

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 | Mt Hardy Project |
| Authorisation Number Insert existing authorisation number, where applicable | 0923-01 |
| Operator Name Use ASIC-ABR registered name (if a company), or name of the applicant | Todd River Metals Pty Ltd |
| Operator ABN and ACN numbers | ABN 55 600 314 038 ACN 600 314 038 |
| Location and Access Details Include brief description of the location, access details, and distance to nearest town or community | <p>The project is centred approximately 300 kilometres northwest of Alice Springs or 30 kilometres northwest of the turnoff to the Yuendumu community just off the Tanami Road.</p> <p>Access to site is via a RH turn, approximately 3 kilometres from the Yuendumu turnoff, then north for 18.km along the station track to Ginty's Bore. Turn right onto existing access tracks into the exploration area.</p> |
| Target Commodity Details Include target mineral commodities (i.e. gold, copper etc.) | Cu, Pb, Zn, Ag, Au |
| 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. | Aircore and RC drilling across Mt Hardy prospect areas. Limited diamond drilling would be based on other results received. |
| Proposed Schedule Include start and finish dates of ground disturbing work | April 2023 – October 2023 |

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 |
|--------------|---------------------------|-------------|--|
| EL27892 | Todd River Metals Pty Ltd | 3/08/24 | Mount Doreen Station – Crown Point Pastoral Company Pty Ltd. Donny and Colleen Costello. |
| EL29219 | Todd River Metals Pty Ltd | 26/09/24 | Mount Doreen Station – Crown Point Pastoral Company Pty Ltd. Donny and Colleen Costello. |
| | | | |

Delete or add rows as required

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 | Will Dix |
| Exploration Manager | John Bartlett |
| Senior Geologist | David Cornish |
| Exploration Geologist | Julien Dos-Santos |
| Field Assistant | Kaleb Winchester |
| Administrative Geologist | Cath Wetherley |

Delete or add rows for various position titles as required

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? | No | 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. | External consultants have suggested that based on the available data and relatively low impact of exploration the threat of impact on threatened species is minimal. |
| 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). | Rubberbush evident. Is being progressively eradicated from exploration areas. |
| Step 3: Will you be using water from bores or other sources for the operation? | Yes | 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. | Bore RN19682 used for drilling water as required. The programme is exempt from water extraction licencing requirements as less than 5 mega-litres of water will be used on each exploration licence. |

Environmental assessment and cultural considerations

| ASSESSMENT ASPECT | YES or NO | MANAGEMENT REQUIREMENTS |
|---|-----------|--|
| <p>Step 4: Is your project likely to have a significant impact on the environment?</p> | No | Refer to the NTEPA Environmental Factors and Objectives Guideline. |
| <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>AAPA Abstract of Records shows no sites identified within areas of exploration. Clearance has been received for Hendrix and additional prospects and an additional Authority Certificate Application has been submitted for current proposed exploration.</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>Seek advice in relation to protection of heritage and archaeological sites.</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 1 – Mining Interest and Land Ownership | EL28694 has been removed from the list as the licence was surrendered in February 2022. |
| Section 1 – Mining Interest and Land Ownership | Land ownership details updated. |
| Section 1 – Organisational Structure | Updated for current personnel. |
| Section 2 – Step 3 | Note that the programme is exempt from water extraction licence requirements due to <5 ML use for each licence annually. |
| Section 4 | New programme details added. |
| Section 5 | Disturbance tracking spreadsheet updated. |
| Section 6 | Reviewed. |
| Section 7 | Reviewed. |
| Section 8 | Updated. |

Delete or add rows as required

Section 4 – Activities Proposed for this MMP only

Provide relevant EL numbers

| Mining Interests (i.e. titles) | EL27892 | EL29219 | EL | EL |
|--|---|---|----|----|
| Number and type of proposed exploration drill holes | 250 ^{1,2} aircore 46 ¹ RC 15 ¹ diamond | 100 ^{1,2} aircore 4 ¹ RC | | |
| Maximum depth of proposed holes (m) | 300m | 100m | | |
| Number and size of drill pads to be cleared (L: 20 m x W: 10 m) | Up to 65 pads | Up to 4 pads | | |
| Total area of drill pads to be cleared (ha) | 1.22Ha | 0.08Ha | | |
| Number of proposed water bores | Existing | Existing | | |
| 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 | Unsure | | |
| Number of costeans | NA | NA | | |
| Volume to backfill costeans (Length: m x Width: m x Depth: m) | NA | NA | | |
| Number of bulk sample pits | 0 | 0 | | |
| Volume to backfill bulk sample pits (Length: m x Width: m x Depth: m) | NA | NA | | |
| Bulk sample pits approved under <i>Mineral Titles Act</i> ? (Y or N). If Yes provide approval | NA | NA | | |
| Line/track clearing: (Length m x width m) | 10,535 x 3 | 9,574 x 3 | | |
| Area of proposed line/track clearing (ha) | 3.16Ha | 2.87Ha | | |

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| Mining Interests (i.e. titles) | EL27892 | EL29219 | EL | EL |
|--|---|---------|----|----|
| Camp area to be cleared (ha) | 0.18Ha (2 camp areas of max 0.09ha each, situated in already clear areas) | NA | | |
| Camp Infrastructure (i.e. demountable, tents) Please provide a complete list with measurements as required in the security calculation | Up to: 6 x Tents (2mx3m), 2 x Caravan (10mx2.5m), 4 x Shade marquee (3mx3m) Bunded fuel storage (5mx5m) | NA | | |
| Other | | | | |
| Total proposed area of disturbance (ha) | 4.56Ha | 2.95Ha | | |

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

¹ 250 AC and 30 RC holes have been planned. Additional AC, RC and DD holes have been included in the MMP to account for additions to the programme based on drilling results on ground. It is extremely unlikely all these will be drilled.

² Aircore drilling will be undertaken on existing and new tracks – no further drill pad disturbance has been included for the aircore holes.

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 | <input checked="" type="checkbox"/> | Blade-up approach for clearing will be used (i.e. no windrows, leave root stock and topsoil) |
| 6.2 | <input checked="" type="checkbox"/> | Significant vegetation will be avoided during clearing (i.e. large trees, specimens providing habitat or food sources, riparian vegetation, and threatened species) |
| 6.3 | <input checked="" type="checkbox"/> | Vegetation clearing during, and immediately after rainfall events, will be avoided |
| 6.4 | <input checked="" type="checkbox"/> | Vegetation clearing will be kept to the minimum required to safely traverse vehicles and drill rigs along tracks and drill pads |
| 6.5 | <input checked="" type="checkbox"/> | Where blade-up techniques cannot be employed, topsoil and vegetation will be stockpiled appropriately for rehabilitation purposes |
| 6.6 | <input checked="" type="checkbox"/> | 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 | <input checked="" type="checkbox"/> | Sumps will be lined or tanks of appropriate size to contain water, sediment and drilling fluids encountered during drilling, will be used |
| 6.8 | <input checked="" type="checkbox"/> | Sumps, drill holes, and fuel stores will be located away from environmentally significant areas and water courses |
| 6.9 | <input checked="" type="checkbox"/> | Excavations (sumps, costeans and pits) will be appropriately ramped to allow fauna egress |
| 6.10 | <input checked="" type="checkbox"/> | Drill holes will be securely capped immediately after drilling |
| 6.11 | <input checked="" type="checkbox"/> | 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 | <input checked="" type="checkbox"/> | 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 | <input checked="" type="checkbox"/> | Hazardous substances (including hydrocarbons) will be stored and handled in accordance with relevant Australian Standards |
| 6.14 | <input checked="" type="checkbox"/> | Hydrocarbons will be stored in lined and bunded areas |
| 6.15 | <input checked="" type="checkbox"/> | Waste will be stored securely while on-site to minimise windblown rubbish and access by feral animals |
| 6.16 | <input checked="" type="checkbox"/> | Waste will be removed off-site and disposed of at an appropriate waste management facility |
| 6.17 | <input checked="" type="checkbox"/> | All environmental incidents will be reported to the Department in accordance with Section 29 of the <i>Mining Management Act</i> . |
| 6.18 | <input checked="" type="checkbox"/> | 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 | NA | Radioactive/NORM drill cuttings will be managed to avoid radiation related issues on site. |
| 6.20 | X | Dust management will be implemented on site. |

Justification and alternative management measures:

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

Justification and alternative management measures:

7.7 Remediation of tracks is ongoing but full rehabilitation will be completed as required when project is completed.

Section 8 – Required Attachments

| | | |
|------|-----------------|---|
| 8.1 | X | Initial Application for Authorisation or variation of Authorisation (only if details on the form have subsequently changed). |
| 8.2 | NA | Nomination of Operator Form, where required |
| 8.3 | X | Security Calculation Spreadsheet |
| 8.4 | SEE NOTE | Evidence of Land Access Agreement if operating on an Exploration Licence (EL) on Pastoral Lease (e.g. two-ways exchange of email) |
| 8.5 | X | Disturbance tracking spreadsheet (for existing Authorisations) |
| 8.6 | X | Spreadsheet with coordinates of proposed drill holes or polygons of target areas |
| 8.7 | X | KML/shape files/track logs of proposed tracks, camp sites and proposed drill holes or polygons of target areas |
| 8.8 | X | <p>Map(s) of the work area(s) showing:</p> <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 <p>8.8a_MH Project Location_MMP – shows tenure and location NW of Yuedumu along the Tanami Road.</p> <p>8.8b_MH Existing Drilling_Tracks_MMP – existing tracks and previous drilling programmes carried out t Mt Hardy.</p> <p>8.8c_MH Site Layout_MMP – Existing tracks and drillholes, proposed new tracks and polygons of target areas, campsite locations and known AAPA registered Sacred Sites.</p> |
| 8.9 | NA | Radiation Management Plan (if applicable) |
| 8.10 | NA | <p>Document(s) being appended in relation to Section 2 (if any):</p> <p>-</p> <p>-</p> |

NOTE – Mount Doreen Station was sold during 2022 and TRM are currently finalising the Land Access Agreement with the new owners Crown Point Pastoral.