

# 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

<b>Project Name</b> Provide new or existing project name	Georgina Basin IOCG Project
<b>Authorisation Number</b> Insert existing authorisation number, where applicable	1089-01 Approved 11 August 2021 (File Reference M2021/0039)
<b>Operator Name</b> Use ASIC-ABR registered name (if a company), or name of the applicant	Knox Resources Pty Ltd (a wholly owned subsidiary of Greenvale Mining Limited)
<b>Operator ABN and ACN numbers</b>	91 623 480 286 623 480 286
<b>Location and Access Details</b> Include brief description of the location, access details, and distance to nearest town or community	<p>The Project is located in the East Tennant region approximately 100km east of Tennant Creek and 86km west of the Barkly Homestead Roadhouse.</p> <p>Access is via the Barkly Highway (40kms) west from the Barkly Homestead Roadhouse and then south via the well maintained gas pipeline service road to the gas pipeline (30kms) then west along a newly proposed heavy vehicle track that offsets the weight of heavy vehicles on the pipeline from the pipeline construction road (30kms) to the Project site Muster Point. Turn</p>
<b>Target Commodity Details</b> Include target mineral commodities (i.e. gold, copper etc.)	Iron Oxide Copper Gold (IOCG) mineralisation. Primarily gold and copper + silver, bismuth, cobalt, tungsten, molybdenum and rare earth elements.

## Mining Management Exploration Activities

<p><b>Mining Activities</b> Summarise the mining activities (exploration) to be the subject of the proposed Authorisation or Variation.</p> <p>Drilling programs over a maximum of four years are supported and encouraged and can be staged. Please refer to the guidelines for further information.</p>	<p>Stage 1. Construction of 32km site access tracks and campsite. Close spaced ground gravity and magnetics using quad bikes. Access to site will be via Track 1, Figure 2.</p> <p>Stage 2. Construction of 2 drill pads, drilling and 26km of access from the Barkly Highway to site for heavy drilling equipment access. Access Track 2. Figure 2.</p> <p>Stage 3.a Access to site requires an additional 30km of access tracks for heavy vehicles as the pipeline road was requested to be reserved for light vehicle use only. The proposed 30km of heavy vehicle tracks are access tracks to either existing tracks or new disturbance tracks, linking access and in part cross tenure EL32296.</p> <p>Stage 3.b Within the tenure EL32296 two new drill sites (2 minerals) are proposed and a waterbore alternative to the mineral drill hole already approved in the original MMP at 'Drill Site 2', an additional 1km of internal tracks are proposed to service all drillsites to the previously approved tracks. Within the tenure EL32286 five new drill sites (3 minerals, 2 waterbore) are proposed and within the tenure, an additional 4km of internal tracks are proposed to service all drillsites to the previously approved tracks.</p>
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<p><b>Proposed Schedule</b> Include start and finish dates of ground disturbing work</p>	<p>Stage 1. As soon as approval is granted, Late July / Early September.</p> <p>Stage 2. September through to early November 2022, in effect the approved are extended for operational flexibility given there are now additional drill sites, and not all of the originally approved disturbance had been implemented.</p> <p>Stage 3.a and Stage 3.b upon approval, then extending into November 2022.</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
EL32281	Knox Resources Pty Ltd	22/09/2026	NT Portion 4469 Vacant Crown Land
EL32282	Knox Resources Pty Ltd	22/09/2026	NT Portion 4469 Vacant Crown Land
EL32283	Knox Resources Pty Ltd	22/09/2026	NT Portion 4469 Vacant Crown Land NT Portion 4030. Epenarra Station
EL32285	Knox Resources Pty Ltd	22/09/2026	NT Portion 1. North Australian Pastoral Company Pty Ltd
EL32286	Knox Resources Pty Ltd	22/09/2026	NT Portion 232. North Australian Pastoral Company Pty Ltd
EL32295	Knox Resources Pty Ltd	22/09/2026	NT Portion 773. Bronco Yard Pty Ltd. NT Portion 4469 Vacant Crown Land
EL32296	Knox Resources Pty Ltd	22/09/2026	NT Portion 4469 Vacant Crown Land

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
Chief Executive Officer	<b>Matthew Healy</b>
Director	<b>Neil Biddle</b>
Exploration Manager	
Senior Geologist	<b>Nicholas Ryan</b>
Field Manager	<b>Rob Carlos</b>
Radiation Safety Officer	

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).
<p><b>Step 1:</b> 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 following threatened species have been recorded or have the potential to occur.</p> <p><u>Grey Falcon</u>: <i>Falco hypoleucus</i>. Vulnerable. The Grey Falcon is known from the region. The Grey Falcons when nesting are susceptible to disturbance from the presence of people or vehicles within 300m and if a nest or suspected nest is encountered then a 300 m buffer zone will be put in place to reduce potential impact.</p> <p><u>Greater Bilby</u>: <i>Macrotis lagotis</i>, Vulnerable. The Greater Bilby is known to be present in the region and live-in burrows in the soil. If any colonies of the Greater Bilby are identified then a buffer zone of 30m will be put in place around any burrows to reduce impacts and disturbance.</p> <p>A preliminary Flora and Fauna Baseline survey over and around the proposed drill sites and access has been undertaken by Low Ecology of Alice Springs and their report and recommendations will be appended to an amended MMP.</p> <p>All water, grey and effluent will be caught in covered sumps to restrict the presence of pest animals.</p>	<p>EPBC Protected Matters Search report appended to this document lists the possible presence of 8 threatened fauna species, no threatened flora species recorded within the project search area.</p>

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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>
<b>Step 2:</b> 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).	See section 2.15 Weed Management Procedures – Environment Management Guidelines APPENDIX 1.  Tennant Creek Regional Weeds Strategy 2021 – 2026, Department of Environment, Parks and Water Security.
<b>Step 3:</b> Will you be using water from bores or other sources for the operation?	YES	A bore works permit has been applied for. Approval will be supplied to DITT once received. Nil water extraction licence required, as extraction amount will be less than 2ML/year and bores are not located with a water control district.	Landholder on nearby parcel has been consulted for water use for drilling. In addition, Knox Resources has applied to install four (4) water bores near the drill sites on EL32282 & EL32296 primarily for drilling water and camp water.

### Environmental assessment and cultural considerations

ASSESSMENT ASPECT	YES or NO	MANAGEMENT REQUIREMENTS
<b>Step 4:</b> Is your project likely to have a significant impact on the environment?	No	Refer to the NTEPA Environmental Factors and Objectives Guideline.

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ASSESSMENT ASPECT	YES or NO	MANAGEMENT REQUIREMENTS
<b>Step 5:</b> 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.  On 10 <sup>th</sup> June 2020 Knox Resources applied to AAPA with an application for an abstract of records of Aboriginal Sacred Sites on EL32282 and 32296. There are currently no recorded sites on either EL. Due to s38 of the act, the Abstract of Records cannot be appended to the MMP.
<b>Step 6:</b> 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
Amended Form Sections 1, 2, 4, & 5, 7, 8	Additional ground disturbance consisting of 5 additional mineral exploration drill holes, 4 waterbores, revised tracks, etc. Drillers Camp has moved location – disturbance area remains the same.

Delete or add rows as required

## Section 4 – Activities Proposed for this MMP only

Provide relevant EL numbers

Mining Interests (i.e. titles)	EL32282	EL32296
Number and type of proposed exploration drill holes	Mineral Exploration Holes: 3 RC or rotary mud with diamond tail. Stage 3.b.	Mineral Exploration Holes: 2 RC or rotary mud with diamond tail. Stage 3.b.
Maximum depth of proposed holes (m)	960m	800m
Number and size of drill pads to be cleared (Length: m x Width: m)	3 pads 30m x 25m (each)	2 pads 30m x 25m (each)
Total area of pads to be cleared (ha)	0.225 Ha	0.15 Ha
Sumps – number and size included on the drill pad	5m x 3m x 1.5m (each)	5m x 3m x 1.5m (each)
Total area of sumps to be cleared (ha)	Sumps within drill pads	Sumps within drill pads
Number of proposed water bores Pad (Length: m x Width: m)	2 Waterbores 30m x 25m (each)	2 Waterbore 30m x 25m (each): note only 1 new pad "WB2021_04" to be drilled at previously approved "Drill Site 2"
Total area of pads for waterbores to be cleared (ha)	0.15 Ha	0.075 Ha

Mining Management Exploration Activities

Mining Interests (i.e. titles)	EL32282	EL32296
Sump/Turkey Nest to hold water (Length: m x Width: m x Containment: m)	Outer disturbance maximum: 40m x 25m x 1.5m (each) All disturbance is separate to waterbore drill pad disturbance	Outer disturbance maximum: 40m x 25m x 1.5m (each) All disturbance is separate to waterbore drill pad disturbance
Sump/Turkey Nest area to be cleared.	0.1 Ha	0.1 Ha
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 on exact hydrogeology – water is anticipated to be approx. 40-80m depth	Unsure on exact hydrogeology – water is anticipated to be approx. 40-80m depth
Number of costeans	None	None
Volume to backfill costeans (Length: m x Width: m x Depth: m)	None	None
Number of bulk sample pits	None	None
Volume to backfill bulk sample pits (Length: m x Width: m x Depth: m)	None	None
Bulk sample pits approved under <i>Mineral Titles Act</i> ? (Y or N). If Yes provide approval	None	None

## Mining Management Exploration Activities

Mining Interests (i.e. titles)	EL32282	EL32296
Line/track clearing: (length km x width m)	4.0km x 3.5m	1.0km x 3.5m
Area of proposed line/track clearing (ha)	1.40ha	0.35 ha
Other: Access track into project area (length km x width m)	None	30km x 3.5m 10.5 ha
Camp	Nil	Nil- previously approved area. Location moved.  2 large caravans- 10m x 3m
Total proposed area of disturbance (ha)	1.875 ha	11.175 ha

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.

Please refer to accompanying spreadsheet "disturbance-tracking-for-exploration-projects\_2021\_09\_16.xlsx"

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

Where Blade-up technique cannot be employed due to the dense coverage of spinifex then 6.5 management standards will be implemented.

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

Justification and alternative management measures:

Drill hole rehabilitation will aim to occur progressively – if the wet season impacts rehabilitation of any 2021 drilling, this will be prioritised for completion in the first activities for the 2022 field season.

## Mining Management Exploration Activities

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## 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		Nomination of Operator Form, where required
8.3	X	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) Exploration to be carried out mainly on vacant crown land. Letter sent to Dalmore Downs with map attached outlining low impact ground gravity polygons. Waiting for reply.
8.5	X	Disturbance tracking spreadsheet (for existing Authorisations): refer to “disturbance-tracking-for-exploration-projects_2021_09_16.xlsx”
8.6	X	Spreadsheet with coordinates of proposed drill holes or polygons of target areas
8.7	X	Amended items supplied for KML/shape files/track logs of proposed tracks, camp sites and proposed drill holes or polygons of target areas.
8.8	X	Amendment maps supplied in addition to the previously approved Map(s) of the work area(s) showing: <ul style="list-style-type: none"> <li>1. Map 4. Georgina Basin Project – Amendment Tracks &amp; Waterbores</li> <li>2. Map 5. Georgina Basin Project – Amendment Tracks &amp; Mineral Drill Holes</li> </ul>
8.10		Radiation Management Plan (if applicable)
8.12	X	Document(s) being appended in relation to Section 2 (if any): <p style="text-align: center;">There are no additional appendices submitted with this amendment to the MMP that was approved on the 11-Aug-2021.</p>