to Section 2 (if any): <ul style="list-style-type: none"> - -