1163-01Northern 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 <u>Northern Territory Government website</u>.

Section 1 - Project Details

Project Name Provide new or existing project name	Nobles Nob Gold and Copper Exploration Project
Authorisation Number	1163-01
Insert existing authorisation number,	
where applicable	This is amendment #1 – all additions are highlighted in yellow
Operator Name Use ASIC-ABR registered name (if a company), or name of the applicant	Tennant Consolidated Mining Group Pty Ltd
Operator ABN and ACN numbers	ABN 72 645 263 547
	,
Location and Access Details Include brief description of the location, access details, and distance to nearest town or community	Nobles Nob is located approximately 13 km southeast of Tennant Creek in the Northern Territory; and Juno is located approximately 10 km southeast of Tennant Creek, and 5 km west of Nobles Nob. The Project area encompasses a total of 419 ha, with 253 ha within Nobles Nob mining tenements, and 102 ha within Juno tenements.
	Access to the project site from Tennant Creek is approximately 9 km east of the town along Peko road, following Peko road to the south for another 4 km, turning right on to Goss River Road for approximately 1 km, arriving at the private access gate to Nobles Nob. A key is required for access to the site.
Target Commodity Details Include target mineral commodities (i.e. gold, copper etc.)	Gold and copper

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.

Exploration activities are planned to continue to assess the viability of both gold and copper prospects within the Nobles Nob project area. Drilling activities have been approved. Bulk sampling is being proposed within this amendment.

Bulk sampling of the Northern Waste Rock Dump (Northern WRD) is planned to assess the viability of extraction and processing of this waste rock in future. Three bulk samples are proposed across the existing waste rock dump, each sample of approximately 875 t within a 5 m x 5 m area to a maximum 5 m depth.

Bulk sampling of the Southern Waste Rock Dump (Southern WRD) is planned to assess the efficacy of screening to increase the grade of feed to the mill – and hence improve efficiencies during the early stages of processing the WRD. Three bulk samples are proposed across the existing waste rock dump, each sample of approximately 3,500 t within a 20 m x 20 m area to a maximum 5 m depth.

With a total proposed disturbance area between the two WRDs of 0.13 ha (1,275 m²).

Further details are provided in Appendix C.

Proposed Schedule Include start and finish dates of ground disturbing work The anticipated start date for activities is August 2023, with an anticipated end date of December 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.

•••••

All of the tenements associated with the wider Nobles Nob project are listed below, which includes all of those associated with the historic Nobles Nob and Juno mine sites. Drilling for the 2023 drill program has been approved in 13 of these tenements, as indicated below. Bulk sampling of the Northern WRD is proposed in 1 of these tenements (MLC521), and of the Southern WRD in 2 of these tenements (MLC539 & MLC556), as indicated below.

Title Number	Title Holder	Expiry Date	Underlying Property Name or Land Holder	Works proposed? (Y/N)
MLC517	Tennant Consolidated Mining Group Pty Ltd	31/12/2032	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC534	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N

Title Number	Title Holder	Expiry Date	Underlying Property Name or Land Holder	Works proposed? (Y/N)
MLC690	Tennant Consolidated Mining Group Pty Ltd	31/12/2026	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC521	Tennant Consolidated Mining Group Pty Ltd	31/12/2029	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – bulk sampling Northern WRD (proposed)
MLC525	Tennant Consolidated Mining Group Pty Ltd	31/12/2030	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC549	Tennant Consolidated Mining Group Pty Ltd	31/12/2036	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC545	Tennant Consolidated Mining Group Pty Ltd	31/12/2035	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC540	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC548	Tennant Consolidated Mining Group Pty Ltd	31/12/2036	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC537	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC515	Tennant Consolidated Mining Group Pty Ltd	31/12/2032	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC516	Tennant Consolidated Mining Group Pty Ltd	31/12/2032	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC589	Tennant Consolidated Mining Group Pty Ltd	31/12/2030	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC556	Tennant Consolidated Mining Group Pty Ltd	31/12/2032	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – bulk sampling Southern WRD (proposed)
MLC689	Tennant Consolidated Mining Group Pty Ltd	31/12/2026	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC531	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC541	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC526	Tennant Consolidated Mining Group Pty Ltd	31/12/2026	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N

Title Number	Title Holder	Expiry Date	Underlying Property Name or Land Holder	Works proposed? (Y/N)
MLC538	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC514	Tennant Consolidated Mining Group Pty Ltd	31/12/2032	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC688	Tennant Consolidated Mining Group Pty Ltd	31/12/2026	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC542	Tennant Consolidated Mining Group Pty Ltd	31/12/2035	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC513	Tennant Consolidated Mining Group Pty Ltd	31/12/2032	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC532	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC691	Tennant Consolidated Mining Group Pty Ltd	31/12/2026	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC539	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved) Y – bulk sampling Southern WRD (proposed)
MLC590	Tennant Consolidated Mining Group Pty Ltd	31/12/2030	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC512	Tennant Consolidated Mining Group Pty Ltd	31/12/2032	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC550	Tennant Consolidated Mining Group Pty Ltd	31/12/2036	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC543	Tennant Consolidated Mining Group Pty Ltd	31/12/2035	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC544	Tennant Consolidated Mining Group Pty Ltd	31/12/2035	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC533	Tennant Consolidated Mining Group Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC68	Tennant Gold Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)

Title Number	Title Holder	Expiry Date	Underlying Property Name or Land Holder	Works proposed? (Y/N)
MLC154	Tennant Gold Pty Ltd	31/12/2024	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC46	Tennant Gold Pty Ltd	31/12/2035	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC47	Tennant Gold Pty Ltd	31/12/2035	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC578	Tennant Gold Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC652	Tennant Gold Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MLC45	Tennant Gold Pty Ltd	31/12/2035	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC579	Tennant Gold Pty Ltd	31/12/2033	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	Y – drilling (approved)
MLC155	Tennant Gold Pty Ltd	31/12/2024	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N
MCC284	Tennant Gold Pty Ltd	7/07/2024	Aboriginal Freehold Land (ALRA) Warumungu Aboriginal Land Trust	N

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).

There is a Pre-Existing Tenements Agreement between Normandy Gold Pty Ltd (now Emmerson Resources Limited), Warumungu Land Trust, and the Central Land Council, dated 9 December 1998 which includes some of the above tenements. TCMG has consulted and secured agreement of the Warumungu Land Trust and the Central Land Council for rights and obligations under the Agreement for all of the above mining titles to be formally assigned to TCMG via a Deed of Assumption. The Deed was signed by all parties in July 2023.

Organisational Structure

Position Title	Name
Managing Director	Peter Main
Geology Manager	Steve Rose
Senior Geologist	Matt Golovanoff
Chief Operating Officer	Steve Murdoch
Project Manager	Andrew Harrington
Commercial Manager	AJ Larkin
Groundwater Manager & Principal Hydrogeologist	Ashish Mishra
Territory Manager	Michael Tennant
Environment & Sustainability Manager	Yemaya Smythe McGuinness
Chief Financial Officer	Jamie Morton

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. ECOZ Environmental undertook a flora and fauna assessment of the whole Nobles Nob and Juno project site, including all areas within the associated tenements. This assessment was undertaken to inform the separate Nobles Nob Gold Project MMP (Authorisation #1123-01), which includes mining activities. The EcOz assessment found that it is unlikely the project will affect any Sites of Botanical Significance, given the distance of mapped sites from the project area. No vegetation communities or ecological communities of listed conservation significance have been recorded within 50 km of the Project area. It also found that no flora of conservation significance is expected to occur within the project area due to the disturbed and unsuitable habitat. The EcOz assessment found that 19 threatened fauna species are known to occur within a 50 km radius of the Project area. Of these, five have a medium likelihood of occurrence and one a high likelihood of occurrence, which is the Central Australian Rock-wallaby. This assessment was for the wider mining project area that includes some suitable rock wallaby habitat, who inhabit rock shelters. Looking at the smaller project area relating to the proposed	e.g Consulted EPBC Protected Matters Search Tool and appended it to this document Consulted EPBC Protected Matters Search Tool and previous Biodiversity Management Plan, which is still current/related to the proposed work, appended to this document

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).
		bulk sample pits, these are located on existing waste rock dumps, and do not contain any suitable habitat for the Central Australian Rock-wallaby. The likelihood of disturbing habitat of the Central Australian Rock-wallaby is therefore considered to be low.	
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)	Refer to Nobles Nob Gold Project MMP – Authorisation #1123-01 in Appendix B. Section 2.1.3 outlines known weeds within the project area; and Sections 7.3.1 and 8.3.10 addresses management.
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.	No dewatering or water extraction is proposed within the scope of works for this MMP. A licence or permit under the <i>Water Act</i> 1992 is not required.

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. Given the history of mining disturbance at the site, and the small amount of disturbance associated with the proposed exploration activities, the scope of works proposed in this MMP is not expected to have a significant impact on the environment.

ASSESSMENT ASPECT	YES or NO	MANAGEMENT REQUIREMENTS
Step 5: Are there Aboriginal sacred sites in the Project area?	NO	Sacred Sites are protected under the NT Aboriginal Sacred Sites Act 1989 and administered by the Aboriginal Areas Protection Authority (AAPA). It is recommended that advice be sought from AAPA in relation to sacred site protection. There are two recorded sacred sites within the wider Nobles Nob project area, located on MLC514, and MLC549. As well as one known area of ecological heritage significance in the corridor between the Nobles Nob and Juno tenements. The required management of these areas have been prescribed within AAPA and CLC sacred sites certificates, as outlined below. TCMG will adhere to all requirements of these certificates and will ensure that no works will occur within the restricted works areas and exclusion zones, and
		no damage to sacred sites will occur as a result of project activities. TCMG has been granted two Aboriginal Areas Protection Authority (AAPA) Certificates under the <i>Northern Territory Aboriginal Sacred Sites Act 1989</i> to conduct works within the project area, including exploration works (C2022-026 and C2022-064). These certificates designate Restricted Works Areas around the two known sacred sites, in which no work shall take place other than specified permitted work; no damage shall occur; and the use of existing tracks is permitted for transit only.
		TCMG has also been granted a Central Land Council (CLC) Sacred Sites Clearance Certificate to conduct works within the project area, including exploration works (C2022-077). Being located on Aboriginal Land Trust land, this is required in addition to the AAPA Certificate under the <i>Aboriginal Land Rights (Northern Territory) Act 1976</i> . This certificate designates two Exclusion Zones associated with the two known sacred sites, similar to those designated by AAPA; as well as an additional Restricted Work Area north of the Nobles Nob to Juno infrastructure corridor. Within the Exclusion Zones no access is permitted; and no angled drilling underneath these areas. Within the Restricted Work Area, the certificate requests for only limited works to occur.
		The proposed bulk sampling is located outside of the designated exclusion zones and restricted works areas. The closest sample point to either sacred site is sample point 1 on the Northern WRD, located approximately 160 m southeast of the northern sacred site (a small rock outcrop surrounded by mature trees), and approximately 120 m from the exclusion zone which places a buffer around this site. No works or entry will be permitted within the exclusion zone around this site, and works will be undertaken to ensure they do not cause any movement of waste rock into this area. Erosion controls will be implemented if required. The bulk sampling therefore does not pose a risk to the sacred site.

ASSESSMENT ASPECT	YES or NO	MANAGEMENT REQUIREMENTS
Step 6:	NO	Heritage and archaeology sites are protected in the NT.
Are there archaeological and heritage sites in the Project		NT Department of Territory Families, Housing and Communities (DTFHC) administers the <i>Heritage Act 2011</i> .
area?		Seek advice in relation to protection of heritage and archaeological sites.
		A search of the NT Heritage Register did not return any heritage or archaeological sites within the project area. The high level of historic activities and disturbance indicates it is unlikely for unrecorded heritage values to occur within the site.

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 - Insertion of Authorisation Number and Amendment # Mining Activities – insertion of additional activity bulk sampling of the Northern WRD and Southern WRD Mining Interest and Land Ownership – noted on which tenements bulk sampling is proposed Land access agreement – updated to reflect that this has now been signed by all parties.
2	 Aboriginal Sacred Sites – added information in relation to the proposed bulk sampling locations and the location of the nearest sacred site – outlined relevant management.
3	 This table has been updated to reflect all changes made to this document.
4	 Activities proposed – the bulk sampling activities proposed have been apportioned to the relevant tenements.
5	 Updated to confirm that no disturbance has been undertaken to date, and to outline the previously approved drilling activities, which are planned to be undertaken in August 2023.
8	 Updated to include a required attachment of the initial application for authorisation A new security calculation has been added for infill of the bulk sample pits only. This is in addition to the previously approved security calculation for drilling activities. Request for the security to be split in to two stages (Stage 1 – drilling; and Stage 2 – bulk sampling). Appendix C added to include details of the proposed bulk sampling.

Delete or add rows as required

Section 4 – Activities Proposed for this MMP only

Provide relevant tenement numbers – PART 1 of 1:

Mining Interests (i.e. titles)	MLC521	MLC539	MLC556
Number and type of proposed exploration drill holes	None	None	None
Maximum depth of proposed holes (m)	N/A	N/A	N/A
Number and size of drill pads to be cleared (Length: m x Width: m)	N/A	N/A	N/A
Total area of drill pads to be cleared (ha)	N/A	N/A	N/A
Number of proposed water bores	None	None	None
Is drilling likely to encounter groundwater in multiple or confined aquifers?	N	N	N
(Y, N, unsure) If answering yes, please provide the number of exploration holes where this is likely to occur			
Number of costeans	None	None	None
Volume to backfill costeans (Length: m x Width: m x Depth: m)	N/A	N/A	N/A
Number of bulk sample pits	3	1	2
Volume to backfill bulk sample pits (Length: m x Width: m x Depth: m)	375 m ³ (each pit: 5 m x 5 m x 5 m)	2,000 m ³ (each pit: 20 m x 20 m x 5 m)	4,000 m ³ (each pit: 20 m x 20 m x 5 m)
Bulk sample pits approved under <i>Mineral Titles Act</i> ? (Y or N). If Yes provide approval	N	N	N
Line/track clearing: (length m x width m)	None	None	None
Area of proposed line/track clearing (ha)	N/A	N/A	N/A
Camp area to be cleared (ha)	None	None	None

Mining Interest (i.e. titles)	s	MLC521	MLC539	MLC556	
Camp Infrastructure (i.e. demountable, tents) Please provide a complete list with measurements as required in the security calculation	All personnel will stay in Tennant Creek, no camp infrastructure will be required on site.	The drillers will stay in Tennant Creek, no camp infrastructure will be required on site.			
Other		N/A	N/A	N/A	
Total proposed area of disturbance (ha)		0.0075	0.04	0.08	

Section 5 – Previous Disturbance/Activities previously approved but not yet commenced (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.

.....

The disturbance tracking spreadsheet has not been completed, as no disturbance activities have been undertaken to date. Below are listed the drilling activities that were approved within 1163-01 mining authorisation issued 18 July 2023. These activities are planned to commence in August 2023.

Provide relevant tenement numbers - PART 1 of 2:

Mining Interests (i.e. titles)	MLC525	MLC689	MLC514	MLC688	MLC691	MLC539	MLC512
Number and type of proposed exploration drill holes	1 x RC (NN_Cu_5)	2 x RC (NN_9, NN_11)	1 x RC (NN_10)	1 x RC (NN_Cu_4)	8 x RC (NN_1, NN_2, NN_3, NN_4, NN_5, NN_6, NN_6, NN_7, NN_8)	None	3 x RC (NN_Cu_1, NN_Cu_2, NN_Cu_3)
Maximum depth of proposed holes (m)	209.04m	155.43m	183.82m	260.2m	167.19m	N/A	335.78m
Number and size of drill pads to be cleared (Length: m x Width: m)	~1.25 x 20m x 20m pads	~2.2 x 20m x 20m pads	~0.8 x 20m x 20m pads	~0.5 x 20m x 20m pads	8 x 20m x 20m pads (with overlap)	~0.25 x 20m x 20m pads (at NN_Cu_4)	~3 x 20m x 20m pads
Total area of drill pads to be cleared (ha)	~0.05	~0.088	~0.032	~0.02	~0.335	~0.01	~0.12
Number of proposed water bores	None	None	None	None	None	None	None

Mining Interests (i.e. titles)	MLC525	MLC689	MLC514	MLC688	MLC691	MLC539	MLC512
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	It is anticipated a single, unconfined aquifer will be encountered by all drill holes. Sumps will be constructed to the side of the drill pads to catch any groundwater runoff produced by the drilling.						
Number of costeans	None	None	None	None	None	None	None
Volume to backfill costeans (Length: m x Width: m x Depth: m)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of bulk sample pits	None	None	None	None	None	None	None
Volume to backfill bulk sample pits (Length: m x Width: m x Depth: m)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bulk sample pits approved under <i>Mineral</i> <i>Titles Act</i> ? (Y or N). If Yes provide approval	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Line/track clearing: (length m x width m)	None	None	None	None	None	None	None

Mining Interests (i.e. titles)	MLC525	MLC689	MLC514	MLC688	MLC691	MLC539	MLC512	
Area of proposed line/track clearing (ha)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Camp area to be cleared (ha)	None	None	None	None	None	None	None	
Camp Infrastructure (i.e. demountable, tents) Please provide a complete list with measurements as required in the security calculation	The drillers v	The drillers will stay in Tennant Creek, no camp infrastructure will be required on site.						
Other	Sumps will be constructed to the side of the drill pads to catch any groundwater runoff produced by the drilling – and in the case of diamond drilling, to mix drilling fluids and retain cuttings from the returned drilling fluids. Sumps will be lined. These will be constructed within the disturbance area of the drill pads.							
Total proposed area of disturbance (ha)					~0.01	~0.12		

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

Provide relevant tenement numbers – PART 2 of 2:

Mining Interests (i.e. titles)	MLC68	MLC46	MLC47	MLC578	MLC45	MLC579
Number and type of proposed exploration drill holes	2 x DDH (J_9 & J_10)	None	4 x DDH (J_1, J_3, J_4, J_5)	3 x RC (J_Cu_1, J_Cu_2, J_Cu_3)	1 x DDH (J_2)	3 x DDH (J_6, J_7, J_8)
Maximum depth of proposed holes (m)	402.98m	N/A	381.26m	291.42m	381.14m	466.66m

Mining Interests (i.e. titles)	MLC68	MLC46	MLC47	MLC578	MLC45	MLC579
Number and size of drill pads to be cleared (Length: m x Width: m)	2 x 20m x 30m pads	~0.5 x 20m x 30m pads (at J_6)	~3 x 20m x 30m pads (with overlap)	3 x 20m x 20m pads	~2 x 20m x 30m pads (with overlap) (at J_2, J_4 & J_5)	~2.5 x 20m x 30m pads
Total area of drill pads to be cleared (ha)	0.12	~0.03	~0.12	0.12	~0.075	~0.15
Number of proposed water bores	None	None	None	None	None	None
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	holes. Sun	It is anticipated a single, unconfined aquifer will be encountered by all drill holes. Sumps will be constructed to the side of the drill pads to catch any groundwater runoff produced by the drilling.				
Number of costeans	None	None	None	None	None	None
Volume to backfill costeans (Length: m x Width: m x Depth: m)	N/A	N/A	N/A	N/A	N/A	N/A
Number of bulk sample pits	None	None	None	None	None	None
Volume to backfill bulk sample pits (Length: m x Width: m x Depth: m)	Ν/Δ Ν/Δ		N/A	N/A	N/A	N/A
Bulk sample pits approved under Mineral Titles Act? N/A (Y or N). If Yes provide approval		N/A	N/A	N/A	N/A	N/A

Mining Interests (i.e. titles)	MLC68	MLC46	MLC47	MLC578	MLC45	MLC579	
Line/track clearing: (length m x width m)	None	None	None	None	None	None	
Area of proposed line/track clearing N/A (ha)		N/A	N/A	N/A	N/A	N/A	
Camp area to be cleared (ha)	None	None	None	None	None	None	
Camp Infrastructure (i.e. demountable, tents) Please provide a complete list with measurements as required in the security calculation		The drillers will stay in Tennant Creek, no camp infrastructure will be required on site.					
Other	Sumps will be constructed to the side of the drill pads to catch any groundwater runoff produced by the drilling – and in the case of diamond drilling, to mix drilling fluids and retain cuttings from the returned drilling fluids. Sumps will be lined. These will be constructed within the disturbance area of the drill pads.						
Total proposed area of disturbance (ha)	0.12	~0.03	~0.12	0.12	~0.075	~0.15	

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

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	Υ	Blade-up approach for clearing will be used (i.e. no windrows, leave root
0.1		stock and topsoil)
6.2	Υ	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	N/A	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 Mining Management Act.
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.

6.19	N/A	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	ustification 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	Υ	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	Υ	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	Υ	All drill hole and access markers including flagging tape, wooden markers and star pickets will be removed from site.
7.5	Υ	Cut and fill drill pads will be re-contoured to be consistent with the surrounding terrain.
7.6	Υ	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	N/A	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	N/A	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	N/A	All water bores will be decommissioned unless otherwise agreed in writing by the land holder or appropriate third party.
7.14	Υ	All rubbish and infrastructure will be removed from site.
7.15	Υ	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:

No new tracks are required, no watercourses will be encountered, and no water bores will be constructed within the scope of these works.

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	Υ	Nomination of Operator Form, where required			
8.3	Υ	Security Calculation Spreadsheet			
8.4	N/A	Evidence of Land Access Agreement if operating on an Exploration Licence (EL) on Pastoral Lease (e.g. two-ways exchange of email)			
8.5	N/A	Disturbance tracking spreadsheet (for existing Authorisations)			
8.6	Υ	Spreadsheet with coordinates of proposed drill holes or polygons of target areas			
		Details of proposed bulk sampling points are included in Appendix C of this MMP.			
8.7	N	KML/shape files/track logs of proposed tracks, camp sites and proposed drill holes or polygons of target areas			
		Coordinates of the proposed bulk sample points are included in Appendix C of this MMP. No new disturbance related to tracks or camp sites are expected.			
8.8	Υ	Map(s) of the work area(s) showing:			
		title boundaries and title numbers			
		2. current and proposed drill holes, or polygons of target areas			
		current and proposed tracks			
		4. rehabilitated areas			
		5. camp sites			
		heritage sites or significant environmental areas			
		7. environmental constraints			
		Maps showing the relevant features are included in Appendix C of this MMP.			
8.10	N/A	Radiation Management Plan (if applicable)			
8.12	N/A	Document(s) being appended in relation to Section 2 (if any):			



Mining Management Exploration Activities Appendix C. Proposed bulk sampling

Proposed Bulk Sampling of the Nobles Nob Waste Rock Dumps

The Northern Waste Rock Dump (Northern WRD) and Southern Waste Rock Dump (Southern WRD) are waste rock deposits remaining at the Nobles Nob Project site from historic mining activities. The location of the two WRDs in relation to the Nobles Nob Project site are shown in Figure 1 below. The proximity to Sacred Sites Exclusion Zones as designated by AAPA and CLC in sacred site clearance certificates for the Project area are also shown in Figure 1.

TCMG proposes to carry out a screening trial of the Northern WRD and Southern WRD to assess the efficacy of screening material to achieve an upgrade in the product. Laboratory metallurgical test work has been carried out by TCMG on material previously taken from the Southern WRD at Nobles Nob, which has shown that simple screening achieves a significant upgrade of the product.

Exploration drilling of the Northern WRD was previously carried out and the grade was found to be low – it was therefore assessed as not viable to excavate and process the waste rock material. It is proposed to undertake a screening trial of the Northern WRD, to see if a similar upgrade can be achieved to that seen in the laboratory, thus allowing TCMG to reassess the viability of processing the Northern WRD.

The Southern WRD has been approved for excavation and processing within the Nobles Nob Gold Project MMP (Authorisation 1123-01 granted 15 August 2022). Ahead of processing activities, it is proposed to conduct a screening trial at the same time as that for the Northern WRD, to verify the findings of the initial laboratory testing. That is, to establish whether screening can be used to increase the grade of feed to the mill. This would decrease crushing costs and improve project efficiencies and return during the early stages of processing the WRD.

TCMG proposes to undertake bulk sampling of material from the Northern WRD and Southern WRD for use in the screening trial. Six sample points are proposed, as shown in Table A, Figure 2, and Figure 3 below. From each sample pit within the Northern WRD approximately 875 t of material will be reclaimed, within a 5 m x 5 m pit area, to a maximum depth of 5 m. From each sample pit within the Southern WRD approximately 3,500 t of material will be reclaimed, within a 20 m x 20 m pit area, to a maximum depth of 5 m. With a total sample amount between the six sample pits of approximately 13,125 t and a total disturbance area of approximately 0.13 ha (1,275 m²). The central coordinates of the proposed sample pits are shown in Table A below.

Table A. Proposed bulk sample points

Propos	sed bulk sample points	GDA94 M	GDA94 MGA 94 Z53	
Target	Sample ID	EAST	NORTH	
Northern WRD	Sample point 1	425543.9	7820471.4	
Northern WRD	Sample point 2	425584.8	7820365.2	
Northern WRD	Sample point 3	425685.0	7820428.9	
Southern WRD	Sample point 4	425920.2	7819681.1	
Southern WRD	Sample point 5	425751.3	7819666.0	
Southern WRD	Sample point 6	425755.0	7819780.4	

Methodology

It is proposed to undertake the screening trial using a track-mounted mobile power screen. The power screen will be driven on to the WRDs to the location of each sample pit. Each pit will be excavated using a 36T Digger, with the excavated material directly transferred on to the power screen. The large material will first be separated out using a coarse Grizzly screen. The remaining material will then be separated out by the power screen in to three grades (+32 mm; 10-32 mm; and 0-10 mm). A small stockpile of each grade will be formed. A 980 Loader will then take the stockpiled material and spread it in to 'fingers' of material for sampling. Representative samples will be collected from each 'finger' and sent to the laboratory for assay and metallurgical test work.

It is estimated that this screening trial will take approximately 2-4 weeks to undertake on day shift only. Dust suppression will be undertaken during works using a water cart. Erosion controls will be used if required to prevent movement of waste rock or stockpiled material. Works will not be undertaken during the wet season, to avoid any potential safety or erosion issues from wet conditions.

Personnel will include:

- 2 samplers
- 1 digger operator
- 1 loader operator
- 1 water cart operator

At completion each bulk sample pit will be bunded and made safe and stable. Pits in the Northern WRD will be assessed for any potential to cause movement of material towards the sacred site exclusion zone – or elsewhere – and will be levelled and stabilised as required to ensure this does not occur.

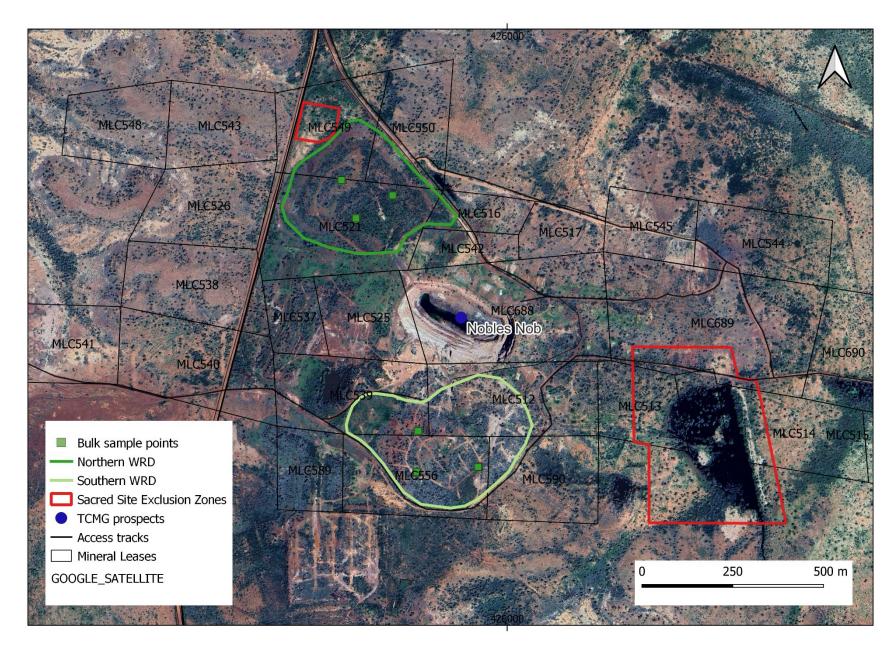


Figure 1. Location of the Waste Rock Dumps at Nobles Nob – showing sacred sites exclusion zones

Tennant Consolidated Mining Group Pty Ltd Nobles Nob Gold and Copper Exploration Project MMP



Figure 2. Location of proposed bulk sampling points (each 5 m x 5 m) within the Northern Waste Rock Dump

Tennant Consolidated Mining Group Pty Ltd Nobles Nob Gold and Copper Exploration Project MMP



Figure 3. Location of proposed bulk sampling points (each 20 m x 20 m) within the Southern Waste Rock Dump

Tennant Consolidated Mining Group Pty Ltd Nobles Nob Gold and Copper Exploration Project MMP