

**TENNENT MINERALS LTD**

**MINING MANAGEMENT PLAN**

**FOR**

**THE BARKLY PROJECT**

**EL 28620**

**New Authorisation**

**1169-01**

## CONTENTS

<b>BACKGROUND INFORMATION.</b>	<b>3</b>
<b>1 PROJECT DETAILS</b>	<b>4</b>
1.1 MAP OF SITE LOCATION AND LAYOUT	4
1.2 MINING INTEREST AND LAND OWNERSHIP	5
1.3 ORGANISATIONAL STRUCTURE	5
<b>2 OPERATOR SELF-ASSESSMENT OF THE ENVIRONMENTAL RISK</b>	<b>6</b>
2.1 ENVIRONMENTAL CONSIDERATIONS	6
2.2 ENVIRONMENTAL ASSESSMENT AND CULTURAL CONSIDERATIONS	7
<b>3 AMENDMENTS</b>	<b>7</b>
<b>4 ACTIVITIES PROPOSED FOR THIS MMP ONLY</b>	<b>9</b>
<b>5 PREVIOUS DISTURBANCE (FOR EXISTING AUTHORISATIONS ONLY)</b>	<b>10</b>
<b>6 ENVIRONMENTAL MANAGEMENT</b>	<b>10</b>
<b>7 REHABILITATION AND CLOSURE</b>	<b>11</b>
<b>8 REQUIRED ATTACHMENTS</b>	<b>12</b>

**BACKGROUND INFORMATION.**

On the 2nd of June 2023 Tennent Minerals Ltd submitted an 'Nomination of Operator' form to be the registered operator two Colour Minerals exploration tenements - Els 28620 and 30701.

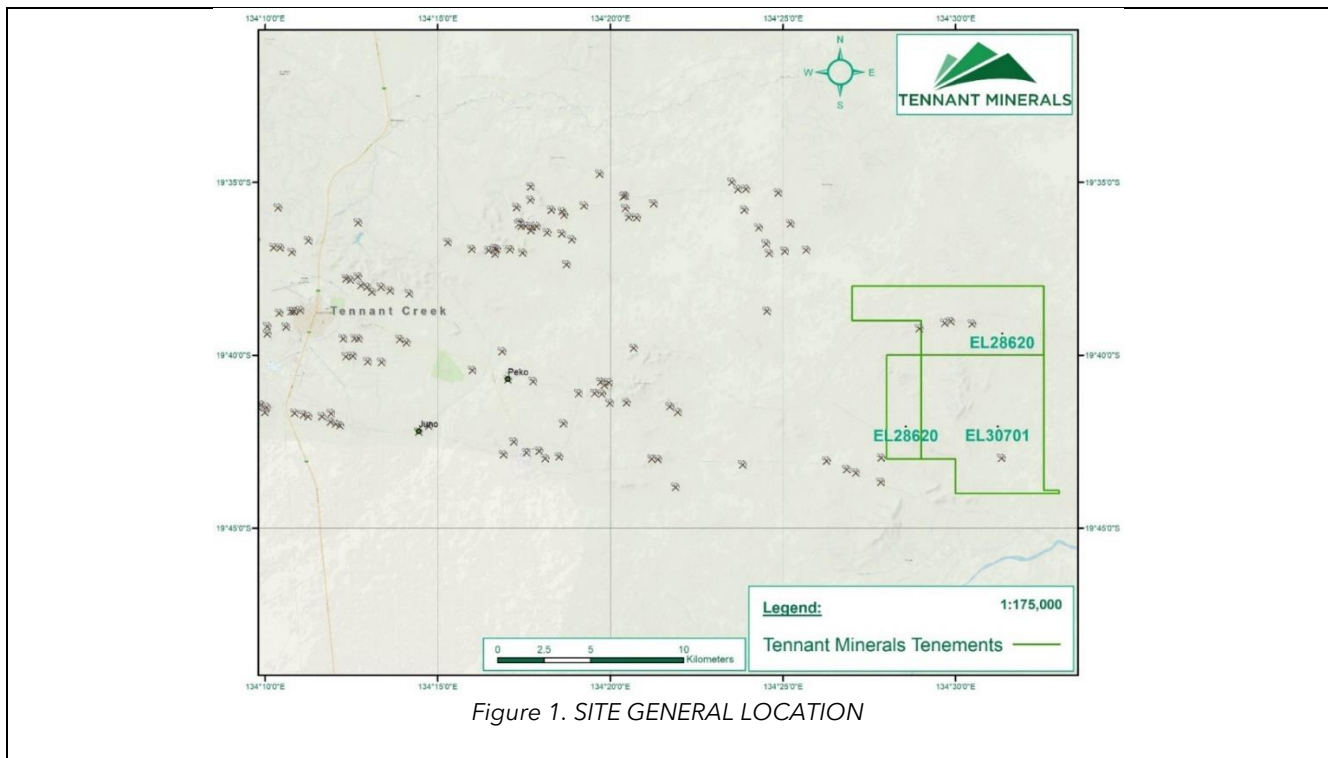
As a result of the transfer, the current MMP (0964-01) will not be updated or varied.

Tennant Minerals understands and acknowledges that the ongoing responsibilities and accountabilities under MMP 0964-01 are now transferred to Tennent Minerals.

# 1 PROJECT DETAILS

<b>Project Name</b>	The Barkly Project
<b>Authorisation Number</b>	1169-01
<b>Operator Name:</b>	TENNENT MINERALS LTD
<b>ACN</b>	086 471 007
<b>Location:</b>	EAST TENNANT CREEK MINERAL FIELD (134.51° E, 19.65°S)
<b>Site Access:</b>	Project area is accessed via Peko Road and the Gosse River
<b>Target Commodity</b>	Gold and Copper
<b>Mining</b>	Drilling – RAB, Air-Core, RC and Diamond Coring.
<b>Proposed Schedule</b>	JUNE 2023 – JUNE 2024

## 1.1 MAP OF SITE LOCATION AND LAYOUT



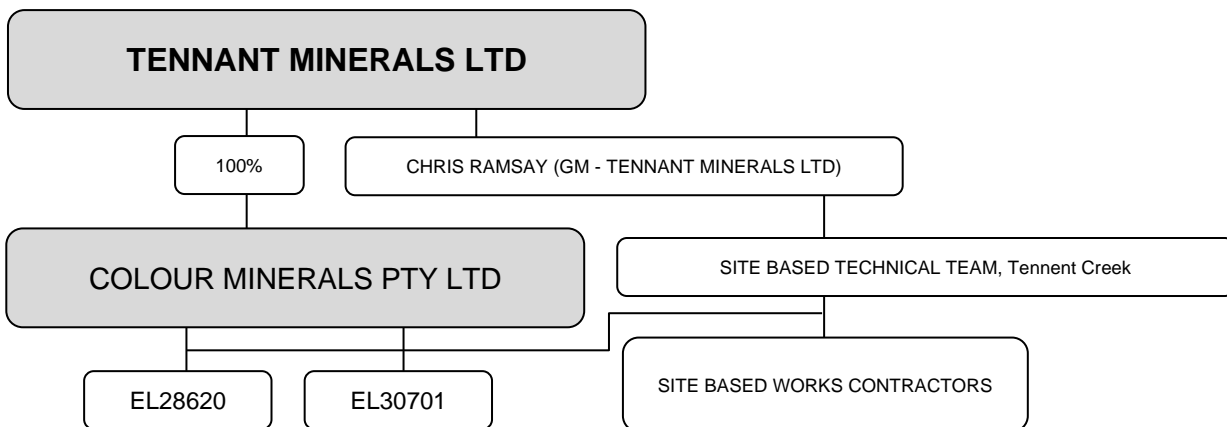
## 1.2 MINING INTEREST AND LAND OWNERSHIP

TITLE NUMBER	TITLE HOLDER	EXPIRY DATE	UNDERLYING PROPERTY NAME OR LAND HOLDER
EL28620	Colour Minerals Pty Ltd	15/12/2023	Tennant Creek Station.
EL30701	Colour Minerals Pty Ltd	19/08/2023	Tennant Creek Station.

Tennant Minerals (and previously Colour Minerals which is 100% subsidiary of Tennant Minerals) have an agreement Tennant Creek Station regarding access to the station area for exploration activities. The agreement is updated every year in June. The agreement for 06/2023 through to 06/2024 has recently been signed by both parties.

## 1.3 ORGANISATIONAL STRUCTURE

POSITION TITLE	NAME
TECHNICAL DIRECTOR	JONATHAN DUGDALE
GENERAL MANAGER	CHRIS RAMSAY
SENIOR GEOLOGIST	STUART MCCALLUM



## 2 OPERATOR SELF-ASSESSMENT OF THE ENVIRONMENTAL RISK

Tennant Minerals has undertaken the following assessments previously and has reviewed the assessment for this revision of the authorisation. Planned activities have not varied significantly from the current MMP. Ongoing fieldwork will overlap the current authorised MMP, and the work outlined in this revision.

### 2.1 ENVIRONMENTAL CONSIDERATIONS

<b>ASSESSMENT ASPECT</b>	<b>YES or NO</b>	<b>ACTIONS REQUIRED (if answered YES)</b>	<b>APPENDED INFORMATION (Evidence of consultation with DENR and/or management plan)</b>
<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>	NO	<p>It is acknowledged that there is potential for two species of note to be present in the working area. The <u>Greater Bilby</u> and the <u>Grey Falcon</u> are species which may live in the area and therefore the area may be considered as habitat. Both have a 'Threatened Category' recorded as 'Vulnerable'.</p>	<p>- <u>Consulted EPBC Protected Matters Search Tool and appended it to this document.</u> - <u>Planned activities will involve an initial 'clearance' action. This will include inspection of constrained working areas to record the presence of any fauna. Any significant habitat or fauna community (such as large trees or burrows) in the area will be worked around i.e. work sites will not impact known permanent habitat or fauna communities.</u></p>
<p><b>Step 2:</b> Are there any known declared weeds within the proposed work area?</p>	NO	<p>Under the <i>Weeds Management Act</i> declared weeds are required to be eliminated or controlled by the owner and occupier of land. Seek advice from DENR - Weeds Management to ensure management measures are appropriate for the level of activity proposed and attach a Weed Management Plan (if required).</p>	<p><u>An information search for known occurrences or concerning weed species and their significance in the working area was undertaken. There are no weed species or related significant matters recorded in the planned working area.</u> <u>The company will comply with the <i>Weed management Act 2001</i> as and where it applies to the working area.</u></p>

ASSESSMENT ASPECT	YES or NO	ACTIONS REQUIRED (if answered YES)	APPENDED INFORMATION (Evidence of consultation with DENR and/or management plan)
<b>Step 3:</b> Will you be using water from bores or other sources for the operation?	YES	<i>Note the Government is proposing to amend the exemption of water licencing under the Water Act for mining activities, including exploration.</i>  <i>This section will be updated in light of any changes in the future.</i>	<u>Activities at the working area will include using water - which has been transported to the working area from town supplies in Tennant Creek. There is no intention to extract water at the working area.</u>

## 2.2 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.
<b>Step 5:</b> Are there Aboriginal sacred sites in the Project area?	YES	Sacred Sites are protected under the NT <i>Aboriginal Sacred Sites Act</i> and administered by the Aboriginal Areas Protection Authority (AAPA).  <u>A sacred site search has been conducted by the company. The AAPA search noted the presence of a sacred site in the company's license area. Previously the company has demarcated an exclusion zone around the site. This exclusion zone remains in place and the company undertakes not to carry out any work inside the zone and will not enter the zone or approach the sacred site at any time.</u>
<b>Step 6:</b> Are there archaeological and heritage sites in the Project area?	NO	Heritage and archaeology sites are protected in the NT. <u>A search of the NT Government Heritage Register was undertaken. There are no records of 'non-public' or 'protected matters' recorded and available under these registers.</u>

## 3 AMENDMENTS

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

This is an application for a new authorisation and as such, there are no amendments.

Section	Amendment
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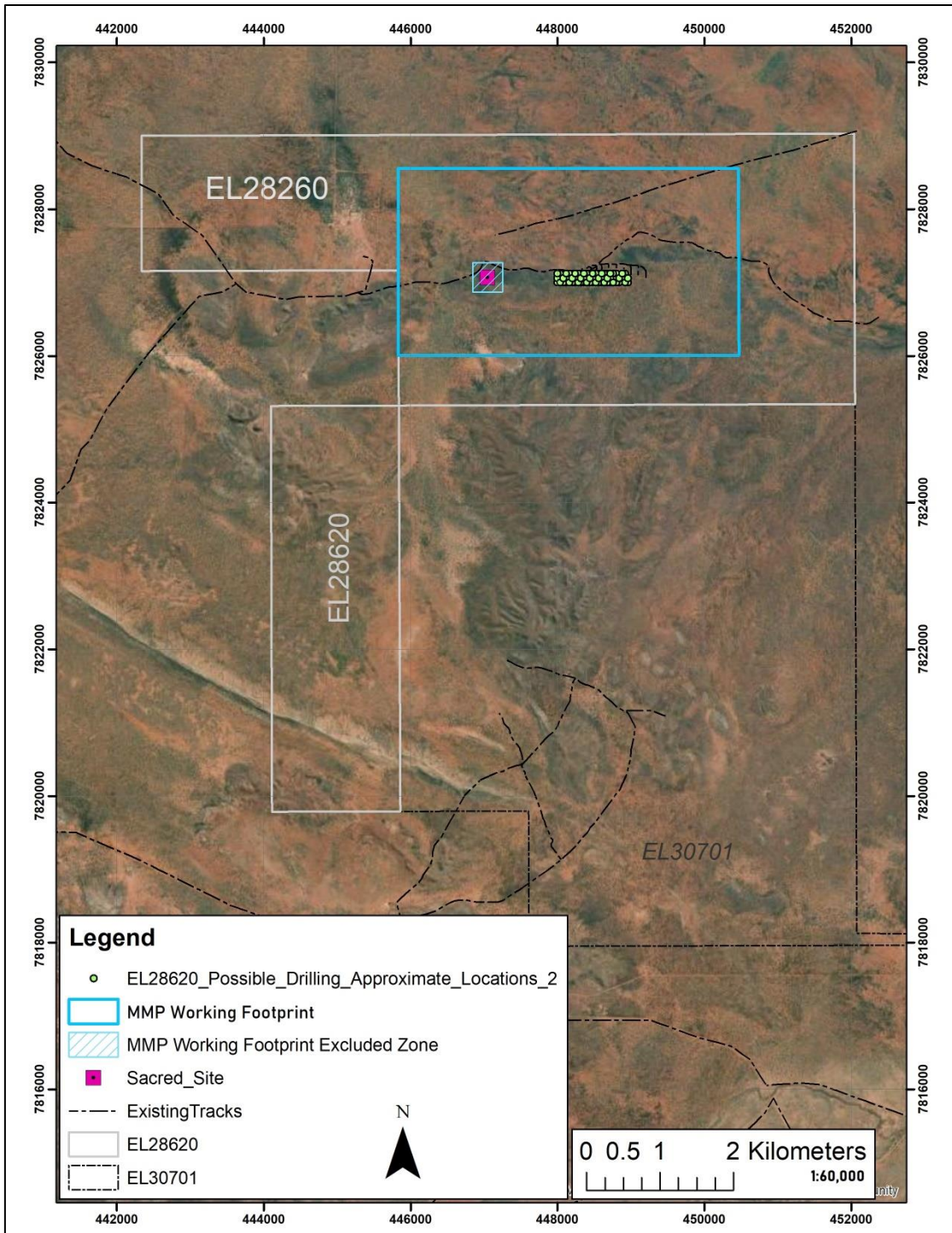


Figure 2. TENEMENT AREA AND PROPOSAED WORK AREA FOOTPRINT

A total of up to 2.9 hectares of ground disturbance may occur under the planned work.



#### 4 ACTIVITIES PROPOSED FOR THIS MMP ONLY

Mining Interests (i.e., titles)	EL28620
<b>Number and type of proposed exploration drill holes.</b>	40 RC/DDH, 30 DDH (70 in total).
<b>Maximum depth of holes</b>	450
<b>Number and size of drill pads to be cleared (Length: m x Width: m)</b>	70 x (20*10)=0.02Ha/ea.
<b>Total area of drill pads to be cleared (ha)</b>	1.4
<b>Number of proposed water-bores</b>	0
<b>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</b>	No. The target formations are not known aquifers. Apart from aquifers drilling will encounter fractures which may contain water. It is possible that <u>all</u> drill holes will encounter fractures which are below the water table and therefore contain water. Fractures are not considered aquifers.
<b>Number of costeans</b>	0
<b>Volume to backfill costeans (Length: m x Width: m x Depth: m)</b>	0
<b>Number of bulk sample pits</b>	0
<b>Volume to backfill bulk sample pits (Length: m x Width: m x Depth: m)</b>	0
<b>Bulk sample pits approved under Mineral Titles Act? (Y or N). If Yes provide approval</b>	0
<b>Line/track clearing: (1,875 m x 8m)</b>	15,000m <sup>2</sup>
<b>Area of proposed line/track clearing (ha)</b>	1.5
<b>Camp area to be cleared (ha)</b>	0
<b>Camp Infrastructure (i.e. demountable, tents) Please provide a complete list with measurements as required in the security calculation .</b>	0
<b>Other</b>	-
<b>Total proposed area of disturbance (ha)</b>	2.9

## 5 PREVIOUS DISTURBANCE (FOR EXISTING AUTHORISATIONS ONLY)

This is a new authorisation. Previous disturbances and activities authorised under a current authorisation (0964-01) are tabulated and provided with this document with Appendix 5.

## 6 ENVIRONMENTAL MANAGEMENT

The following environmental management methods are used at the exploration project. The methods will be maintained and will be improved on where opportunities exist.

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 remediation 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
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> .
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.
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Justification and alternative management measures:

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## 7 REHABILITATION AND CLOSURE

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

7.1	✓	Drill holes 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 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
7.9	✓	All tracks will be remediated unless otherwise agreed in writing by the land holder or appropriate third party
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 backfilled within 6 months of completion of drilling
7.13	✓	All water bores 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 remediated 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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## 8 REQUIRED ATTACHMENTS

8.1	✓	Initial Application for Authorisation or variation of Authorisation (only if details on the form have subsequently changed).
8.2	✓	Nomination of Operator Form
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	✓	Google Earth KML/shape files/track logs of proposed tracks and camp sites
8.8	✓	A map of the work area(s) showing: <ul style="list-style-type: none"> <li>1. title boundaries and title numbers</li> <li>2. current and proposed drill holes, or polygons of target areas</li> <li>3. current and proposed tracks</li> <li>4. remediated areas</li> <li>5. camp sites</li> <li>6. heritage sites or significant environmental areas</li> <li>7. environmental constraints</li> </ul>
8.9	-	Remediation Register (for existing Authorisations)
8.10	✓	Photographs of remediation work
8.11	-	Radiation Management Plan (if applicable)