Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L9362/2022/1
Licence holder	Norton Gold Fields Pty Limited
ACN	112 287 797
Registered business address	'Viskovich House' Level 1, 377 Hannan Street Kalgoorlie WA 6430
DWER file number	DER2022/000510
Duration	29/03/2023 to 29/03/2032
Date of issue	29/03/2023
Date of amendment	27/09/2024
Premises details	Binduli Operations Legal description - Part of mining tenements M26/115, M26/243, M26/387, M26/420, M26/430, M26/445, M26/446, M26/447, M26/474, M26/629 and M26/833. BINDULI WA 6430 As defined by the premises map in Schedule 1 and the coordinates outlined in Schedule 2.

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	5,000,000 tonnes per annual period
Category 6: Mine dewatering	1,500,000 tonnes per annual period
Category 7: Vat or in situ leaching of material	5,000,000 tonnes per annual period
Category 12: Screening, etc. of material	800,000 tonnes per annual period
Category 52: Electric power generation	13 MW per annual period

This amended licence is granted to the licence holder, subject to the attached conditions, on 27 September 2024, by:

Kang Tam
Digitally signed by Kang Tam
Date: 2024.09.27 09:57:06 +08'00'

A/MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATEWIDE DELIVERY)
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
29/03/2023	L9362/2022/1	Licence granted to authorise the operation of a power station and ore processing and heap leach facility infrastructure.
25/03/2024	L9362/2022/1	Amendment to authorise the discharge of brine water from the water treatment plant to Fort William Pit.
27/09/2024	L9362/2022/1	Amendment to authorise the discharge of mine dewatering effluent from Janet Ivy pit to Fort William pit and authorise the operation of a mobile crushing and screening plant constructed under W6730/2022/1 (Category 12 added to licence).

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

1. The Licence Holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1	Gold-bearing ore crushing and screening Plant	(a) Dust suppression sprays must be operated throughout the plant, at the head of the conveyor and material discharge points when visible dust is detected; and (b) Record volumes of ore processed through the crushing and screening plant.	Labelled as “Crushing Plant” in the Premises Layout Map as depicted in Figure 2 of Schedule 1.
2	Heap leach facility - Stage 1	(a) Bunding to be maintained around heap leach pad to prevent potentially contaminated stormwater from mixing with uncontaminated stormwater; (b) Maintain integrity of 1.5 mm HDPE liner on heap leach pad and stormwater pond; (c) Nine groundwater monitoring bores as depicted in Figure 4, of Schedule 1 must be maintained around the heap leach facility for leak detection; and (d) Storm water pond to capture contaminated stormwater runoff or leachate that has percolated through the bunded heap leach pad via a diversion channel and reused through the heap leach circuit.	Labelled as “Heap Leach” and “Diversion Channel/Bund” in the Premises Layout Map as depicted in Figure 2 of Schedule 1.
3	Mine dewater and brine pipelines	(a) Flow meter to be maintained on pipeline discharge point(s) to measure cumulative volumes (tonnes or m^3) of water discharged.	Labelled as Mine dewatering Pipeline” and “Brine Discharge Pipeline” in the Discharge Point Locations Map as depicted in Figure 3 of Schedule 1.
4	Fort Scott Pit and Fort William Pit	(a) A freeboard of 6 m from below the pit crest is to be maintained at all times; and	Labelled as “Fort Scott and Fort William” in the Discharge Points Locations Map as depicted in Figure 3

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		(b) Receive brine from water treatment plant in accordance with condition 4; and (c) Fort William Pit to receive mine dewater from Janet Ivy Pit in accordance with condition 4	of Schedule 1.
5	Processing and raw water ponds	(a) Pit Water Pond (PWP), Raw Water Pond (RWP), Intermediate Liquor Pond (ILP), Barron Water Pond (BWP) and Pregnant Liquor Pond (PLP) to have a minimum freeboard of 0.5 m maintained at all times; and (b) Maintain integrity of 1.5 mm HDPE liner on PWP, RWP, ILP, BWP and PLP.	Labelled as “Process Water Pond” in the Premises Map and Premises Layout Map as depicted in Figure 1 and Figure 2 of Schedule 1.
6	Gas, diesel, hydrocarbon and chemical reagent storage	(a) Refueling activities and unloading areas shall occur on a steel spill containment grid to contain any potential spills or drips; (b) All hydrocarbons and chemical storage areas shall be located within bunded internally draining hardstands to capture any overflows or spillages; and (c) Spill kits must be retained on site, for use in the event of a hydrocarbon or chemical spill, used by personal trained in spill response and clean up.	Labelled as “Fuel Farm” in the Premises Layout Map as depicted in Figure 2 of Schedule 1.
7	Stormwater Management System	(a) Potentially contaminated stormwater to be captured and prevented from being released in the environment; (b) Ensure that uncontaminated stormwater is kept separate from contaminated or potentially contaminated stormwater; (c) Surface water catchment pond to be designed to contain contaminated stormwater/sedimentation runoff from within the plant area directed to the surface water catchment pond via diversion drains; (d) Surface water catchment pond to maintain a minimum operating freeboard of 0.3 m; (e) Sedimentation shall be captured within sedimentation traps and toe drains; (f) Sedimentation traps and toe drains are to be regularly inspected and	Within the Prescribed premises boundary depicted in Figure 1 of Schedule 1.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		pumped out to remove excess sediment to prevent overflowing of contaminated stormwater; and (g) Hydrocarbon testing shall be undertaken from the surface water catchment pond where greater than 30 mm of rainfall has been recorded over a 24-hour period or standing water level breaches 0.3 m freeboard.	
8	Water treatment plant	(a) Nano filtration water treatment plant to treat hypersaline mine dewater effluent for use in the heap leach circuit and ore processing; and (b) Waste stream (brine) to be discharged to Fort Scott Pit and Fort William Pit via brine water pipeline in accordance with condition 4.	Labelled as “WTP” as depicted in Figure 3 of Schedule 1.
9	Power station	(a) 13 x 1 megawatt Cummins KTA50-G3 diesel generators within a steel framed power station building centred on a concrete pad.	Labelled as “Power station” in the Premises Layout Map as depicted in Figure 2 of Schedule 1.
10	Crushing and screening plant	(a) Crushing and screening plant consisting of the following machinery (or equivalent); • Terex Finlay J1175 Jaw Crusher (x2); • Terex Finlay C1550 Cone Crusher; • Terex Finlay C1545 Cone Crusher; • Terex Finlay C1540 Cone Crusher; • Terex Finlay 693 Double Deck Screen; • Terex Finlay 696 Triple Deck Screen; • R230 McCloskey Reclaimer; and • Telestack TC624 Track Stacker/Radial Stockpiler; (b) Water sprays installed at all crushing and screening points and conveyor discharge points to be operated to supress dust emissions; and (c) Water cart must be available on site to suppress visible emissions of fugitive dust from the crushing and screening plant.	Labelled as “Mobile Crushing and Screening” in Figure 1 and Figure 2 of Schedule 1.

2. The Licence Holder shall ensure that all pipelines containing dewatering effluent or brine discharge are either:

(a) equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures;

(b) equipped with automatic cut-outs in the event of a pipe failure; or

(c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.

3. The Licence Holder shall:

(a) undertake inspections as detailed in Table 2;

(b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and

(c) maintain a record of all inspections undertaken.

Table 2: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Gold-bearing ore crushing and screening Plant	Visual assessment to ensure controls for managing dust emissions are effective.	Daily when operating
Heap leach pad	Visual assessment for leak detection	
Processing ponds for heap leach facility	Visual to confirm required freeboard capacity is available.	
Fort Scott Pit and Fort William Pit	Visual assessment to confirm required freeboard capacity is available	
Mine dewater and brine water pipelines	Visual integrity and leak assessment.	Twice daily when operating
Crushing and screening plant	Visual assessment to ensure controls for managing dust emissions are effective.	Daily when operating

Emissions and discharges

Dewater discharges

4. The Licence Holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 3: Authorised discharge points

Emission point reference	Discharge point	Discharge point location	Authorised discharged volume
Discharge of brine water from Water Treatment Plant	Fort Scott Pit and Fort William Pit	As shown in Schedule 1, Figure 3: Authorised discharge point locations.	1,500,000 tonnes per annual period

Discharge of water from dewatering of Janet Ivy Pit	Fort William Pit	As shown in Schedule 1, Figure 3: Authorised discharge point locations.	
Air emissions including NOx, Sox, CO	Power station stacks	As shown in Schedule 1, Figure 2: labelled as 'Power station'	-

Emissions Monitoring

Dewater discharge monitoring

5. The licence holder must monitor emissions:

(a) from each discharge point;

(b) at the corresponding monitoring location;

(c) for the corresponding parameter;

(d) at the corresponding frequency;

(e) for the corresponding averaging period; and

(f) in the corresponding unit

as set out in Table 4: Emissions and discharge monitoring.

Table 4: Emissions and discharge monitoring

Discharge Point	Monitoring location	Parameter	Frequency	Averaging period	Unit
Fort Scott Pit and Fort William Pit	Flow meters on Fort Scott Pit and Fort William Pit discharge pipes	Volume of brine discharged Volume of mine dewatering effluent discharged	Continuous	Monthly	kL
	Surface of pit lakes	Standing Water Level	Quarterly	Spot sample	Metres below pit crest level

6. The Licence Holder must record the results of all monitoring activity required by condition 5.

Ambient Environmental Monitoring

Ambient groundwater monitoring

7. The Licence Holder must conduct a groundwater monitoring programme in accordance with the requirements specified in condition 10 and record the results of all monitoring activity conducted under that programme.

8. The Licence Holder must adhere to the field quality assurance and quality control procedures specified in condition 11 for the monitoring required by condition 7.

9. All sample analysis must be undertaken by laboratories with current accreditation

from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in condition 10.

10. The Licence Holder must monitor groundwater for concentrations of the identified parameter(s) in accordance with Table 5.

Table 5: **Groundwater monitoring of ambient concentrations**

Monitoring well location	Parameter	Unit	Frequency	Averaging period	Method
Heap leach monitoring bores (as shown in Figure 4 of Schedule 1) MBH-01 – MBH-09	Standing water level[1]	mbgl	Quarterly	Spot sample	Spot sample in accordance with AS/NZS 5667.11.
	pH[2]	pH units			
	Electrical conductivity[2]	µS/cm			
	Total dissolved solids	mg/L			
	• Ammonia (NH_3); • Aluminium (Al); • Antimony (Sb); • Arsenic (As); • Barium (Ba); • Beryllium (Be); • Bicarbonate (HO_{3}^{-}); • Boron (B); • Cadmium (Cd); • Calcium (Ca); • Carbonate (CO_3^{2-}); • Chloride (Cl); • Chromium (Cr) • Cobalt (Co); • Copper (Cu); • Hydroxide (OH^-); • Iron (Fe); • Lead (Pb); • Magnesium (Mg); • Manganese (Mn); • Mercury (Hg); • Molybdenum (Mo); • Nickel (Ni); • Nitrate (NO_2); • Nitrate + Nitrate (NO_3); • Potassium (K); • Reactive Phosphorus (P); • Selenium (Se); • Strontium (Sr); • Sulphate (SO_4^{2-}); • Total Cyanide (CN^-); • Total Kjeldahl Nitrogen (N); • Total Nitrogen (TN); • Total Phosphorus (TP); • Tin (Sn^{+2}) • Uranium (U); • Vanadium (V); and • Zinc (Zn).				

Note 1: Standing water level shall be determined prior to collection of other water samples.
Note 2: In field non-NATA accredited analysis permitted.

Quality assurance and quality control requirements

11. The Licence Holder must adhere to the following field quality assurance and quality control procedures, as specified in Schedule B2 of the Assessment of Site

Contamination NEPM, and must include as a minimum:

(a) decontamination procedures for the cleaning of tools and sampling equipment before sampling and between samples;

(b) field instrument calibration for instruments used on site;

(c) blind replicate samples and rinsate blanks must be collected in the field and sent to the primary laboratory to determine the precision of the field sampling and laboratory analytical program;

(d) completed field monitoring sheets / sampling logs for each sample collected, showing:

  (i) time of collection;

  (ii) location of collection;

  (iii) initials of sampler;

  (iv) sampling method;

  (v) field analysis results;

  (vi) duplicate type / location (if relevant); and

  (vii) site observations and weather conditions, and

(e) chain-of-custody documentation must be completed which details the following information:

  (i) site identification;

  (ii) the sampler;

  (iii) nature of the sample;

  (iv) collection time and date;

  (v) analyses to be performed;

  (vi) sample preservation method;

  (vii) departure time from site;

  (viii) dispatch courier(s); and

  (ix) arrival time at the laboratory.

Records and reporting

12. 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:

(a) the name and contact details of the complainant, (if provided);

(b) the time and date of the complaint;

(c) the complete details of the complaint and any other concerns or other issues raised; and

(d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

13. The Licence Holder must:

(a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

(b) prepare and submit to the CEO by no later than 60 days after the end of that annual period an Annual Audit Compliance Report in the approved form.

14. The Licence Holder must submit to the CEO by no later than 30 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 6, and which provides information in accordance with the corresponding requirement set out in Table 6.

Table 6: Annual Environmental Report

Condition	Requirement
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken.
5 (Table 4)	Dewater discharge monitoring.
10 (Table 5. Table 5)	Ambient groundwater quality monitoring data that includes: (a) Tabulated groundwater monitoring data results and time series graphs for each monitoring well showing concentrations of all parameters; (b) Laboratory data sheets for quarterly monitoring in accordance with condition 10. a) An interpretation of monitoring data results including comparison to historical trends.
12	Complaints summary
13	Compliance: Annual Audit Compliance Report (AACR)

15. 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 1 of this licence;

(c) monitoring programmes undertaken in accordance with conditions 5 and 7 of this licence; and

(d) complaints received under condition 12 of this licence.

16. The books specified under condition 15 must:

(a) be legible;

(b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

(c) be retained by the licence holder for the duration of the licence; and

(d) be available to be produced to an inspector or the CEO as required.

Definitions

In this licence, the terms in Table 7 have the meanings defined.

Table 7: Definitions

Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
Annual Period	a 12 month period commencing from 1 January until of the 31 December of the immediately following year.
Averaging Period	means the time over which a limit is measured or a monitoring result is obtained
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 (R2016) Water quality – sampling – guidance on sampling groundwater, as amended from time to time.
BWP	means Barron Water Pond
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Condition	A condition to which this works approval is subject under section 62 of the EP Act.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
Discharge	has the same meaning given to that term under the EP Act.
Emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
Freeboard	means the distance between the maximum water surface elevations

Term	Definition
	and the top of retaining banks or structures at their lowest point.
HDPE	means high density poly-ethylene.
ILP	means Intermediate Liquor Pond
Licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
Licence Holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
Monthly	means a monthly monitoring period where monitoring is undertaken at least 15 days apart.
mbgl	means meters below ground level.
NATA	means National Association of Testing Authorities
NEPM	means National Environmental Protection Measure
PWP	means Pit Water Pond
PLP	means Pregnant Liquor Pond
Premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (**Figure 1**) in Schedule 1 to this licence
Prescribed Premises	has the same meaning given to that term under the EP Act.
Quarterly	means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September and 1 October to 31 December, and in the following year 1 January to 31 March.
RWP	means Raw Water Pond
Spot Sample	means a discrete sample representative of the time and place at which the sample is taken
WTP	means Water Treatment Plant

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

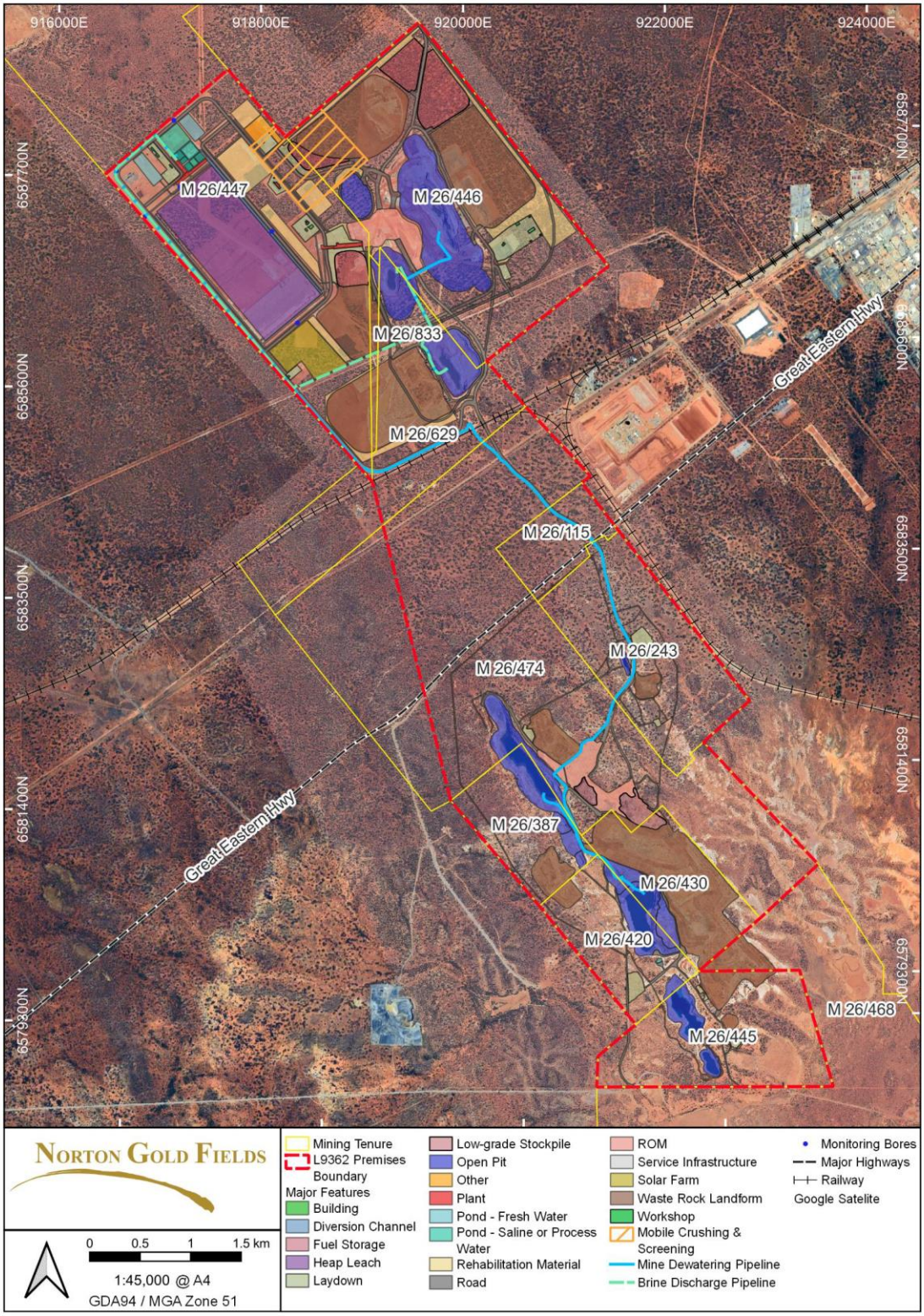

Figure 1: Map of the boundary of the Prescribed Premises

Premises layout map

The Premises layout and location of key infrastructure is shown in the map below (Figure 2).

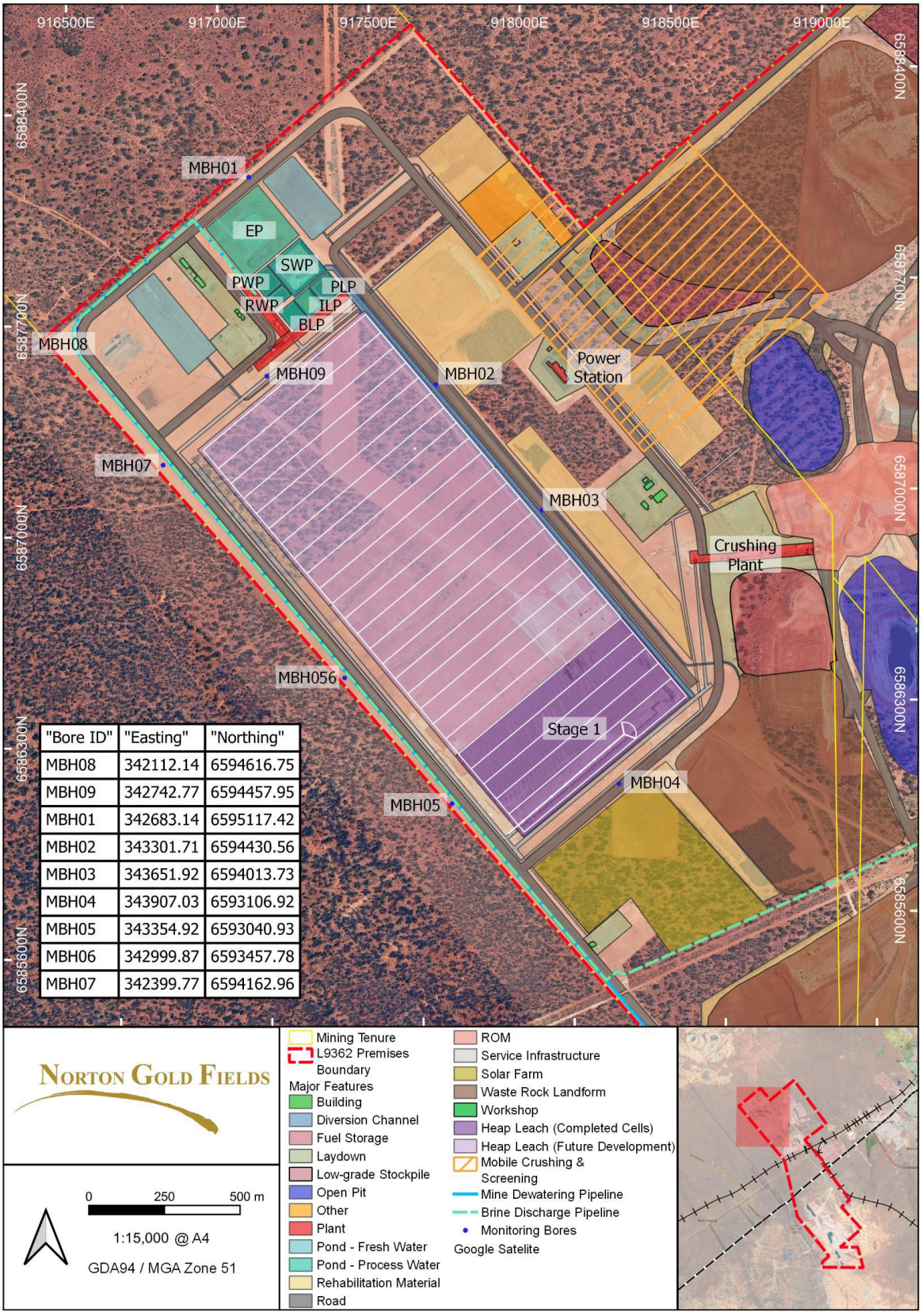

Figure 2: Prescribed Premises map showing locations of key infrastructure.

Discharge point and pipeline infrastructure locations map

The location of the discharge point and pipeline infrastructure at the Premises are shown in the map below (Figure 3)

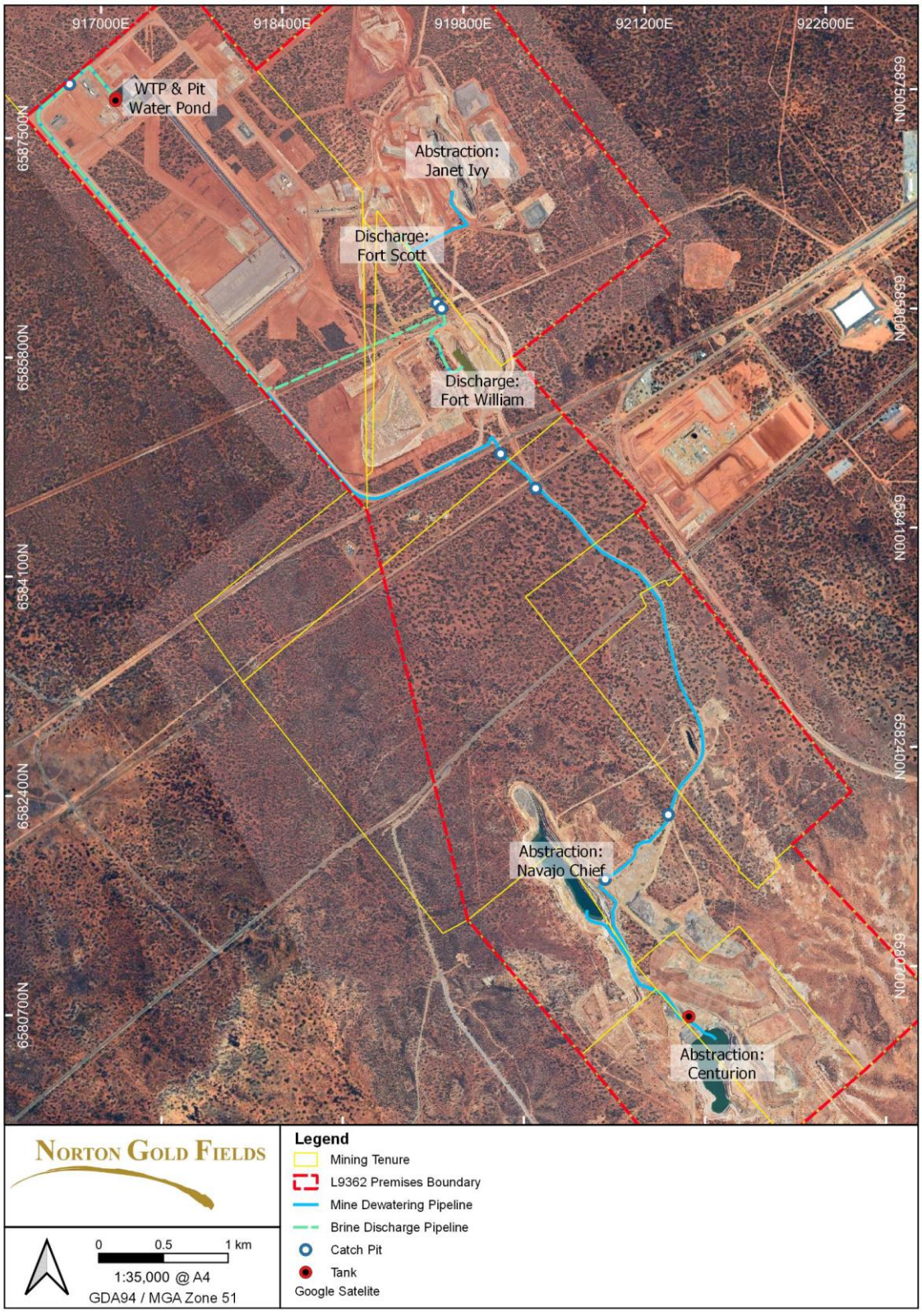

Figure 3: Authorised discharge point locations and constructed pipeline infrastructure.

Map of groundwater monitoring bore locations

The location of the groundwater monitoring bores surrounding the heap leach pad at the Premises are shown in the map below (Figure 4).

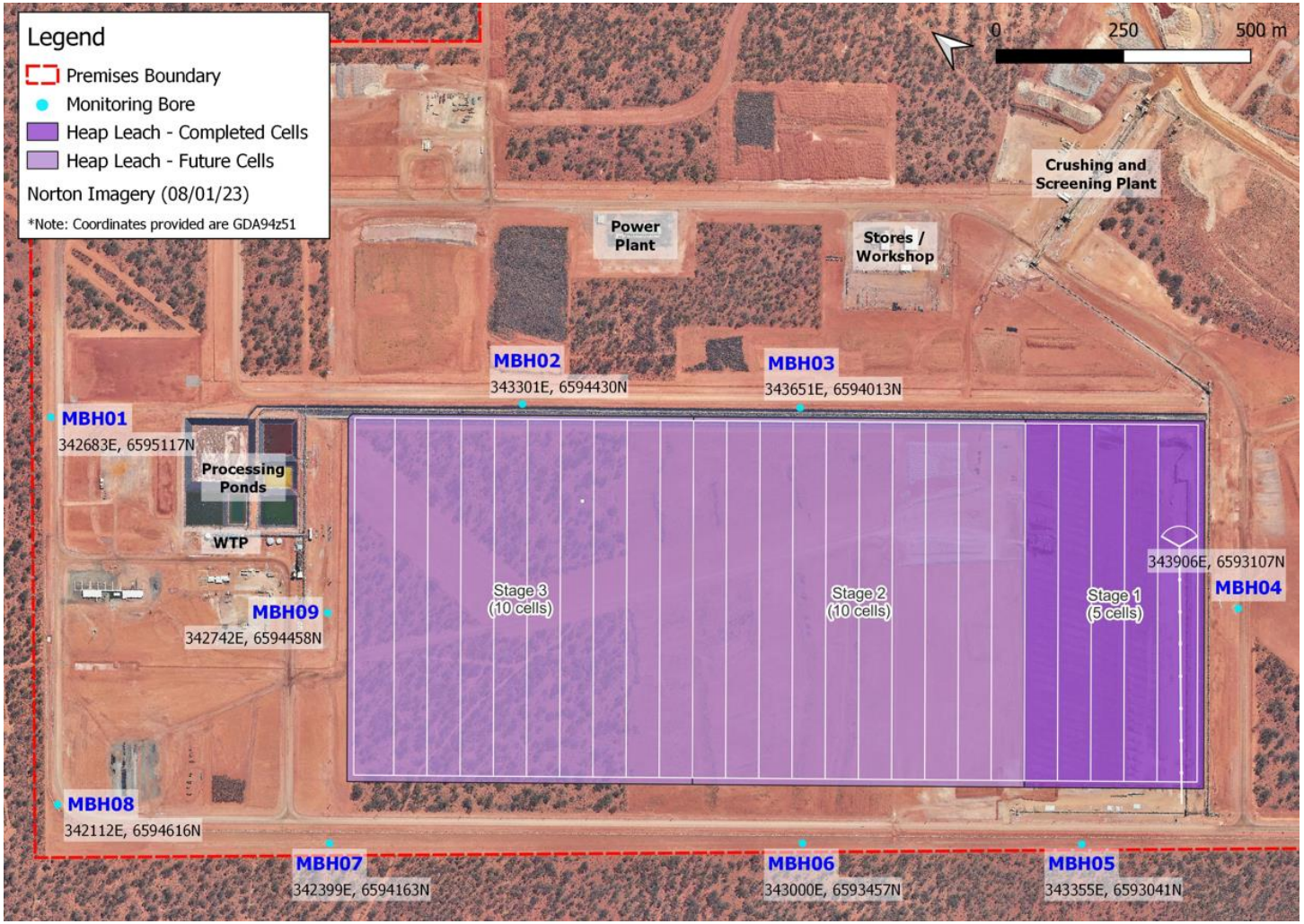

Figure 4: Map showing locations of groundwater monitoring bores

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 8.

Table 8: Premises boundary coordinates (GDA2020)

	Easting	Northing	Zone
1.	918174.41	6587928.43	50
2.	918826.33	6588430.49	50
3.	919554.87	6588998.78	50
4.	919768.22	6588697.98	50
5.	921299.32	6586471.47	50
6.	920044.27	6585596.99	50
7.	920405.16	6585122.98	50
8.	921012.12	6584398.63	50
9.	920921.28	6584336.27	50
10.	921261.38	6583840.90	50
11.	922469.33	6582081.39	50
12.	921989.09	6581693.41	50
13.	923060.96	6580419.05	50
14.	922456.86	6579914.20	50
15.	921819.27	6579420.37	50
16.	922819.86	6579376.23	50
17.	923093.12	6578201.82	50
18.	920747.63	6578323.38	50
19.	920777.84	6578630.82	50
20.	921167.90	6578922.74	50
21.	920275.57	6580152.84	50
22.	919454.23	6581246.09	50
23.	918847.38	6584457.38	50
24.	916365.64	6587654.30	50
25.	917636.26	6588630.75	50