



Licence number	L8358/2009/3
Licence holder	Northern Star (MKO) Pty Ltd
ACN (if applicable)	135 597 634
Registered business address	Level 4, 500 Hay Street SUBIACO WA 6008
DWER file number	DER2015/001858-1~5
Duration	19/10/2024 to 18/10/2029
Date of issue	18/10/2024
Premises details	Bronzewing Gold Mine 106 Mt McClure Road LEONORA WA 6438 Legal description - Mining Tenements M36/146, M36/200, M36/263, M36/295, L36/183, L36/200 and L36/245 As defined by the premises map in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	2.5 million tonnes per annual period
Category 6: Mine dewatering	1 million tonnes per annual period
Category 52: Electric Power Generation	10 MW in aggregate
Category 73: Bulk storage of chemicals etc.	1 600 m ³ in aggregate
Category 85: Sewage facility	100 m ³ per day
Category 89: Putrescible landfill	600 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 18 October 2024, by:

Christine Pustkuchen
MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATEWIDE DELIVERY)
Officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
19/10/2009	L8358/2009/1	New Licence granted.
25/03/2010	L8358/2009/1	Licence amendment to include new tenements relating to W4647 (mine dewatering from Success Pit to Parmelia Pit)
16/10/2014	L8358/2009/2	Licence renewal. Updated to the current licence format and conditions changed to reflect the non-operational status. Issued to Metaliko Resources.
16/06/2016	L8358/2009/2	Licence amendment to update conditions to ensure accurate and adequacy in relation to on-site activities.
13/02/2019	L8358/2009/2	Licence amendment and review to ensure assessment is current as operations recommence. .
28/10/2019	L8358/2009/2	Licence amendment to correct storage amount for category 73 and to change continuous WAD-CN monitoring in the in-it TSF to manual monitoring per shift.
22/05/2020	L8358/2009/2	Licence transferred from Echo Resources Limited to Northern Star (Echo Mining) Pty Ltd
02/07/2021	L8358/2009/2	Amendment to complete administrative changes and allow dewatering operations into Central Pit.
18/10/2024	L8358/2009/3	Licence Renewal granted with five-year duration.

Interpretation

In this licence:

- (a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Infrastructure and equipment

- The licence holder must ensure that the infrastructure and equipment specified in Column 1 of Table 1 is maintained in good working order and operated in accordance with the requirements specified in Column 2 of Table 1.

Table 1: Infrastructure and equipment controls table

Column 1	Column 2
Site infrastructure and equipment	Operational requirements
Mining infrastructure	
Process water ponds	<ul style="list-style-type: none"> HDPE lined to achieve a permeability of at least 1×10^{-9} m/s; A top of embankment freeboard of at least 500 mm
Tailings infrastructure	
Tailings storage facility 1	<ul style="list-style-type: none"> Ambient groundwater monitoring as per condition 4
Discovery in-pit tailings facility	<ul style="list-style-type: none"> Tailings only to be discharged into this facility as depicted in the Bronzewing site layout map in Schedule 1. Operational freeboard of at least 500 mm to be maintained Monitoring as per condition 4 & 5
Tailings pipelines	<ul style="list-style-type: none"> V-drains and sumps to be kept clear of sediment; capacity to be maintained Inspections to be undertaken as per condition 2
Dewatering infrastructure	
Dewater containment	<ul style="list-style-type: none"> Orelia pit dewater discharged to Lotus pit. Orelia and Lotus pit dewater to be discharged to Central pit.
Dewatering pipelines	<ul style="list-style-type: none"> equipped with telemetry system and pressure sensors along pipelines to allow the detection of leaks and failures; or equipped with automatic cut-outs in the event of a pipe failure. Inspections to be undertaken as per condition 2 Monitoring to be undertaken as per condition 7
Sewage facility infrastructure	
Treated effluent	<ul style="list-style-type: none"> To be discharged to the series of four clay-lined effluent ponds Lined with clay to achieve a permeability of at least 1×10^{-9} m/s; Freeboard at least 500mm.

Landfill infrastructure	
Putrescible 'Village' landfill	<ul style="list-style-type: none"> • General refuse and light industrial rubbish only (including food waste, office and packaging waste and non-chemical waste generated from manufacturing and services); • Solid waste only • Waste to be disposed within the Village landfill area as depicted on the Bronzewing layout map in Schedule 1 • Waste to be covered with clean fill or soil at least weekly
Inert landfills	<ul style="list-style-type: none"> • Waste to be disposed of within the inert landfills depicted in the Bronzewing layout map in schedule 1;

Infrastructure Inspection

2. The licence holder must undertake infrastructure inspections to the scope specified in Column 1 of Table 2, of the type specified in Column 2 of Table 2; and at the frequency specified in Column 3 of Table 2.

Table 2: Inspection of infrastructure requirements table

Column 1	Column 2	Column 3
Scope of inspection	Type of inspection	Frequency of inspection
Pipelines carrying tailings including v-drains and sumps	Visual integrity and leak assessment	Every 12 hours
Return water pipelines		
Process water pond(s), return water pond		
Liquid chemicals/hydrocarbon storage areas	Actual or identifiable hydrocarbon losses	
Dewatering pipelines	Visual integrity and leak assessment	Every 48 hours
Sewage evaporation ponds	Visual for freeboard capacity	Every 48 hours
Discovery in-pit TSF Supernatant pond	Visual inspection for wildlife observation in and around the TSF	To occur at dawn and dusk of each day

3. Where an inspection, carried out in accordance with condition 2, identifies that an appropriate level of environmental protection is not being maintained, the licence holder must:
- taking corrective action to mitigate adverse environmental consequences as soon as practicable; and
 - maintain a written log of all inspections undertaken, with each inspection signed off by the person who conducted the inspection.

Monitoring

Ambient Groundwater Monitoring

4. The licence holder must undertake ambient groundwater monitoring for the parameters specified in Column 2 of Table 3; in the units specified in Column 3 of Table 3; and at the frequency specified in Column 4 of Table 3.

Table 3: Water monitoring requirements table

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Monitoring location	Parameter	Units	Limits	Averaging period	Frequency
TSF1 monitoring bores: CB1A, MB03B, MB04B, MB05B, MB07B	Standing water level	mbgl	-	Spot sample (in-field)	Quarterly
	Field pH	-	-		
	Electrical conductivity	mg/L	-	Spot sample (laboratory)	
	Total dissolved solids		-		
Discovery in-pit TSF monitoring bores: CB02A, CB03B, DB50, DB56	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium (total), cobalt, copper, lead, manganese, mercury (total), molybdenum, nickel, nitrate, selenium, silver, thallium, uranium, vanadium and zinc		Arsenic ≤0.5	Spot sample (laboratory)	
Discovery in-pit TSF supernatant pond					

Note: Collection standards, sampling standards, sampling frequency and testing authority accreditation are detailed on conditions 8, 9, 10 & 11.

Cyanide Monitoring of Discovery in-pit Tailings Storage Facility

5. The licence holder must undertake monitoring of cyanide concentrations in the tailings supernatant pond for the parameter specified in Column 2 of Table 4, in the units specified in Column 3 of Table 4, and at the frequency specified in Column 4 of Table 4.

Table 4: Cyanide monitoring requirements

Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring location	Parameter	Units	Limits	Method
Discovery in-pit TSF supernatant pond	Weak dissociable cyanide (WAD CN)	mg/L	≤50	Manual sample
				Frequency
				Once per 12 hour shift

Note: Collection standards, sampling standards, sampling frequency and testing authority accreditation are detailed on conditions 8, 9, 10 & 11.

Department of Water and Environmental Regulation

6. Upon recommencement of operations, the licence holder must report to the CEO at the end of each month the monitoring results from Condition 5 along with any record of wildlife observations required in Condition 2 Table 2. The Licence Holder will continue to report these findings for the first six months of recommencement of operations.

Dewatering Monitoring

7. The licence holder must undertake dewatering monitoring for the parameters specified in Column 2 of Table 5 in the units specified in Column 3 of Table 5; and at the frequency specified in Column 4 of Table 5.

Table 5: Dewatering monitoring requirement table

Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring location	Parameter	Units	Averaging period	Frequency
Lotus Pit and Central Pit	Standing water level	mbgl	Spot sample (in-field)	Quarterly
	Field pH	-		
	Electrical conductivity	µS/cm	Spot sample (laboratory)	
	Total dissolved solids	mg/L		

Note: Collection standards, sampling standards, sampling frequency and testing authority accreditation are detailed on conditions 8, 9, 10 & 11.

General Monitoring Requirements

8. The licence holder must ensure all samples are collected and preserved in accordance with AS/NZS 5667.1.
9. The licence holder must ensure all sampling must be conducted in accordance with AS/NZS 5667.4.
10. The licence holder must ensure that quarterly sampling is conducted at least 45 days apart for each sample.
11. The licence holder must ensure all laboratory samples analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters being measured.

Records and reporting

Records

12. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
 - (a) the calculation of fees payable in respect of this licence;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 2 and 3 of this licence;
 - (c) monitoring programmes undertaken in accordance with conditions 4, 5, & 7 of this licence; and
 - (d) complaints received under condition 14 of this licence.

Department of Water and Environmental Regulation

13. The books specified under condition 12 must:
- be legible;
 - if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - be retained by the licence holder for the duration of the licence; and
 - be available to be produced to an inspector or the CEO as required.
14. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- the name and contact details of the complainant, (if provided);
 - the time and date of the complaint;
 - the complete details of the complaint and any other concerns or other issues raised; and
 - the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
15. The licence holder must comply with a Department Request, within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

Reporting

16. The licence holder must:
- undertake an audit of their compliance with the conditions of this licence during the preceding annual period, and
 - prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by 28 February each year.

Note: The Annual Audit Compliance Report form is available from the Departments website and is located at: [DWER Regulatory documents | Western Australian Government \(www.wa.gov.au\)](http://www.wa.gov.au)

17. The licence holder must:
- prepare an Environmental Report that provides information in accordance with Table 6 for the preceding annual period, and
 - submit that Environmental Report to the CEO by 28 February each year.

Table 6: Environmental reporting requirements

Condition	Requirement	Format of form
2 and 3	Infrastructure inspection and maintenance log of corrective action completed to maintain the infrastructure described in Condition 2 Table 2.	None specified
4	Summary of Groundwater monitoring results as described in	None specified

Department of Water and Environmental Regulation

Condition	Requirement	Format of form
	Condition 4 Table 3.	
5 & 6	Summary of Cyanide monitoring of the Discovery in-pit TSF supernatant pond when process operations recommence. Any limits exceeded to be discussed in the annual report.	None specified
7	Dewatering monitoring of Lotus and Central pit as described in Condition 7 Table 5	None specified
12 (a)	Summary of each licence category production capacities achieved for the preceding annual period of the licence.	None specified
14	Summary of all complaints received during the annual period plus the action undertaken to address all complaints.	None specified
16	Annual audit of licence conditions as required by Condition 16	Annual Audit Compliance Report (AACR)

Definitions

In this licence, the terms in Table have the meanings defined.

Table 7: Definitions

Term	Definition
ACN	Australian Company Number
Annual Period	means a 12 month period commencing from 1 January until 31 December.
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 Or: info@dwer.wa.gov.au
Compliance Report	means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to: <ul style="list-style-type: none"> (a) compliance with the EP Act or this Licence; (b) the Books or other sources of information maintained in accordance with this Licence; or (c) the Books or other sources of information relating to Emissions from the Premises.
Discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environmental Regulation.
Emission	has the same meaning given to that term under the EP Act.
EP Act	means the <i>Environmental Protection Act 1986</i> (WA).
EP Regulations	means the <i>Environmental Protection Regulations 1987</i> (WA).
Freeboard	Means the distance between the maximum water surface elevation and the top of retaining banks or structures at their lowest point.
HDPE	high density polyethylene
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this

Term	Definition
	Licence has been granted, as specified at the front of this Licence.
mbgl	metres below ground level
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Spot sample	A discrete sample taken randomly (with regard to time and/or location) from a body of water.
Waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (

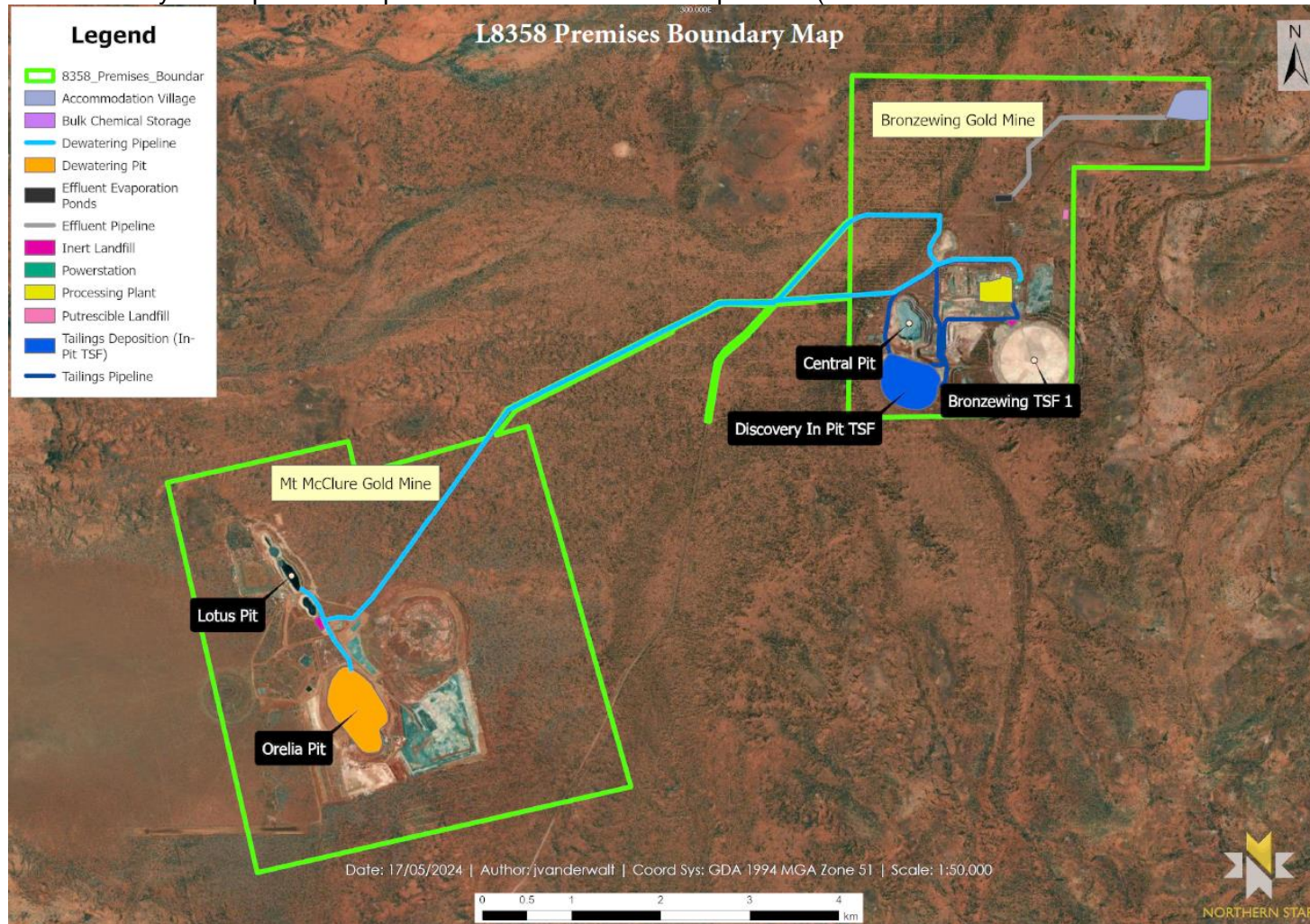


Figure 1).

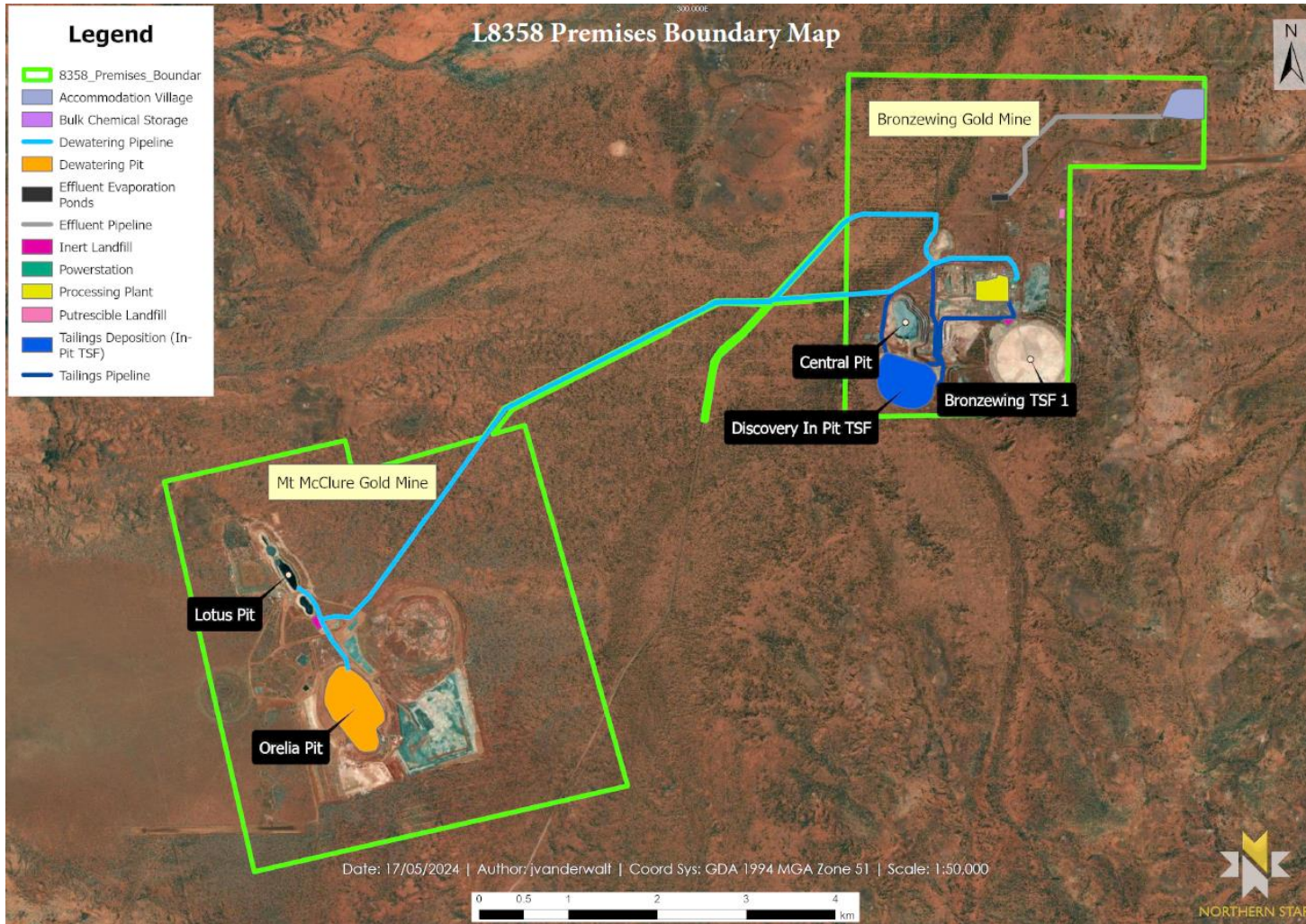


Figure 1: Map of the boundary of the prescribed premises

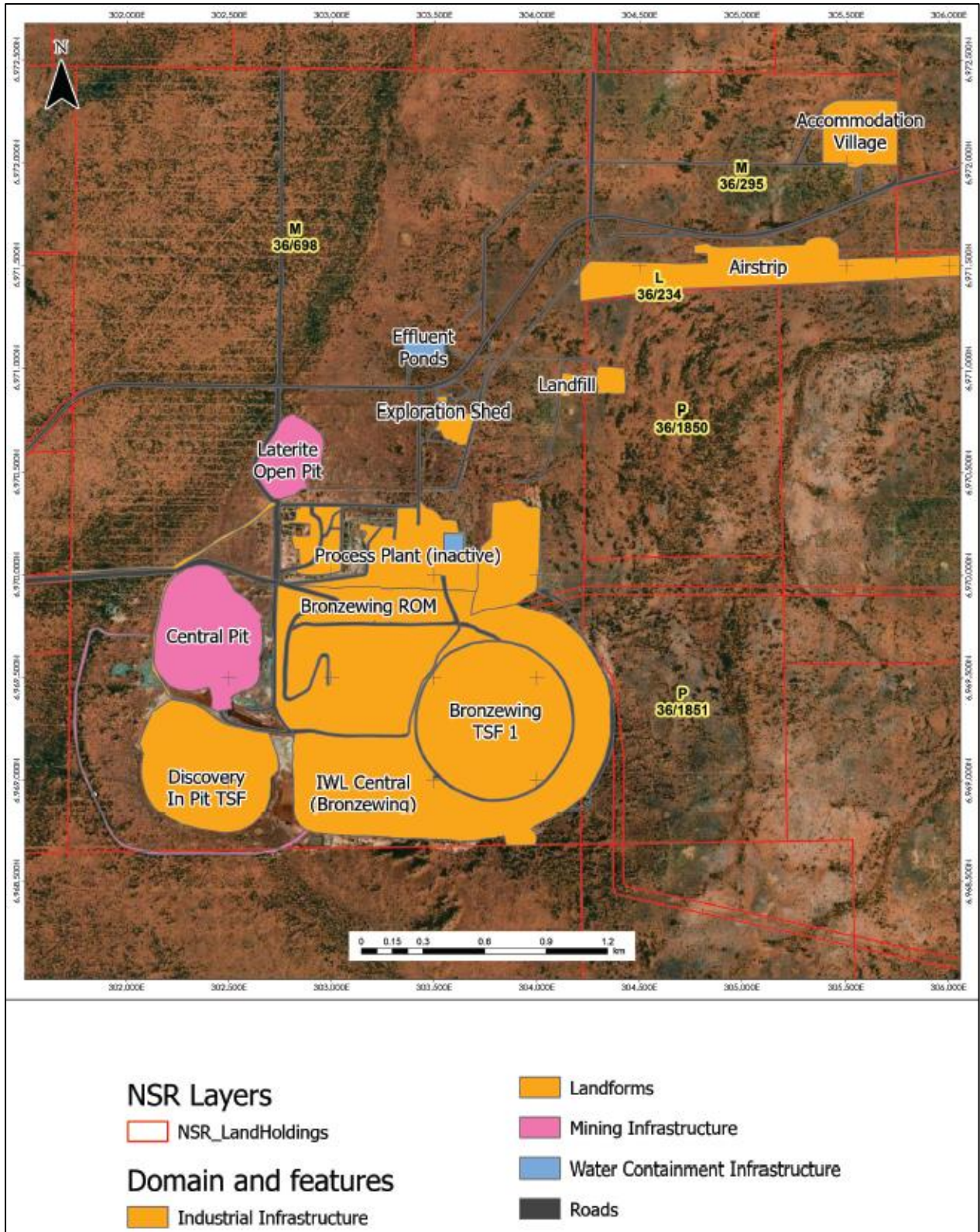


Figure 2: Bronzewing site layout

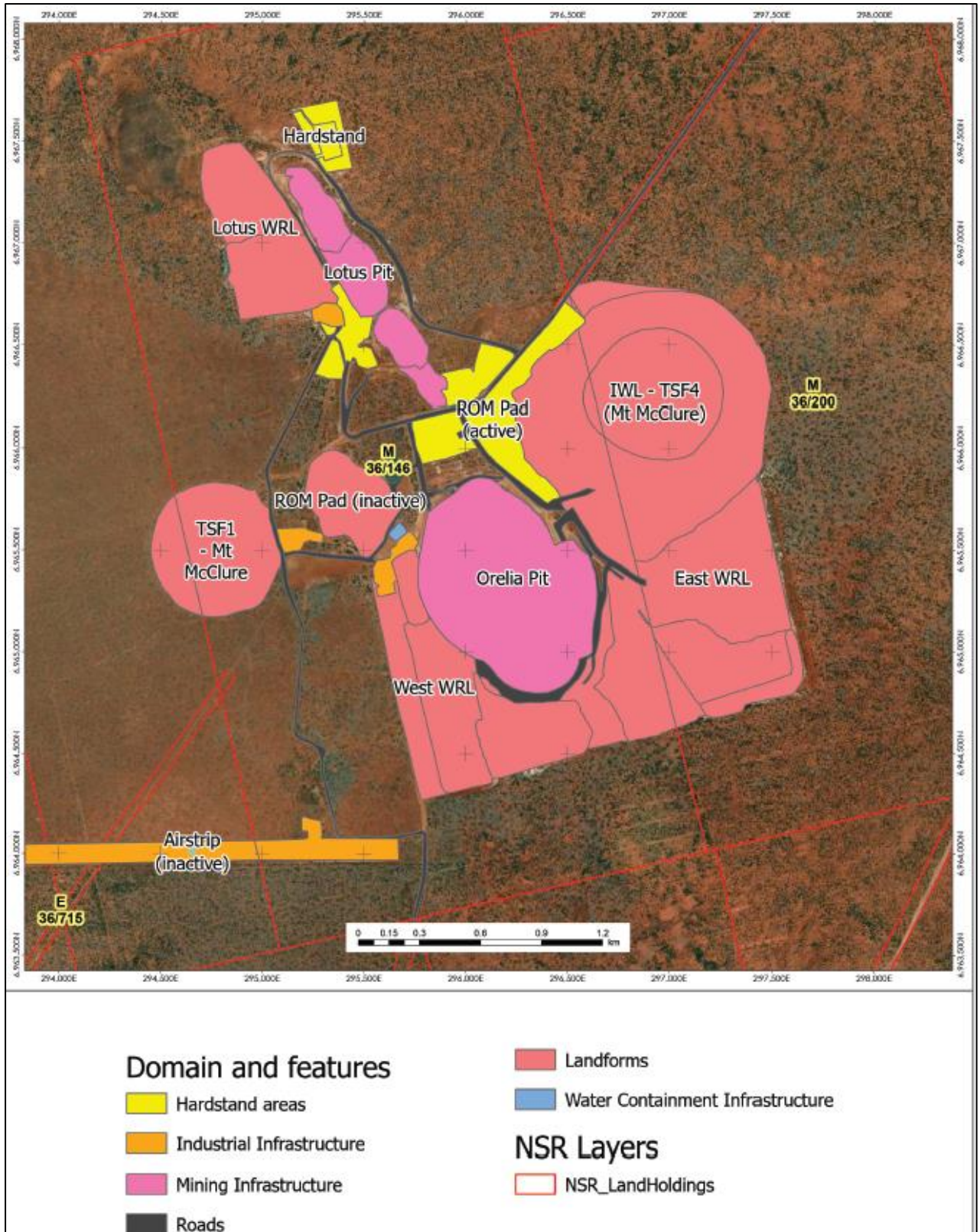


Figure 3: Mt McClure site layout

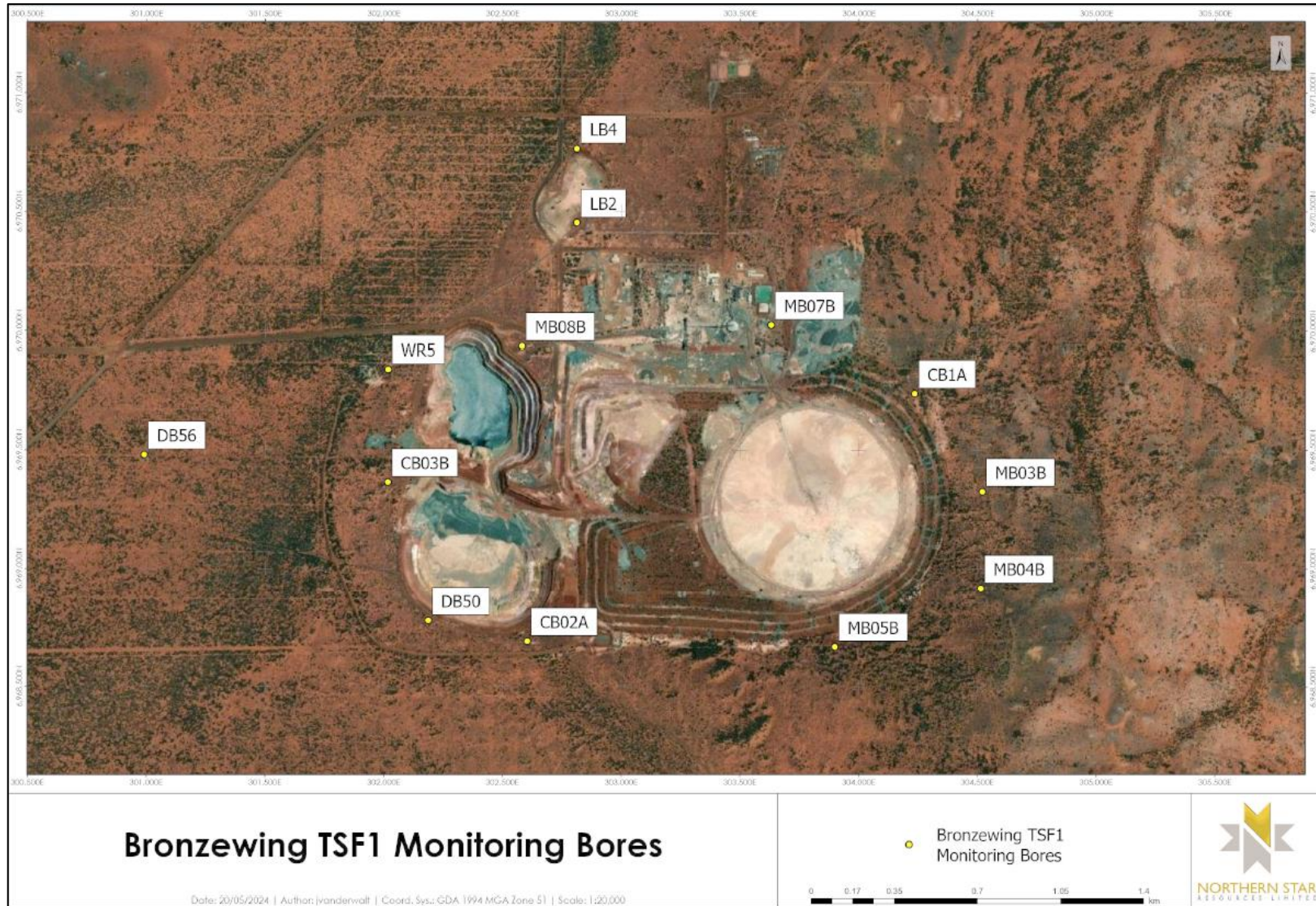


Figure 4: Bronzewing TSF Monitoring Bores