



Licence number	L6868/1989/12
Licence holder	Billabong Gold Pty Ltd
ACN	613 900 922
Registered business address	Level 1, 30 Richardson Street WEST PERTH WA 6005
DWER file number	DER2014/001259-1
Duration	18/09/2014 to 17/09/2024
Date of amendment	15/10/2020
Premises details	Plutonic Gold Mine Mining Tenements: M52/171, M52/170, M52/148, M52/149, M52/150, M52/295, M52/296, M52/301 and M52/300 MEEKATHARRA WA 6642 As depicted in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	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	1,300,000 tonnes per annual period
Category 52: Electric power generation	27.2 MW (natural gas)
Category 54: Sewage facility	140 cubic metres per day
Category 57: Used tyre storage (general)	200 tyres
Category 89: Putrescible landfill site	5,000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 15 October 2020, by:

Alana Kidd

Manager, Industry Regulation

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
26/11/2009	W4567/2009/1	New application for a works approval – Category 5
06/01/2011	W4811/2010/1	New application for a works approval – Category 61
28/04/2011	W4836/2010/1	New application for a works approval – Category 5
19/09/2011	L6868/1989/11	Licence re-issue
27/10/2011	W5030/2011/1	New application for a works approval - Category 5
04/09/2014	L6868/1989/12	Licence re-issue
10/12/2015	L6868/1989/12	Amendment to authorise discharge of water from Laterite Pit. Addition of the wastewater treatment ponds and irrigation area. Category 52 – Electrical Power generation added to replace Category 84.
10/03/2016	L6868/1989/12	Licence amendment to add category 57 tyre storage.
29/09/2016	L6868/1989/12	Licence amendment for TSF2 and TSF3 lifts. Licence was also transferred from Northern Star Resources Ltd to Billabong Gold Pty Ltd.
21/04/2017	L6868/1989/12	Amendment Notice 1: Licence amendment to remove the SWL limit for the TSF bores and to remove the requirement to monitoring Piranha In-Pit TSF bores PIRMB1, PIRMB2, PIRMB3 and PIRMB4. The Improvement Program IR1 condition 4.1.1, Table 4.1.1 was also replaced as the management recommendations and commitments were received from the Applicant and have been included as the new IR1.
31/08/2018	L6868/1989/12	Amendment Notice 2: Licence amendment to allow the disposal of pit water from Salmon Pit Lake to be discharged to an ephemeral creek-line and removal of ambient groundwater monitoring for historic in-pit TSFs (Callop, Dogfish, Perch, Catfish, Piranha and Trout).
15/10/2020	L6868/1989/12	Amendment to add two new gas turbines to the licence. Amalgamation of amendment notices into the licence and to contemporise the 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

1 General

1.1 General conditions

- 1.1.1 The licence holder shall install and maintain mechanisms to ensure that stormwater from the following areas, is diverted to facilities for treatment and disposal or reuse:
- Process plants;
 - Washdown bays;
 - Refuelling areas; and
 - Mechanical workshops.

1.2 Premises operation

- 1.2.1 The licence holder shall only accept waste on to the landfill if:
- it is of a type listed in Table 1.2.1;
 - the quantity accepted is below any quantity limit listed in Table 1.2.1;
 - it meets any specification listed in Table 1.2.1; and
 - it conforms to the description in the documentation supplied by the producer and holder.

Waste	Quantity Limit	Specification
Clean fill	<u>All waste types</u>	None specified
Inert Waste Type 1	No more than 5,000 tonnes per annual period of all waste types cumulatively shall be disposed of by landfilling.	None specified
Inert Waste Type 2		None specified
Putrescible waste		None specified
Contaminated solid wastes		Waste is to meet waste acceptance criteria specified for class I or II landfills
	<u>Putrescible waste</u>	
	No more than 500 tonnes per annual period.	
	<u>Contaminated solid wastes</u>	
	No more than 500 tonnes per annual period.	
Special Waste Type 1	N/A.	<ul style="list-style-type: none"> Only to be disposed of into a designated asbestos disposal area within the landfill; Not to be deposited within 2 m of the final tipping surface of the landfill; and No works shall be carried out on the landfill that could lead to a release of asbestos fibres.
Special Waste Type 2	N/A.	<ul style="list-style-type: none"> Only to be disposed of into a designated biomedical waste disposal area within the landfill; Not to be deposited within 2 m of the final tipping surface of the landfill; and No works shall be carried out on the landfill that could lead to biomedical wastes being excavated or uncovered.

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 2: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

1.2.2 The licence holder shall ensure that wastes accepted onto the landfill are only subjected to the process set out in Table 1.2.2 and in accordance with any process limits described in that Table.

Table 1.2.2: Waste processing		
Waste type	Process	Process limits
Contaminated Solid Waste	Written or electronic records of all contaminated waste accepted for burial at the landfill. Records to include but not be limited to: (i) the time and date the waste was received; (ii) the type of contaminated solid waste; (iii) the nature of the contaminated solid waste; (iv) the quantity of the contaminated solid waste; (v) the disposal location by grid reference; and (vi) the source of the contaminated solid waste.	None specified
Used Tyres	Storage	Storage of tyres shall only take place within the tyre storage/burial areas shown on the Landfill Area Map in Schedule 1. <ul style="list-style-type: none"> • Not more than 200 used tyres shall be stored at the premises at any one time; • Used tyre stacks shall not exceed 200 tyres per stack and 4 m in height; • Used tyre stacks are to be stored no less than 6 m from any other stored tyre stacks; • Tyres shall be stored on their side walls or if stored on treads the area shall be baled with a securing device made of non-combustible material; and • Tyres shall be stored on level ground.

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

1.2.3 The licence holder shall manage the landfilling activities to ensure:

- (a) waste is disposed of in a defined trench or within an area enclosed by earthen bunds;
- (b) the size of the tipping face is kept to a minimum and not larger than 30 m in length and 2 m above ground level in height; and
- (c) the separation distance between the base of the landfill and the highest groundwater level shall not be less than 2 m.

1.2.4 The licence holder shall ensure that cover is applied to waste in the tipping area in accordance with Table 1.2.3 and that sufficient stockpiles of cover are maintained on site at all times.

Table 1.2.3: Cover requirements			
Waste type	Material	Depth	Timescale
Putrescible wastes	Clean fill and Inert Waste Type 1	A minimum of 200 mm. No waste is to be left exposed after covering	Cover shall be applied monthly
Inert Waste Type 2	Clean fill and Inert Waste Type 1	500 mm	Once 200 tyres have been stored.
Contaminated solid wastes	Clean fill and Inert Waste Type 1	100 mm	As soon as practicable after deposit.
Special Waste Type 1	Type 1 Inert waste, soil or clay	300 mm	As soon as practicable after deposit and prior to compaction.
		1000 mm	By the end of the working day in which the asbestos waste was deposited.
Special Waste Type 2		100 mm	As soon as practicable after deposit.

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

1.2.5 The licence holder shall take all reasonable and practical measures to ensure that no wind-blown waste escapes from the Premises and that wind-blown waste is collected on at least a quarterly basis and returned to the tipping area.

1.2.6 The licence holder shall ensure that tailings and effluent are only discharged into containment cells/dams/ponds with the relevant infrastructure requirements and at the location specified in Table 1.2.4 and identified in Schedule 1.

Table 1.2.4: Containment infrastructure		
Containment point reference	Material	Infrastructure requirements
TSF2	Tailings	-
TSF3	Tailings	-
WWTP	Ponds 1, 2, 3 and 4	HDPE lined

1.2.7 The licence holder shall manage the TSFs such that:

- a minimum top of embankment freeboard of 300 mm is maintained;
- stormwater run-off is diverted from the tailings dam/s to prevent flooding or erosion; and
- a perimeter drain is maintained downstream of the external toe of the tailings dam/s to recover any liquid matter resulting from seepage or breach of the embankment.

1.2.8 The licence holder shall manage all wastewater treatment ponds such that:

- overtopping of the ponds does not occur;
- the integrity of the containment infrastructure is maintained;
- trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter; and
- vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.

1.2.9 The licence holder shall ensure that all pipelines containing environmentally hazardous substances are either:

- equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures;
- equipped with automatic cut-outs in the event of a pipe failure; or
- provided with secondary containment sufficient to contain any spill for a period equal to the time between inspections.

1.2.10 The licence holder shall ensure the limits specified in Table 1.2.5 are not exceeded.

Table 1.2.5 Production or design capacity limits		
Category¹	Category description¹	Premises production or design capacity limit
5	Processing or beneficiation of metallic or non-metallic ore	5,000,000 tonnes of ore per annual period
6	Mine dewatering	1,300,000 tonnes per annual period
52	Electric power generation	27.2 MW (natural gas)
54	Sewage Facility	140 cubic metres per day
57	Used tyre storage (general)	200 tyres
89	Class II putrescible landfill	5,000 tonnes per annual period

Note 1: *Environmental Protection Regulations 1987*, Schedule 1.

- 1.2.11 The licence holder shall construct the TSF2 and TSF3 lifts and discharge pipeline in accordance with the requirements specified in Table 1.2.6. The licence holder must not depart from the design and construction requirements specified in Table 1.2.6 except:
- where such departure is minor in nature and does not materially change or affect the infrastructure; or
 - where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment; and
 - where all other conditions in this Licence are still satisfied.

Table 1.2.6: Infrastructure requirements	
Infrastructure	Requirements (design and construction)
TSF2 & 3 lifts	The TSF2 & 3 lifts must: <ol style="list-style-type: none"> be constructed at the current TSF2 & 3 as depicted in Schedule 1; be no more than 2.5m raises in stages from RL522.9 m up to RL532.0 m; utilize the existing piezometer and groundwater monitoring program associated with TSF2 & 3; and be designed to accommodate a 1 in 100 year 72 hour rainfall event.
Discharge pipeline	Installation off main pipeline Discharge pipeline to include: <ol style="list-style-type: none"> valve connection at entry point into the creek-line; single point within the creek bed; and flow meter to record volume discharged.

1.2.12 The licence holder shall operate the TSF2 and TSF3 lifts and discharge pipeline in accordance with the conditions of this Licence, following submission of the compliance document required under condition 4.3.1.

2 Emissions

2.1 Point source emissions to air

2.1.1 The licence holder shall ensure that where waste is emitted to air from the emission points in Table 2.1.1 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this Licence.

Emission point ¹	Emission point and source	Emission point height (m)	Source, including any abatement
A1	Exhaust from Gas Engines 1, 2 & 3, via vent stack A1	19.9	Gas Engines 1, 2 and 3 used for power generation
A2	Exhaust from Gas Engine 4 via vent stack A2	19.9	Gas Engine 4 used for power generation
A3	Exhaust from Gas Engine 5 via stack A3	12.2	Gas Engine 5 used for power generation
A4	Exhaust from Gas Engine 6 via stack A4	12.2	Gas Engine 6 used for power generation
A5	Heat exhaust from Elution Boiler vented through stack A5	6.5	Elution Boiler used during gold desorption
A6	Exhaust from Regen kiln vented through stack A6	Not specified	Regen kiln used for reactivating activated carbon
A7	Exhaust from Gold Room Furnace vented from vent stack A7	8.9	Gold Room Furnace used for gold smelting
A8	Exhaust from Gas Engine 7 via stack A8	12.2	Gas Engine 7 used for power generation
A9	Exhaust from Gas Engine 8 via stack A9	12.2	Gas Engine 8 used for power generation

Note 1: Emission point location shown in Schedule 1: Maps

2.2 Point source emissions to surface water

2.2.1 The licence holder shall ensure that where waste is emitted to surface water from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this Licence.

Emission point ¹	Description	Source including abatement
W1	Discharge to ponding area at base of Main Waste Rock Dump	Water from Laterite Pit only. Only to occur when rainfall has caused overtopping risk and no other water-holding structures on site have capacity to take water. Rock armour mound at discharge point to reduce erosion risk.
W2	Discharge from Salmon Pit Lake to creek-line	Single discharge point within the creek bed to receive pit water from Salmon Pit Lake only.

Note 1: Emission point location shown in Schedule 1: Maps

2.3 Emissions to land

2.3.1 The licence holder shall ensure that where waste is emitted to land from the emission points in Table 2.3.1 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this Licence.

Table 2.3.1: Emissions to land		
Emission point¹	Description	Source including abatement
L1	Discharge to irrigation area	Treated wastewater from final wastewater treatment pond.

Note 1: Emission point location shown in Schedule 1: Maps

3 Monitoring

3.1 General monitoring

- 3.1.1 The licence holder shall ensure that:
- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1 unless stated in Condition 3.1.1(b);
 - (b) groundwater samples for the monitoring of WAD Cyanide are collected and preserved in accordance with APHA;
 - (c) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - (d) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
 - (e) all microbiological samples are collected and preserved in accordance with AS/NZS 2031; and
 - (f) all samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in relevant table.
- 3.1.2 The licence holder shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

3.2 Monitoring of point source emissions to surface water

- 3.2.1 The licence holder shall undertake the monitoring in Table 3.2.1 according to the specifications in Table 3.2.1.

Table 3.2.1: Monitoring of point source emissions to surface water			
Emission point	Parameter	Units	Frequency
W1 W2	Volumetric flow rate	m ³ /day	Cumulative (when discharge occurring)
	pH ¹	pH units	Spot-sample (when discharge occurring)
	TDS	mg/L	
	TRH		
	Aluminium		
	Antimony		
	Arsenic		
	Boron		
	Cadmium		
	Chromium		
	Cobalt		
	Copper		
	Fluoride		
	Iron		
	Lead		
	Manganese		
	Mercury		
	Molybdenum		
	Nickel		
	Selenium		
	Sulphate		
	Thallium		
	Total Nitrogen		
	Total Phosphorus		
	Uranium		
	Zinc		
	WAD Cyanide		

Note 1: In-field non-NATA accredited analysis permitted for pH measurement.

3.3 Monitoring of emissions to land

3.3.1 The licence holder shall undertake the monitoring in Table 3.3.1 according to the specifications in Table 3.3.1.

Table 3.3.1: Monitoring of emissions to land				
Emission point	Parameter	Units	Averaging Period	Frequency
L1	Volumetric flow rate (cumulative)	L/s or m ³ /day	Monthly	Continuous
	pH ¹	-	Spot sample	Quarterly
	Total Suspended Solids	mg/L		
	Total Dissolved Solids			
	Biochemical Oxygen Demand			
	Total Nitrogen			
	Total Phosphorus			
	<i>Escherichia coli</i>			

Note 1: In-field non-NATA accredited analysis permitted for pH measurement.

Note 2: Actual units are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL.

3.4 Monitoring of inputs and outputs

3.4.1 The licence holder shall undertake the monitoring in Table 3.4.1 according to the specifications in Table 3.4.1.

Table 3.4.1: Monitoring of inputs and outputs				
Input/Output	Parameter	Units	Averaging period	Frequency
Waste Inputs	Clean Fill Inert Waste Type 1 Inert Waste Type 2 Putrescible Waste Contaminated Solid Waste	m ³ (where no weighbridge is present)	Monthly	Each load disposed at the Premises
Waste Outputs	Waste type as defined in the Landfill Definitions			Each load leaving or rejected from the Premises

3.5 Ambient environmental quality monitoring

3.5.1 The licence holder shall undertake the monitoring specified in Tables 3.5.1 and 3.5.2 and record and investigate the exceedance of any limit specified.

Table 3.5.1: Monitoring of ambient groundwater quality					
Monitoring point¹	Parameter	Units	Limit	Averaging period	Frequency
TD1-2, TD1-5, TD2-1, TD2-3, TD3-2, TD3-7	pH ²	pH units	-	Spot sample	Quarterly
	TDS	mg/L	-		
	Aluminium		-		
	Antimony		-		
	Arsenic		<0.5		
	Boron		-		
	Cadmium		-		
	Chromium		-		
	Cobalt		-		
	Copper		<1.0		
	Fluoride		-		
	Iron		-		
	Lead		-		
	Manganese		-		
	Mercury		-		
	Molybdenum		-		
	Nickel		<1.0		
	Selenium		-		
	Sulphate		-		
	Thallium		-		
Total Nitrogen		-			
Total Phosphorus		-			
Uranium		-			
Zinc		-			
WAD Cyanide			<0.8		
TD1-2, TD1-5	SWL	mbgl	>7	Spot sample	Quarterly

Note 1: Monitoring point location shown in Schedule 1: Maps

Note 2: In-field non-NATA accredited analysis permitted for pH measurement.

Table 3.5.2: Monitoring of vegetation			
Purpose	Monitoring point¹	Parameter	Frequency
Monitor the vegetation in the zone of influence of discharge from point W1.	V1 V2 V3	Photographs of vegetation taken from monitoring points in a fixed direction towards discharge point.	Quarterly
Monitor the vegetation in the zone of influence of discharge from point W2	V4 V5 V6		

Note 1: Monitoring point location shown in Schedule 1: Maps

4 Information

4.1 Records

- 4.1.1 All information and records required by the Licence shall:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 4.1.1(d), be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
 - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The licence holder must submit to the CEO within 90 days after the Anniversary Date, an Annual Audit Compliance Report indicating the extent to which the licence holder has complied with the Conditions in this Licence for the annual period.
- 4.1.3 The licence holder shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

- 4.2.1 The licence holder shall submit to the CEO an Annual Environmental Report within 90 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in Table 4.2.1.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form¹
-	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	None specified
Table 3.2.1	Monitoring of point source emissions to surface water	WR1
Table 3.3.1	Monitoring of emissions to land	LR1
Table 3.4.1	Monitoring of inputs and outputs	None specified
Table 3.5.1	Monitoring of ambient groundwater quality	GR1
Table 3.5.2	Monitoring of vegetation	None specified
Condition 4.1.2	Compliance	Annual Audit Compliance Report (AACR)
Condition 4.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2

- 4.2.2 The licence holder shall ensure that the annual environmental report also contains:
- (a) an assessment of the information contained within the report against previous monitoring results and Licence limits; and
 - (b) a list of any original monitoring reports submitted to the licence holder from third parties in the reporting period and make these reports available on request.

4.3 Notification

- 4.3.1 The licence holder shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of Table 4.3.1.

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement¹	Format or form²
-	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
-	Production ceasing for an unspecified period of time	As soon as practicable after the decision has been made	None Specified
-	Production recommencing	At least 28 days prior to production recommencing	None specified
Condition 1.2.12	The licence holder shall submit a compliance document to the CEO, following construction of the TSF2 and TSF3 lifts and discharge pipeline. The compliance document shall: <ul style="list-style-type: none"> a) be certified by a suitably qualified engineer (TSF2 and TSF 3 lifts) and certify that the works were constructed in accordance with the construction requirements specified in Table 1.2.6; b) provide a list of departures from the specified works; and c) be signed by a person authorised to represent the licence holder and contain the printed name and position of that person within the company. 	Within 7 days of the completion of construction	None specified

Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the EP Act
Note 2: Forms are in Schedule 2

Definitions

In this licence, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Anniversary Date	31 December of each year
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 31 December
APHA	the American Public Health Association: <i>Standard Methods for the Examination of Water and Wastewater</i> , 22nd Edition
AS/NZS 2031	Australian Standard AS/NZS 2031 Selection of containers and preservation of water samples for microbiological analysis
AS/NZS 5667.1	Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples
AS/NZS 5667.10	Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters
AS/NZS 5667.11	Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters
averaging period	time over which a limit is measured or a monitoring result is obtained
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 <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Clean Fill	defined in Landfill Definitions
Compliance Report	A report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO from time to time and published on the Department's website
Contaminated Solid Waste	defined in Landfill Definitions

Term	Definition
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (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	<i>Environmental Protection Act 1986</i> (WA)
freeboard	distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point
HDPE	High Density Polyethylene
Inert Waste Type 1	defined in Landfill Definitions
Inert Waste Type 2	defined in Landfill Definitions
Landfill Definitions	Landfill Waste Classification and Waste Definitions 1996, published by the Chief Executive Officer of the Department of Water and Environment Regulation, as amended from time to time
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.
mbgl	metres below natural ground level
NATA	National Association of Testing Authorities, Australia
NATA accredited	the laboratory is NATA accredited for the specified analysis at the time of the analysis
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises maps in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act
Putrescible	defined in Landfill Definitions
quarterly	means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September, and 1 October to 31 December
RL	reduced level
Schedule 1	Schedule 1 of this Licence unless otherwise stated
Schedule 2	Schedule 2 of this Licence unless otherwise stated

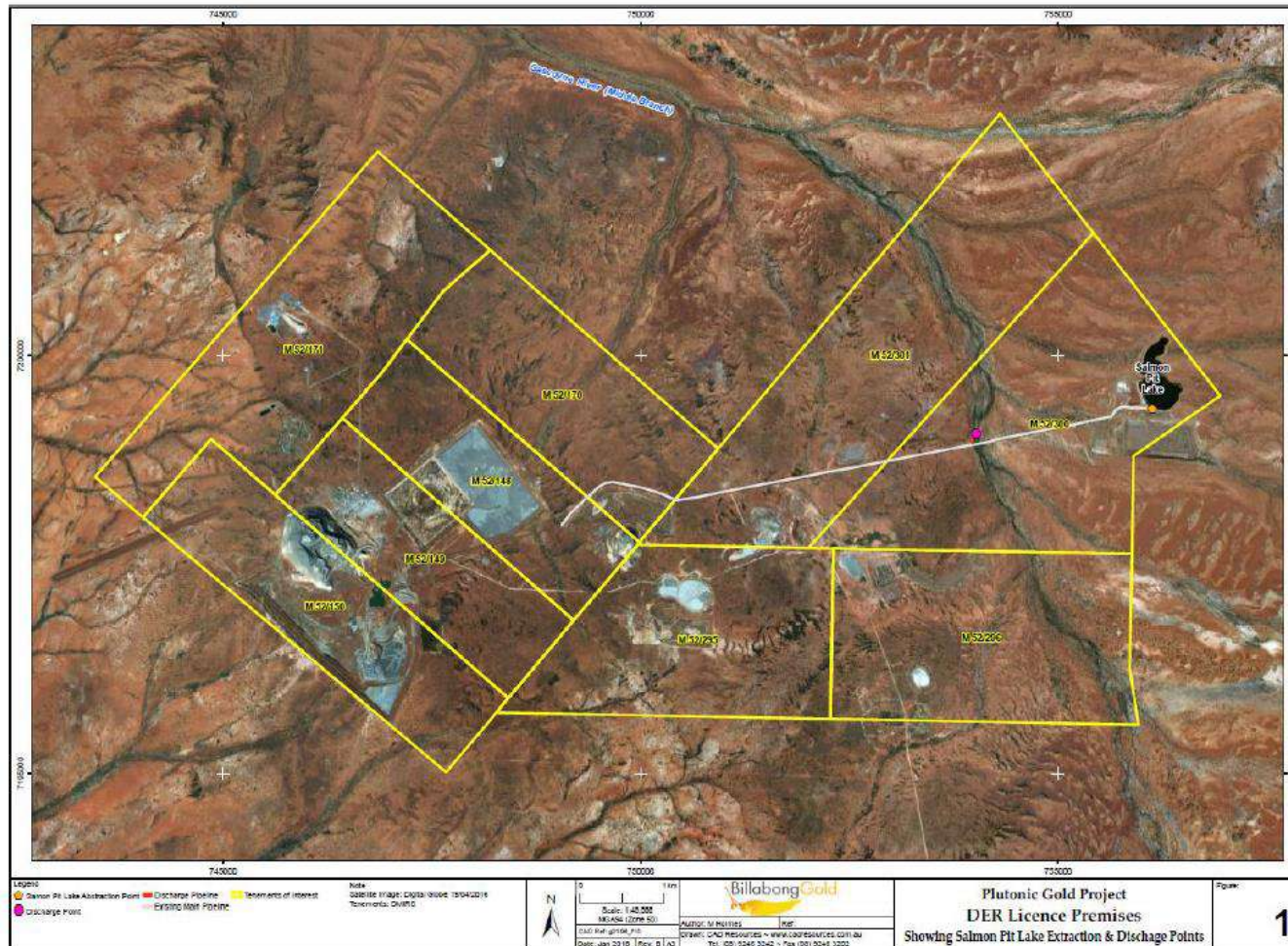
Term	Definition
Special Waste Type 1	defined in Landfill Definitions
Special Waste Type 2	defined in Landfill Definitions
spot sample	A discrete sample representative at the time and place at which the sample is taken
SWL	Standing Water Level
TDS	Total Dissolved Solids
TRH	Total Recoverable Hydrocarbons
TSF	Tailings Storage Facility;
WAD Cyanide	cyanide species liberated at moderate pH of 4.5
WWTP	wastewater treatment plant
waste	has the same meaning given to that term under the EP Act

END OF CONDITIONS

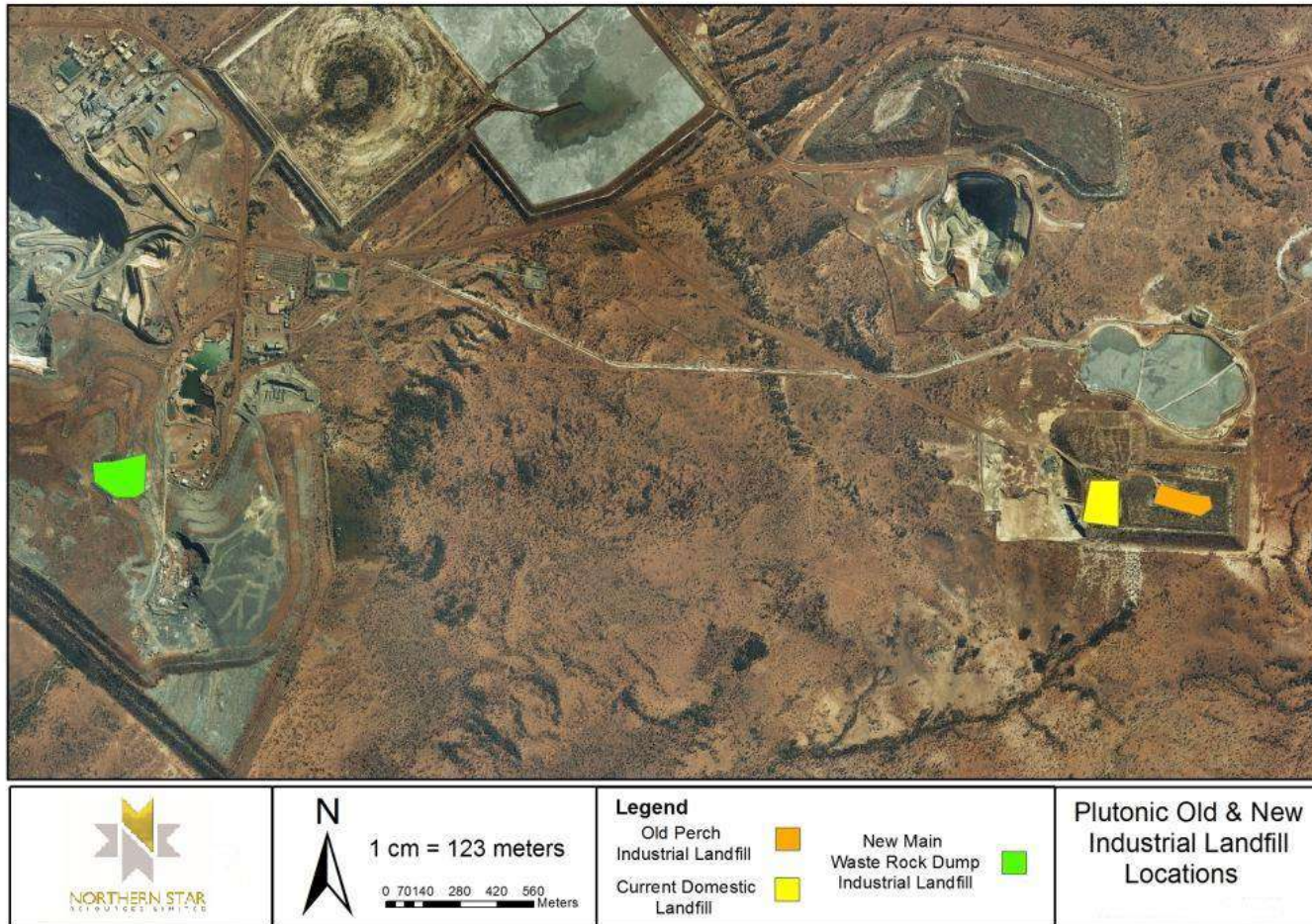
Schedule 1: Maps

Premises map

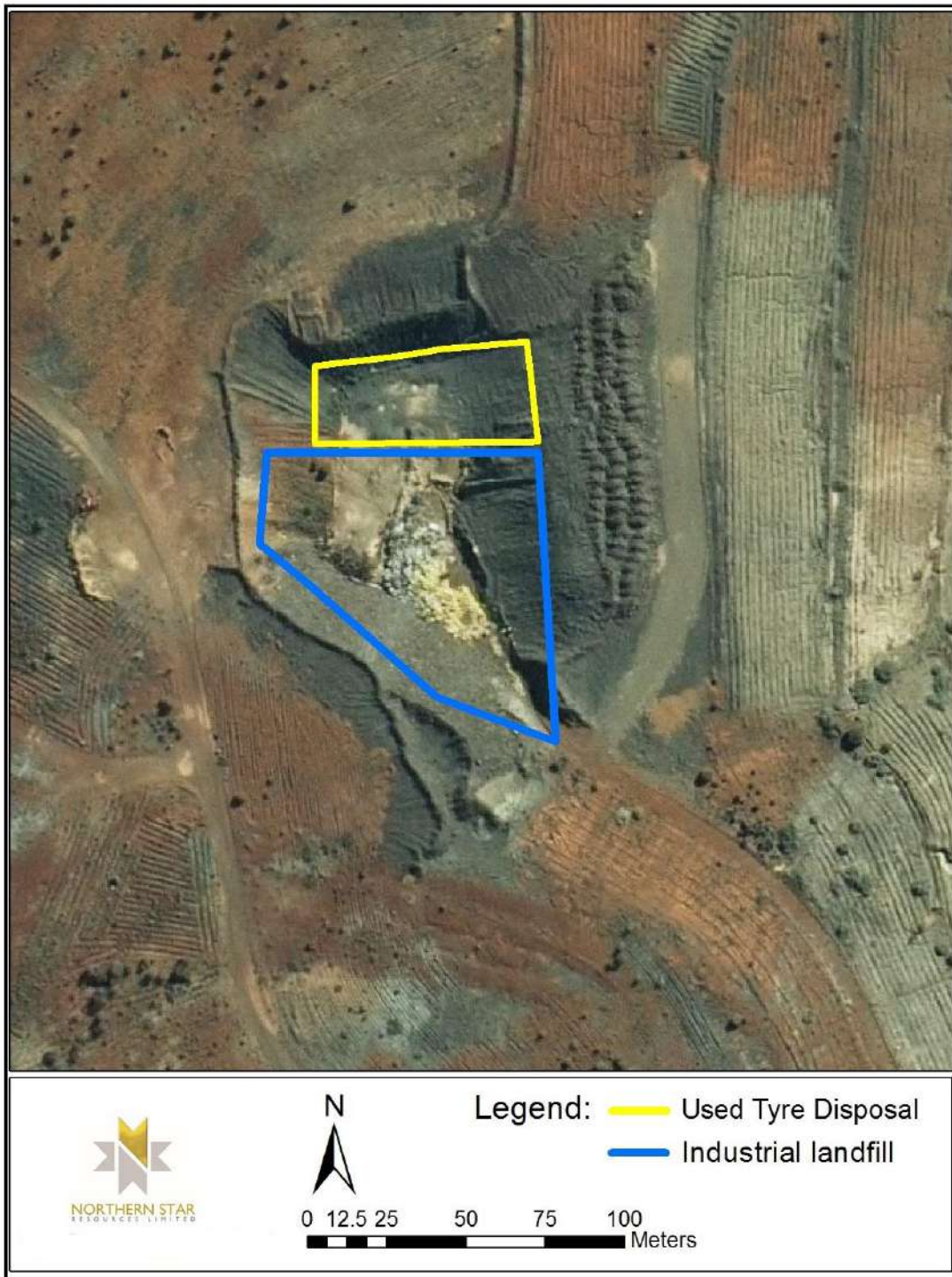
The Premises is shown in the map below. The yellow outside lines depicts the Premises boundary.



The Landfill Area Map is shown below.



The tyre storage and disposal location at the New Main Rock Waste Dump Industrial Landfill is shown in the map below by the yellow line.

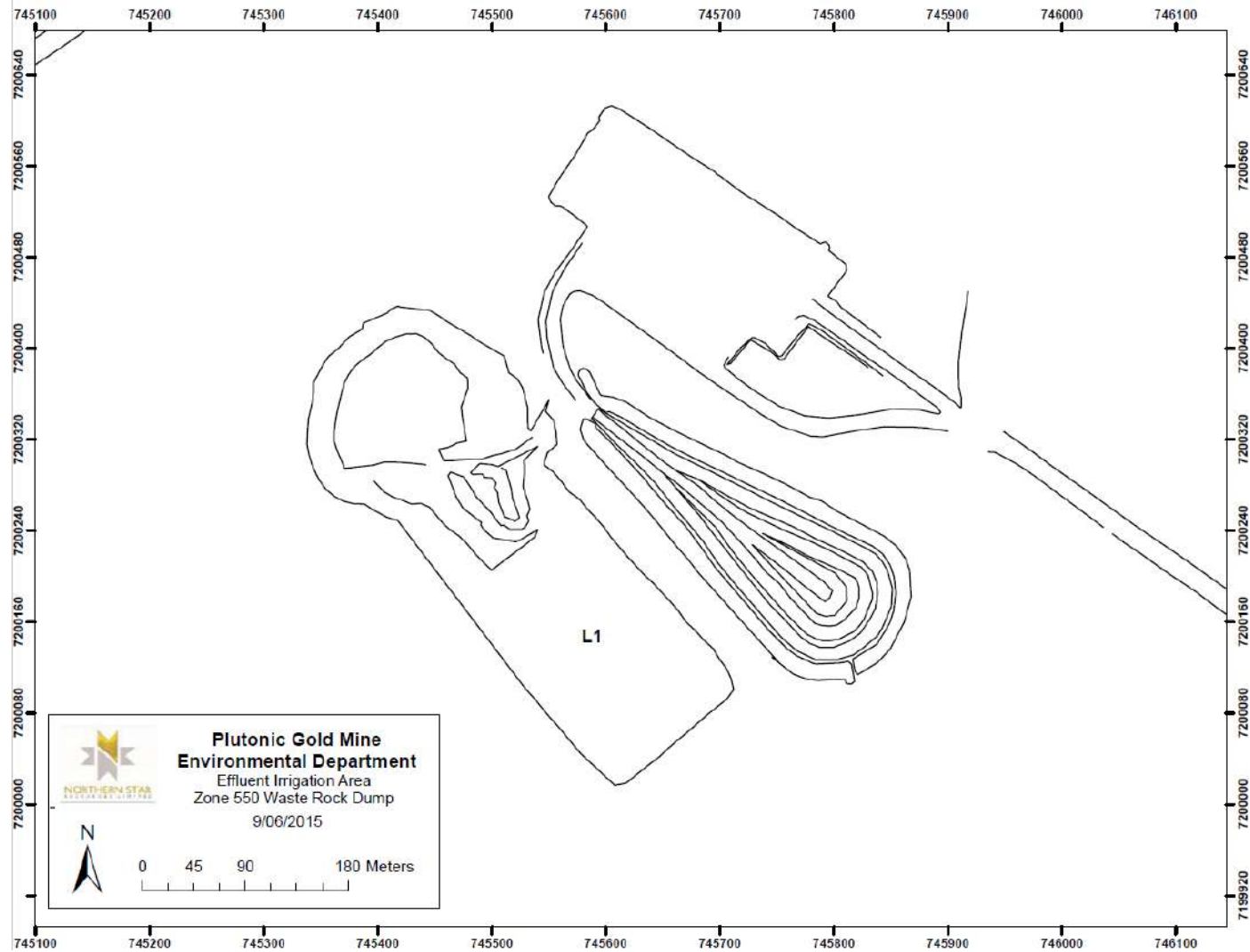


Map of emission points

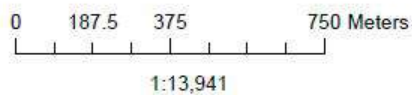
The locations of the emission points defined in Table 2.1.1 are shown below.



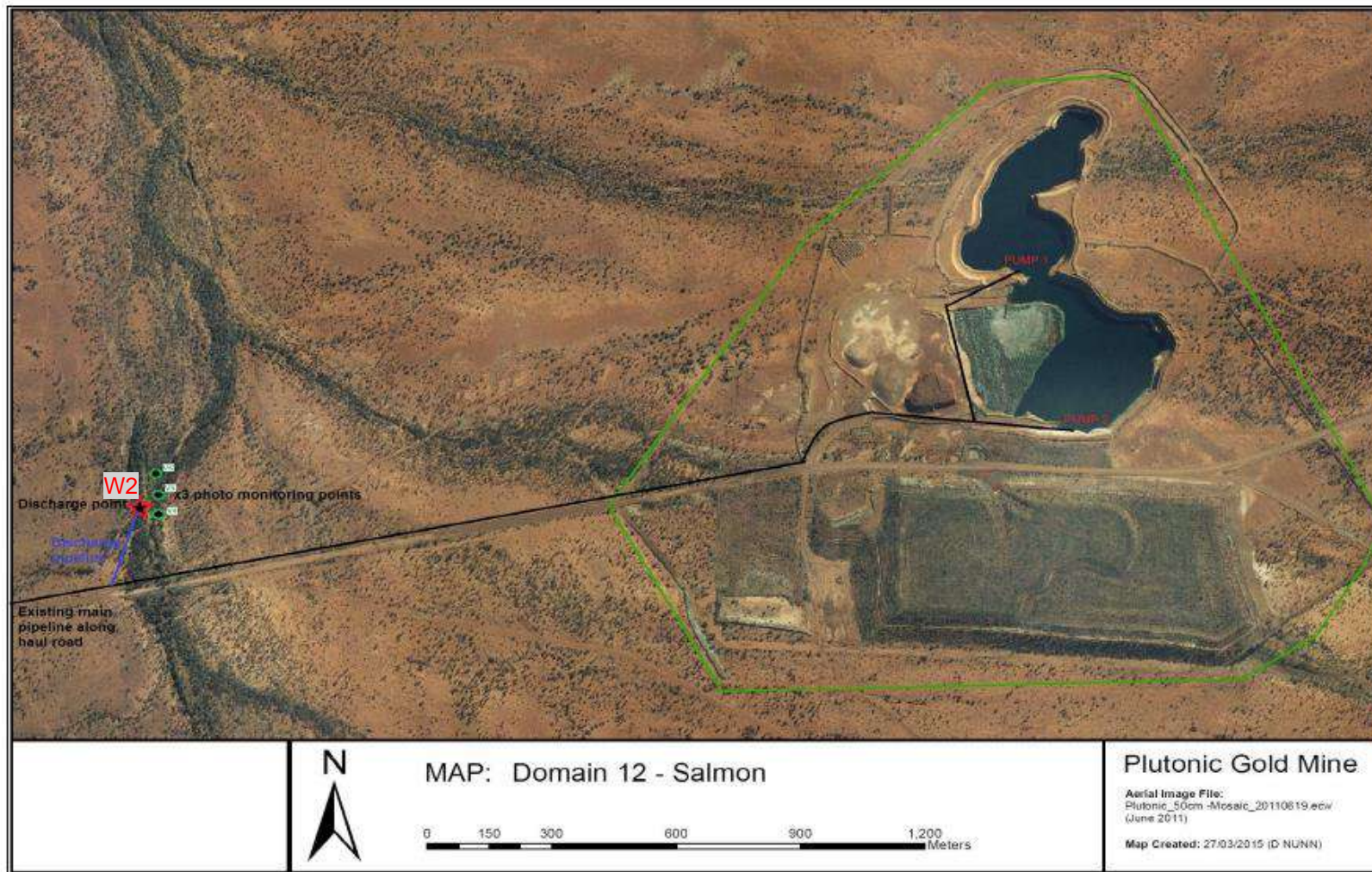
The locations of the emission point defined in Table 2.3.1 is shown below.

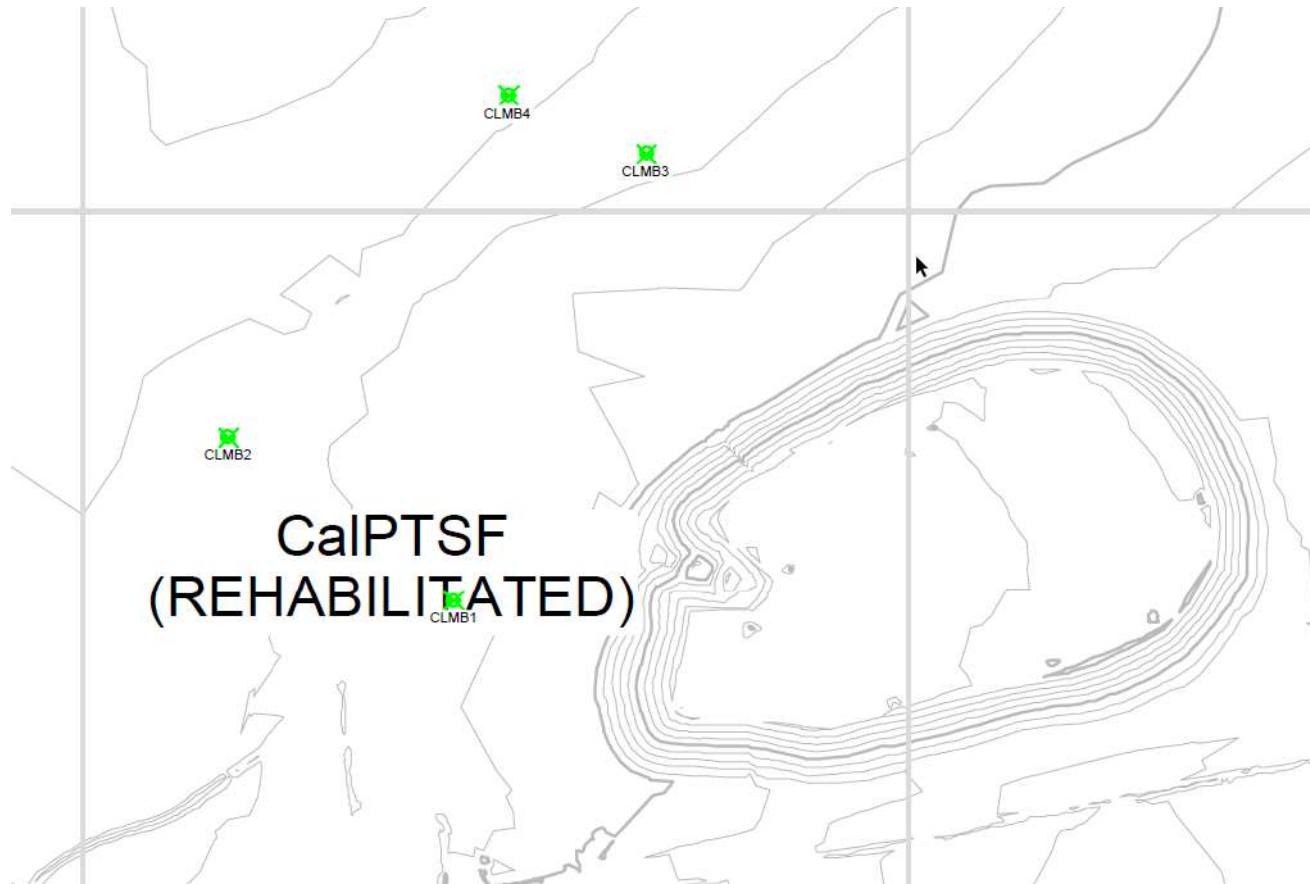


The locations of the emission points defined in Table 2.2.1 are shown in the two maps below. The locations of the monitoring points defined in Table 3.5.2 are also shown in the two maps below.

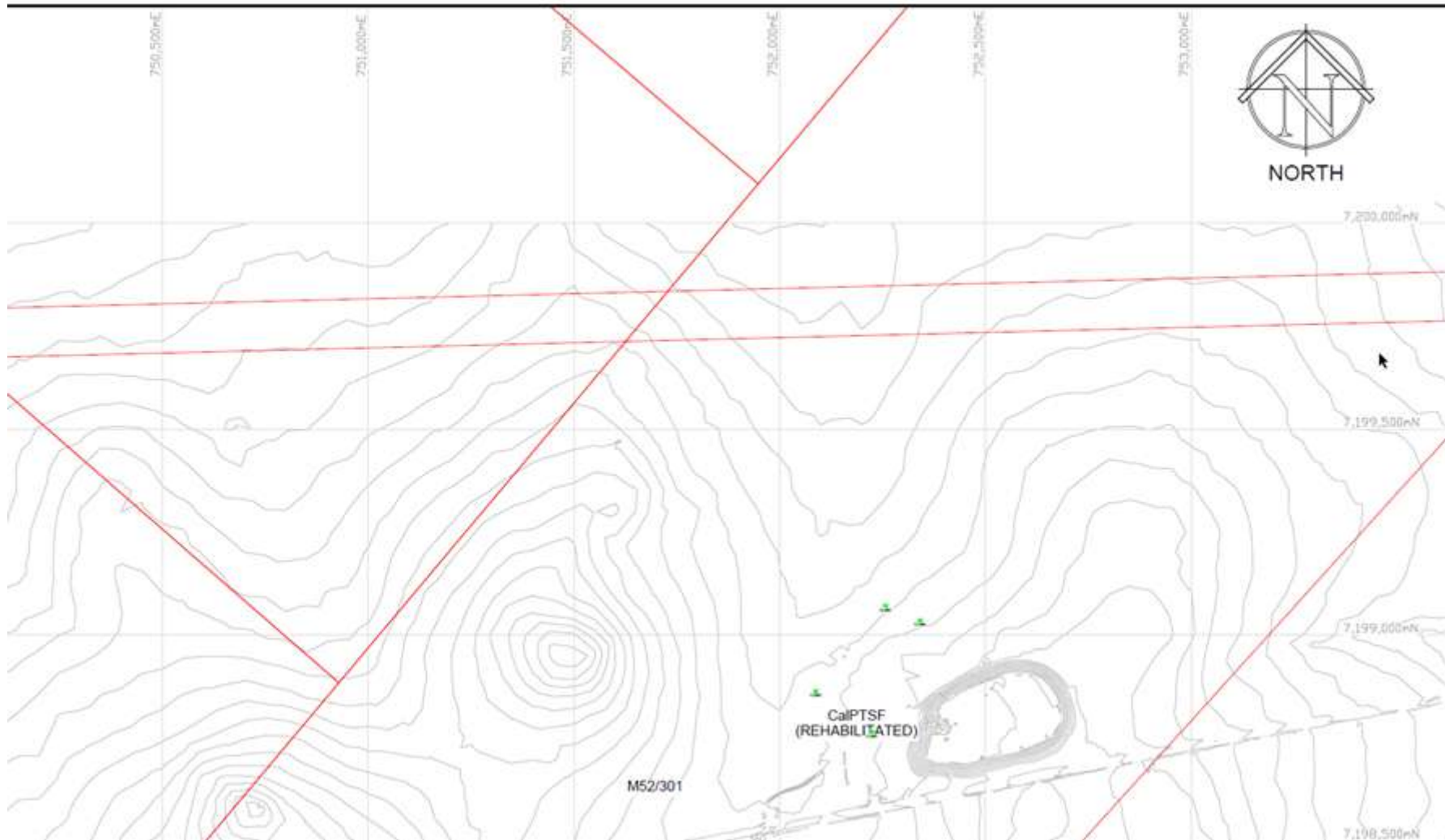


**Proposed Vegetation Monitoring
and Water Discharge Points**
Plutonic Gold Mine - April 2015

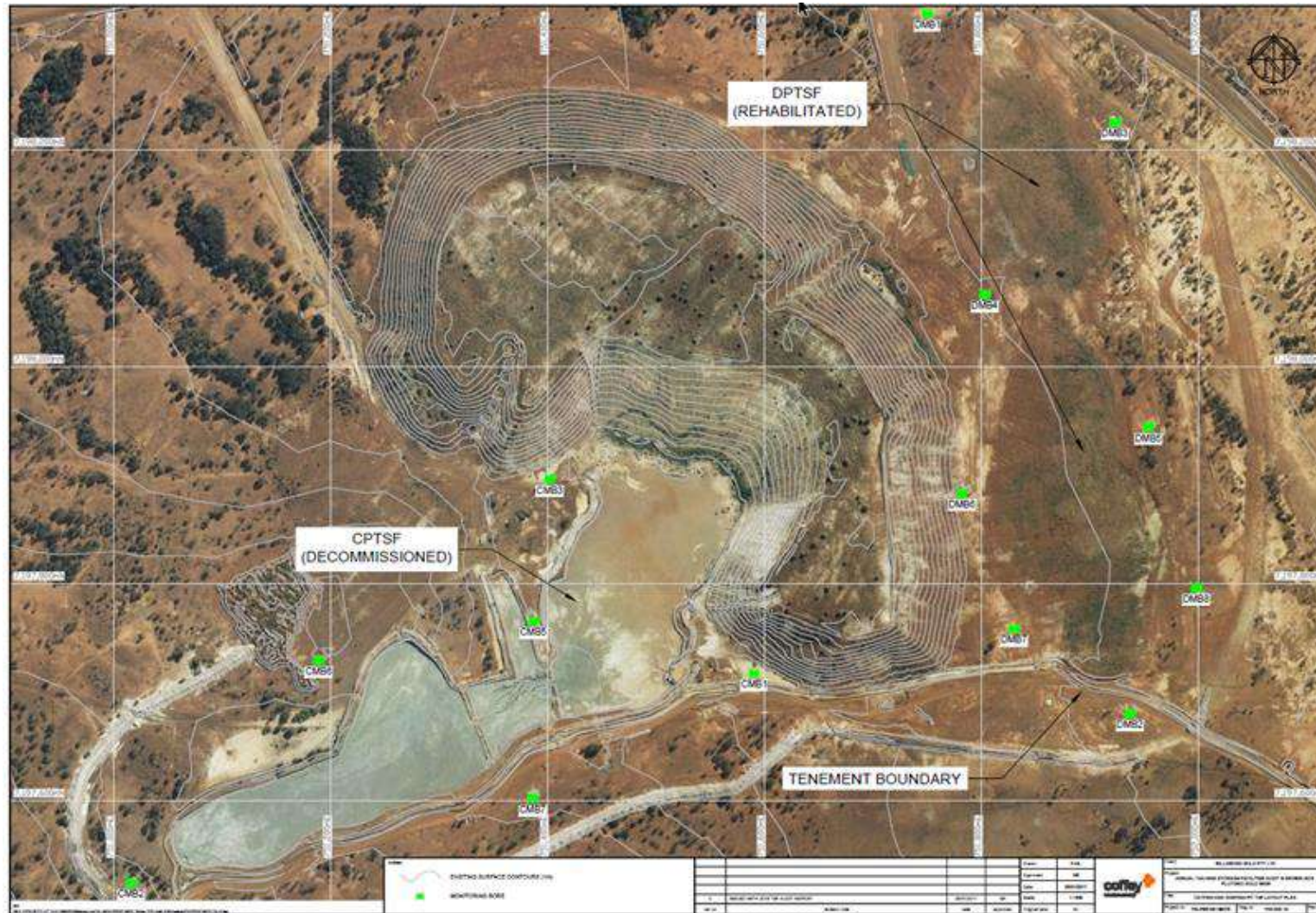




Callopp groundwater monitoring bores



Callop groundwater monitoring bores with coordinates



Catfish/Dogfish groundwater monitoring bores



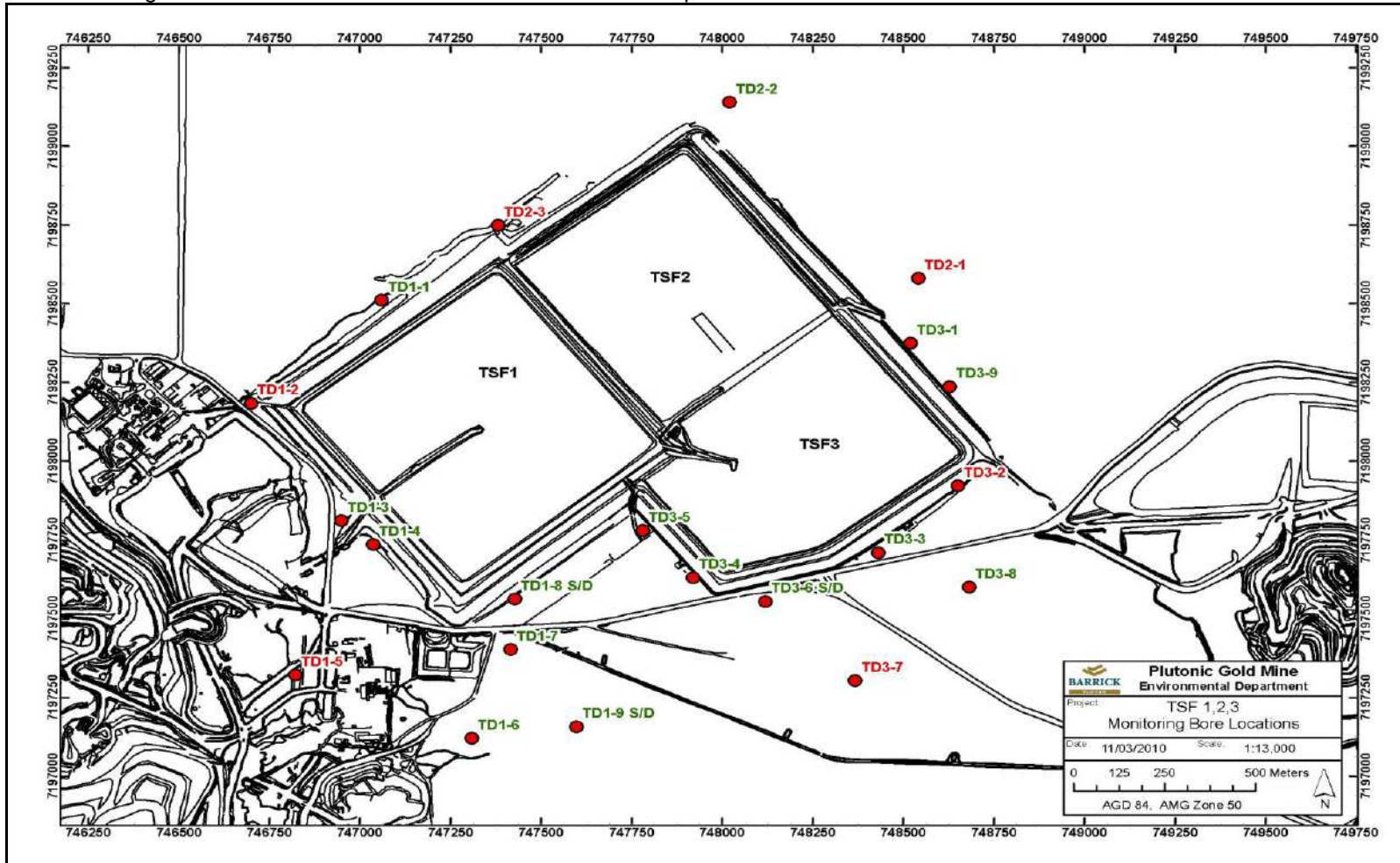
Piranha groundwater monitoring bores

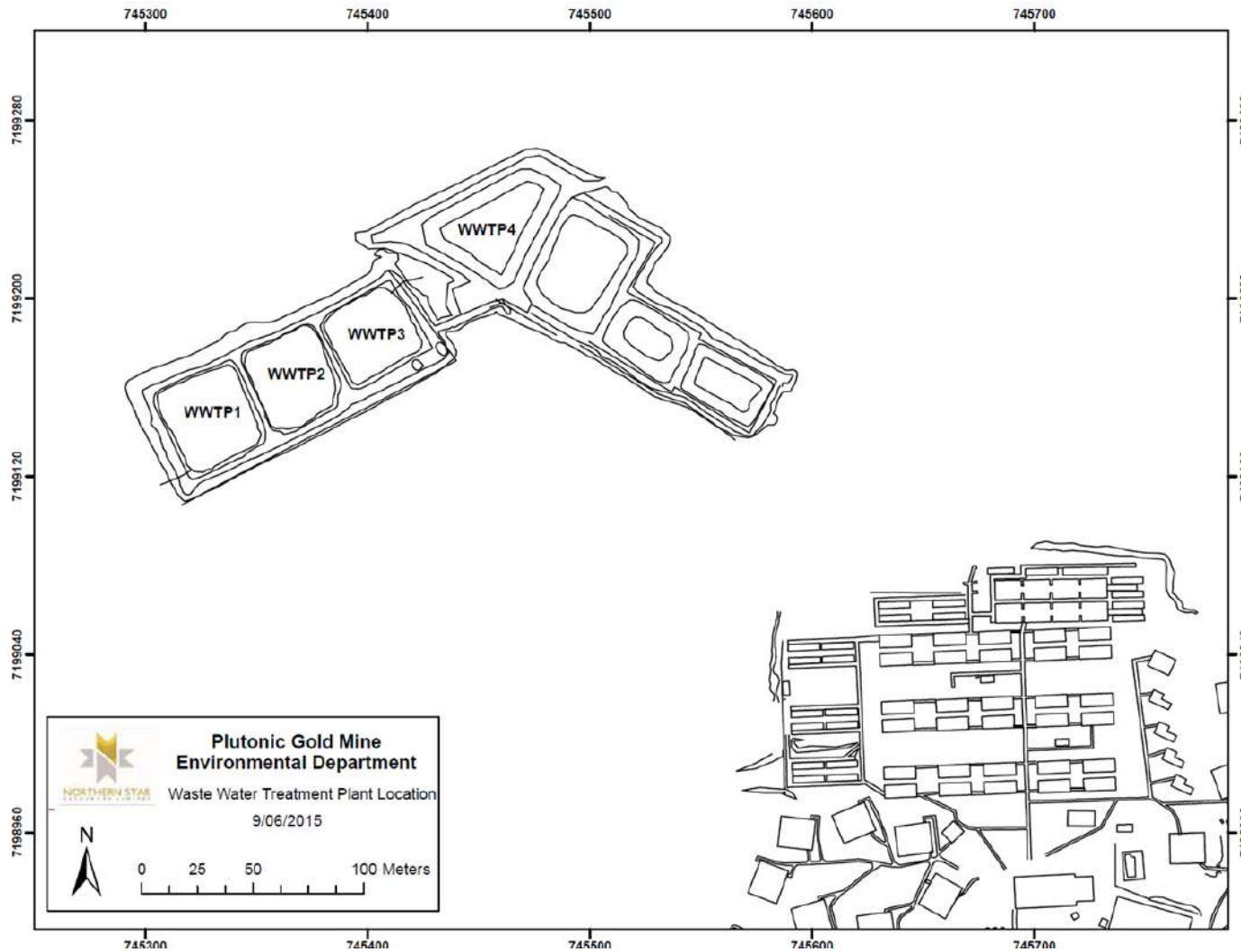


Trout groundwater monitoring bores

Map of storage locations

The location of the storage areas defined in Table 1.2.4 are shown in the maps below.





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

Licence: L6868/1989/12

Form: WR1

Name: Monitoring of point source emissions to surface water

Licence holder: Billabong Gold Pty Ltd

Period:

Form WR1: Monitoring of point source emissions to surface water						
Emission point	Parameter	Unit	Result	Averaging period	Method	Sample date & times
W1 W2	Volumetric flow rate	m ³ /day		Cumulative (when discharging)		
	pH	-		Spot sample		
	Total Dissolved Solids	mg/L		Spot sample		
	Total Recoverable Hydrocarbons	mg/L		Spot sample		
	Aluminium	mg/L		Spot sample		
	Antimony	mg/L		Spot sample		
	Arsenic	mg/L		Spot sample		
	Boron	mg/L		Spot sample		
	Cadmium	mg/L		Spot sample		
	Chromium	mg/L		Spot sample		
	Cobalt	mg/L		Spot sample		
	Copper	mg/L		Spot sample		
	Fluoride	mg/L		Spot sample		

Form WR1: Monitoring of point source emissions to surface water						
Emission point	Parameter	Unit	Result	Averaging period	Method	Sample date & times
	Iron	mg/L		Spot sample		
	Lead	mg/L		Spot sample		
	Manganese	mg/L		Spot sample		
	Mercury	mg/L		Spot sample		
	Molybdenum	mg/L		Spot sample		
	Nickel	mg/L		Spot sample		
	Selenium	mg/L		Spot sample		
	Sulphate	mg/L		Spot sample		
	Thallium	mg/L		Spot sample		
	Total Nitrogen	mg/L		Spot sample		
	Total Phosphorus	mg/L		Spot sample		
	Uranium	mg/L		Spot sample		
	Zinc	mg/L		Spot sample		
	WAD Cyanide	mg/L		Spot sample		

Signed on behalf of Billabong Gold Pty Ltd: Date:

Licence: L6868/1989/12
 Form: LR1
 Name: Monitoring of emissions to land

Licence holder: Billabong Gold Pty Ltd
 Period:

Form LR1: Monitoring of emissions to land						
Emission point	Parameter	Units	Result	Averaging period	Method	Sample date & times
L1	Volumetric flow rate	L/s or m ³ /day		Monthly		
	pH	-		Spot sample		
	Total Suspended Solids	mg/L		Spot sample		
	Total Dissolved Solids	mg/L		Spot sample		
	Biochemical Oxygen Demand	mg/L		Spot sample		
	Total Nitrogen	mg/L		Spot sample		
	Total Phosphorus	mg/L		Spot sample		
	Escherichia coli	cfu/100 mL		Spot sample		

Signed on behalf of Billabong Gold Pty Ltd: Date:

Licence: L6868/1989/12
 Form: GR1
 Name: Monitoring of ambient groundwater quality

Licence holder: Billabong Gold Pty Ltd
 Period:

Form GR1: Monitoring of ambient groundwater					
Emission point	Parameter	Limit	Units	Result	Sample date & times
TD1-2, TD1-5, TD2-1, TD2-3, TD3-2, TD3-7	pH		N/A		
	TDS		mg/L		
	WAD Cyanide	< 0.8	mg/L		
	Aluminium		mg/L		
	Antimony		mg/L		
	Arsenic	< 0.5	mg/L		
	Boron		mg/L		
	Cadmium		mg/L		
	Chromium		mg/L		
	Cobalt		mg/L		
	Copper	< 1.0	mg/L		
	Fluoride		mg/L		
	Iron		mg/L		
	Lead		mg/L		
	Manganese		mg/L		
	Mercury		mg/L		
	Molybdenum		mg/L		
Nickel	< 1.0	mg/L			
Selenium		mg/L			

Form GR1: Monitoring of ambient groundwater					
Emission point	Parameter	Limit	Units	Result	Sample date & times
	Sulphate		mg/L		
	Thallium		mg/L		
	Total Nitrogen		mg/L		
	Total Phosphorus		mg/L		
	Uranium		mg/L		
	Zinc		mg/L		
TD1-2, TD1-5	SWL	>7	mbgl		

Signed on behalf of Billabong Gold Pty Ltd: Date:

Licence: L6868/1989/12
 Form: N1

Licence holder: Billabong Gold Pty Ltd
 Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of Billabong Gold Pty Ltd	
Date	