Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence Number	L7969/2004/3
Licence holder	Black Cat (Paulsens) Pty Ltd
ACN	657 781 194
Registered business address	Level 3, 52 Kings Park Rd WEST PERTH WA 6005
File Number	DER2013/000991-1
Duration	08/11/2011 to 07/11/2025
Date of issue	03/11/2011
Date of amendment	29/7/2024
Premises details	Paulsen's Gold Operation Mining Leases M08/99 and M08/196 Nanutarra-Munjina Road PARABURDOO WA 6754 As defined by the Premises map in Schedule 1

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	480,000 tonnes per annual period
Category 52: Electric power generation	11.04 MW in aggregate
Category 63: Inert landfill site	500 tonnes per annual period
Category 64: Landfill facility	32 tonnes per annual period
Category 85: Sewage facility	70 cubic metres per day

This Licence is granted to the Licence holder, subject to the following conditions, on 29 July 2024 by:

Timothy Moran
Digitally signed by Timothy Moran
Date: 2024.07.29 15:22:06 +08'00'

A/MANAGER, RESOURCE INDUSTRIES REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence History

Instrument log table		
Instrument	**Issued**	**Description**
L7969/2004/3	21/11/2013	Amendment issued to correct the company registered business address.
L7969/2004/3	29/04/2016	Department initiated amendment in accordance with section 59(1)(k) of the *Environmental Protection Act 1986* to amend the duration of the licence date month year.
L7969/2004/3	15/09/2016	Amendment issued for the following: • Removal of mine dewatering conditions and category 6; • Reduction in the frequency of tailings monitoring; • increase in the TDS limit of ambient groundwater monitoring from 3500mg/L up to 10,000mg/L; • Addition of groundwater monitoring bores and Production bore; • Addition of category 63 and 64 to the licence; • Addition of category 52 to the licence as upgrades involved the installation of three additional skid mounted container style diesel generators; • Addition of improvement conditions
L7969/2004/3	27/10/2016	Amendment Notice 1: relates to an administrative change to correct the registered business address.
L7969/2004/3	15/12/2016	Amendment Notice 2: on 15 September 2016 an application was made to update maps for inert waste disposal landfill locations.
L7969/2004/3	21/04/2017	Amendment Notice 3: DWER initiated amendment to make changes to the TSF groundwater monitoring requirements specified in Table 2 of conditions 8 and 9 of the Licence.
L7969/2004/3	24/11/2017	Amendment Notice 4: On 13 July 2017 an application was made by the Licence holder to amend the requirement for monthly landfill cover to minimum of 200mm.
L7969/2004/3	03/12/2018	Amendment Notice 5: On 23 August 2018 a licence amendment application was made by the Licence holder to remove groundwater monitoring bores PMB1 and PMB2. These two bores have been dry or have water levels too low to obtain water samples for an extended period of time.
L7969/2004/3	31/01/2020	DWER initiated amendment to consolidate separately issued amendment notices in the licence.
L7969/2004/3	05/08/2022	Transfer of Licence to new occupier.
L7969/2004/3	16/11/2023	Administrative Amendment to include the TSF lift 7 and correct references to monitoring bores.
L7969/2004/3	08/12/2023	DWER initiated amendment to correct typographical error of Condition 16 and update Figure 8.
L7969/2004/3	29/07/2024	Amendment to alter the location of Genset A5 at Power Station 1 to avoid the powerline corridor and reinstall Gensets A1- A4.

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;

Licence conditions

Discharge to air

1. The licence holder must ensure that where waste is emitted to air from the emission points in Table 1 and identified in Figure 4 and Figure 5 of Schedule 2, it is done so in accordance with the conditions of this Licence.

Table 1: Emission points to air

Emission point reference	Emission Point	Emission point height (m)
A1	Exhaust from Diesel Engine 1 at PS1	4
A2	Exhaust from Diesel Engine 2 at PS1	4
A3	Exhaust from Diesel Engine 3 at PS1	4
A4	Exhaust from Diesel Engine 4 at PS1	4
A5	Exhaust from Diesel Engine 5 at PS1	4
B1	Exhaust from Diesel Engine 1 at PS2	4
B2	Exhaust from Diesel Engine 2 at PS2	4
B3	Exhaust from Diesel Engine 3 at PS2	4
B4	Exhaust from Diesel Engine 4 at PS2	4
B5	Exhaust from Diesel Engine 5 at PS2	4
B6	Exhaust from Diesel Engine 6 at PS2	4
B7	Exhaust from Diesel Engine 7 at PS2	4
B8	Exhaust from Diesel Engine 8 at PS2	4

Discharge to land

Tailings storage facility

2. The licence holder must maintain at all times at least a 300mm freeboard at the TSF.

3. The licence holder must undertake daily visual inspections of the operational TSFs, and as a minimum, the following must be inspected:

(a) tailings delivery pipelines;

(b) transient return water pipeline;

(c) tailings deposition;

(d) ponding on the surface of the TSF;

(e) internal embankment freeboard; and

(f) toe drains and silt trap for any leakage.

4. If any seepage or spills of tailings constituents are identified during the inspections in condition 3, the licence holder must ensure these wastes are immediately removed and disposed of to the TSF.

5. The licence holder must ensure a daily log book is kept of all visual inspections for the TSF and pipelines in condition 3. The logbook must be signed by the person undertaking the inspection and include date and time.

6. The licence holder must ensure that all above-ground pipelines containing environmentally hazardous substances are either:

(a) equipped with telemetry; or

(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.

7. The licence holder is authorised to:

(a) operate the TSF until the end of Stage 7 to the operating height, as specified in Table 2.

Table 2: Staged construction and operating heights for TSF

Stages	Maximum Embankment Height (m)	Operating height (m)
Stage 1 (Starter Embankment)	4.70	Maintain the required storm water contingency freeboard for a 1:100-year 72 hour storm
Stage 2	6.20	
Stage 3	7.85	
Stage 4A	8.35	
Stage 4B	9.85	
Stage 5	11.35	
Stage 6	12.85	
Stage 7	14.85	

Monitoring program

8. The licence holder must take representative samples from the locations identified in column 1 of Table 3, at the frequency stated in column 2 of Table 3 and have them analysed for the parameters listed in column 3 of Table 3.

9. The licence holder must ensure that the parameter limits listed in Column 4 of Table 3 are not exceeded at the monitoring sites listed in column 1 of Table 3. The licence holder must take the specified management actions outlined in Table 4 in the case of

a reportable event listed in column 5 of Table 3.

Table 3: TSF monitoring requirements

Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring site	**Sampling Frequency**	**Parameters to be measured**	**Limits**	**Reportable event**
Tailings Dam Ground Water Monitoring (Figure 7 of Schedule 3)				
PMB1, PMB2, (when groundwater present)	Quarterly: (October, January, April, July)	pH[1], Total Dissolved Solids (TDS), Standing Water Level (SWL)[2] Major Anions and Cations; Copper(Cu), Arsenic(As), Chromium (Cr), Aluminium (Al), Cadmium (Cd), Iron (Fe), Manganese (Mn), Nickel (Ni), Selenium (Se), Zinc (Zn), Lead (Pb), Antimony (Sb), Cobalt (Co), Thallium (Tl), Weak Acid Dissociable Cyanide (WADCN), Total Nitrogen, Total Phosphorus Sulfate (SO4), Fluoride (F), Mercury (Hg) Total Cyanide (CN)[4]	TDS □ 10,000mg/L pH 6.5-8.5 WAD CN □ 0.5mg/L	Sulfate > 5,000mg/L
PMB3, PMB3A, PMB4, PMB5, PMB6, PMB6A, PMB07, PMB08, PMB09, PMB9a, PMB10, PMB11				
Production Bore 45 (PB45) (Figure 11 of Schedule 6)			TDS □ 5,000mg/L pH 6.5-8.5 WADCN □ 0.5mg/L	Sulfate > 2,000mg/L
Production Bore 70 (PB70) (Figure 11 of Schedule 6)			NA	NA

Note 1: In-field non-NATA accredited analysis permitted.
Note 2: SWL shall be determined prior to collection of other water samples. With the exception of pH and SWL all measurements are to be reported in mg/L.
Note 3: With the exception of pH and SWL all measurements are to be reported in mg/L. Note 4: Only applicable for tailings hopper monitoring.

Table 4: Trigger event management actions

Column 1	Column 2	Column 3	Column 4
Monitoring site	**Event**	**Management action**	**Reporting requirements**
PMB1, PMB2, PMB3, PMB3A, PMB4, PMB5, PMB6, PMB6A, PMB07, PMB08, PMB09, PMB9a PMB10, PMB11	Reportable event listed in column 5 of Table 3	Install seepage recovery bore at PMB09 within one month of a reportable event	Notify the CEO within one month of a reportable event, providing a report containing: • the reportable event date; • the raw monitoring data for the reportable event in tabulated form; and • evidence of management action implementation.

Production Bore 45 (PB45)		Cease abstraction at production bore PB45 within 24 hours of a reportable event	Notify the CEO within seven days of a reportable event, providing a report containing: • the reportable event date; • the raw monitoring data for the reportable event in tabulated form; and • evidence of management action implementation.

Sewage treatment facility

10. The licence holder must manage the package sewage treatment plant in a manner such that:

(a) uncontaminated stormwater runoff resulting from roof and site stormwater drainage must not enter the treatment tanks;

(b) extreme rainfall events do not cause overtopping of the tanks;

(c) there is no discernible seepage loss from the tanks;

(d) vegetation (emergent or otherwise) must be prevented from growing inside the tanks; and

(e) sludge from the sewage treatment plant may be applied to bioremediation landfarm.

11. The licence holder must ensure that all treated effluent from the package sewage treatment plant is discharged to the irrigation area as depicted in Figure 9 of Schedule 4.

12. The licence holder must record the cumulative volume of effluent discharged for the purpose of irrigation and this data must be included in the Annual Environmental Report in tabular form.

13. The licence holder must collect and have analysed, representative water samples from the final tank of the sewage treatment plant for the parameters listed in column 1 of Table 5 at the frequency specified in column 2 of Table 5.

Table 5: Water quality monitoring parameters and frequency

Column 1	**Column 2**
Parameter	**Frequency**
Biochemical Oxygen Demand	Quarterly
Total Suspended Solids	Quarterly
pH	Quarterly
Total Nitrogen	Quarterly
Total Phosphorus	Quarterly
E.coli	Quarterly

Stormwater management

14. The licence holder must ensure that stormwater runoff is diverted away from the processing plant, sewage treatment plant and the irrigation area.

Water sampling

15. The licence holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10; and

(c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

Landfill

16. The licence holder must ensure that where wastes produced on the premises are not taken off-site for lawful use or disposal, they are managed in accordance with the requirements in Table 6.

Table 6: Management of waste

Waste type	Management strategy	Requirements

Inert Waste Type 1	Receipt, handling and disposal of waste by landfilling	All waste types
		• Disposal of waste by landfilling shall only take place within the landfill areas shown on the landfill Areas Map in Figure 10 of Schedule 5.
		• No more than 32 tonnes per year shall be disposed of by landfilling in the Class II Landfill;
		• Construction, operation and decommissioning of landfill cells can occur within the defined landfill area providing there is no waste within:
		  ○ 100 m of any surface water body; and
		  ○ 3 m of the highest level of the water table aquifer;
		• Waste shall be placed in a defined trench or within an area enclosed by earthen bunds; and
		• The active tipping face shall be restricted to a maximum vertical height of 3 m.

Clean Fill and Bioremediated soils as described for Class II Waste within the Landfill Definitions		
Putrescible Waste		
Greenwaste		
Inert Waste Type 2		• Storage of tyres shall only take place within the tyre storage/burial areas shown on the Landfill Area Map in Figure 10 of Schedule 5. • Cell locations where tyres are to be buried will be surveyed and the latitude and longitude or grid coordinates recorded.
Contaminated Solid Waste		Must meet the acceptance criteria for Class I or II landfills as detailed in the Landfill Definitions.

Special Waste Type 1		• Only to be disposed of into a designated asbestos disposal area within the landfill; • Not to be deposited within 2m 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		• Only to be disposed of into a designated biomedical waste disposal area within the landfill; • Not to be deposited within 2m 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.
Inert Waste Type 1 – Category 63 landfill		• No more than 500 tonnes per year shall be disposed of by landfilling in the Inert Landfill.

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*.

17. The licence holder must ensure that where waste does not meet the waste types set out in condition 16 it is stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.

18. The licence holder must ensure that cover is applied and maintained on landfilled wastes in accordance with Table 7 and that sufficient stockpiles of cover are maintained on site at all times.

Table 7: Cover requirements[1]

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 three monthly until the current putrescible waste trench (active as at 16 November 2017) is completed. Monthly cover is required for any other putrescible waste disposal.
Inert Waste Type 2	Clean fill and Inert Waste Type 1	500mm	Once 99 tyres have been stored.
Contaminated solid wastes	Clean fill and Inert Waste Type 1	100mm	As soon as practicable after deposit.
Special Waste Type 1	Type 1 Inert waste, soil or clay	300mm	As soon as practicable after deposit and prior to compaction.
		1000mm	By the end of the working day in which the asbestos waste was deposited.

Special Waste Type 2		100mm	As soon as practicable after deposit.

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

19. The licence holder must implement the following security measures at the mine site:

(a) maintain suitable fencing to prevent unauthorised access to the site; and

(b) ensure that any entrance gates to the premises are securely locked when the premises is unattended; and

(c) undertake regular inspections of all security measures and repair damage as soon as practicable.

20. The licence holder must ensure that wind-blown waste is contained within the boundary of the Landfill Area and that wind-blown waste is returned to the tipping area on at least a weekly basis.

21. The licence holder must undertake the monitoring in Table 8 according to the specifications in that table.

Table 8: Monitoring of inputs and outputs

Input/ Output	Parameter	Units	Averaging period	Frequency
Waste Inputs	Inert Waste Type 1 Inert Waste Type 2 Putrescible Waste Clean Fill Contaminated Solid Waste Special Waste Type 1 Special Waste Type 2	m^3 (where no weighbridge is present)	N/A	Monthly
Waste Outputs	Waste type as defined in the Landfill Definitions			Monthly
Treated wastewater pumped to the irrigation area	Volumetric flow rate (cumulative)	m^3/day	Monthly	Continuous

General conditions

Annual Environmental Report

22. The licence holder must provide to the CEO by 1 November each year an Annual Environmental Report containing data collected during the period beginning 1 July the previous year and ending on 30 June in that year. The report must contain, but not necessarily be limited to:

(a) the monitoring data and other collected data required by any condition of this licence, for the prescribed period (data should be provided in tables and in graphical format);

(b) a discussion of the monitoring data and other collected data against historical data (trend analysis) and known standards, and limits set in this licence;

(c) a summary of incident and exceedance reports;

(d) discussion of any significant responses taken to minimise the likelihood of recurrence of incidents and exceedances;

(e) a summary of activities undertaken at the bioremediation facility and a review of its performance; and

(f) a record of any tailings, chemical or hydrocarbon spill.

Annual Audit Compliance Report

23. The licence holder must submit to the CEO by 1 November, a Compliance Report indicating the extent to which the licence holder has complied with the Conditions in this Licence for the Annual Period.

24. The licence holder must not depart from the specifications in Column 1 and 2 for the infrastructure in each row of Table 9 except:

(a) where such departure is minor in nature and does not materially change or affect the infrastructure; or

(b) where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment; and in accordance with all other conditions in this licence.

Table 9: Works specifications

Column 1	Column 2
Infrastructure	**Specifications (design and construction)**
Inert landfill	The Inert landfill must: (a) be constructed within the Waste Rock Dump Extension; (b) have trenches not exceeding 30 m in length; (c) only have one trench active for waste disposal at a time; and (d) only receive inert wastes.

25. The licence holder must operate the Inert Landfill in accordance with the conditions of this Licence, following submission of the compliance document required under condition 26.

26. The licence holder must submit a compliance document to the CEO, within 7 days of the completion of construction, following construction of the Inert Landfill. The compliance document must:

(a) certify that the works were constructed in accordance with the specifications in Table 9; and

(b) be signed by a person authorised to represent the licence holder and contain the printed name and position of that person within the company.

Definitions

In this licence, the terms in Table 10 have the meanings defined.

Table 10: 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 November until 31 October of the immediately following year.
AS/NZS 5667.1	means the 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	means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*
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
Clean Fill	has the meaning defined in Landfill Definitions;
Compliance Report	means 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
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.
DWER	means Department of Water and Environmental Regulation
emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA)

Term	Definition
EP Regulations	*Environmental Protection Regulations 1987* (WA)
Extreme rainfall event	means a one in ten year rainfall event of 72 hours duration
Freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
Greenwaste	has the meaning defined in Landfill Definitions.
'Inert Waste Type 1; and Inert Waste Type 2	has the meaning defined in Landfill Definitions.
Landfill Definitions	means the document titled "*Landfill Waste Classification and Waste Definitions 1996*" published by the Chief Executive officer of the Department of Environment 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.
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	means in relation to the analysis of a sample that 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 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 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March, 1 April to 30 June.
Special Waste Type 1; and Special Waste Type 2	has the meaning defined in Landfill Definitions.
SWL	means standing water level.

Term	Definition
TDS	Means total dissolved solids.
TSF	Means tailings storage facility.
WAD cyanide	means Weak Dissociable Acid.
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Plan of Premises

Premises map

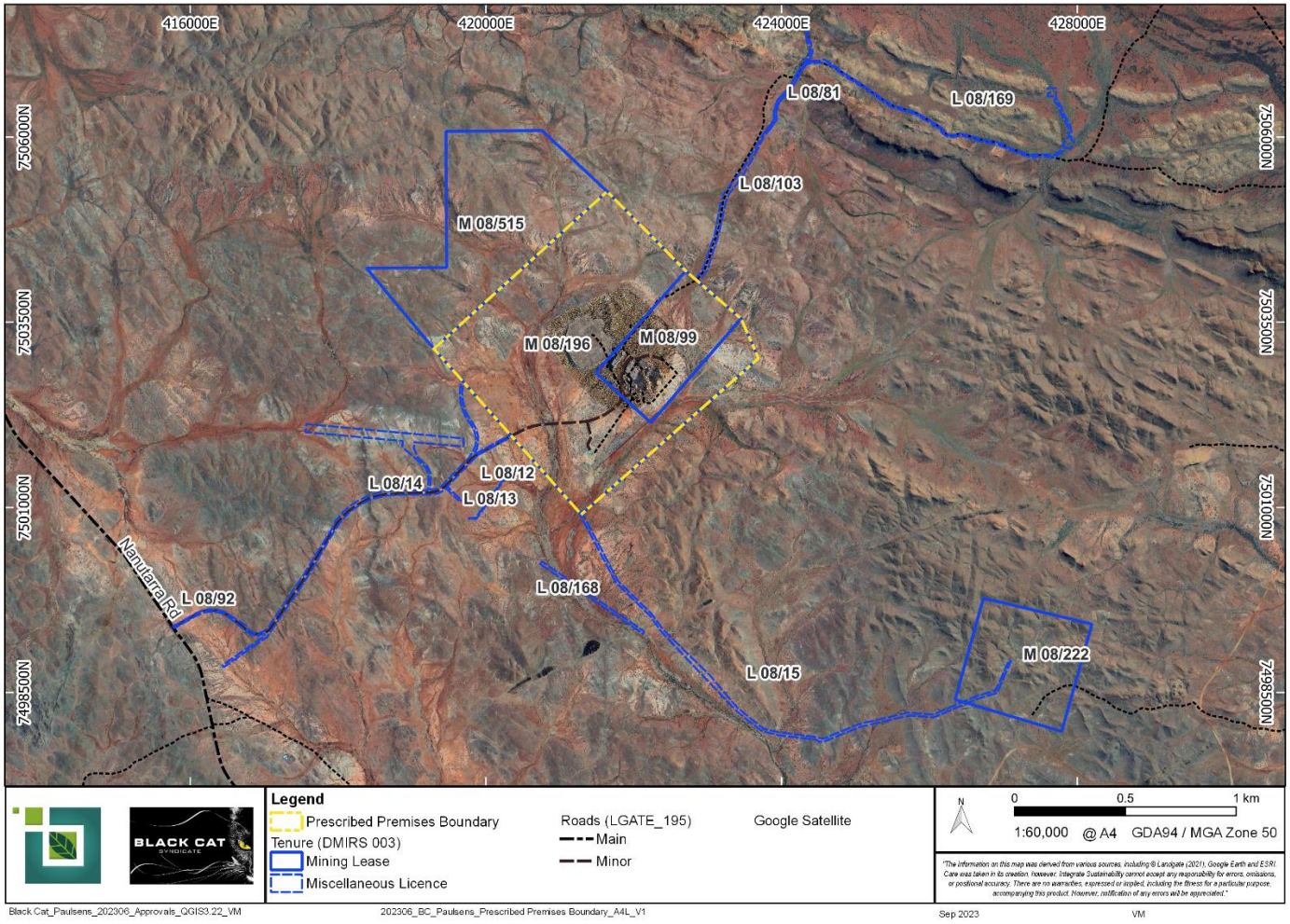

Figure 1: Premises Map

Paulsens Mine Site Layout

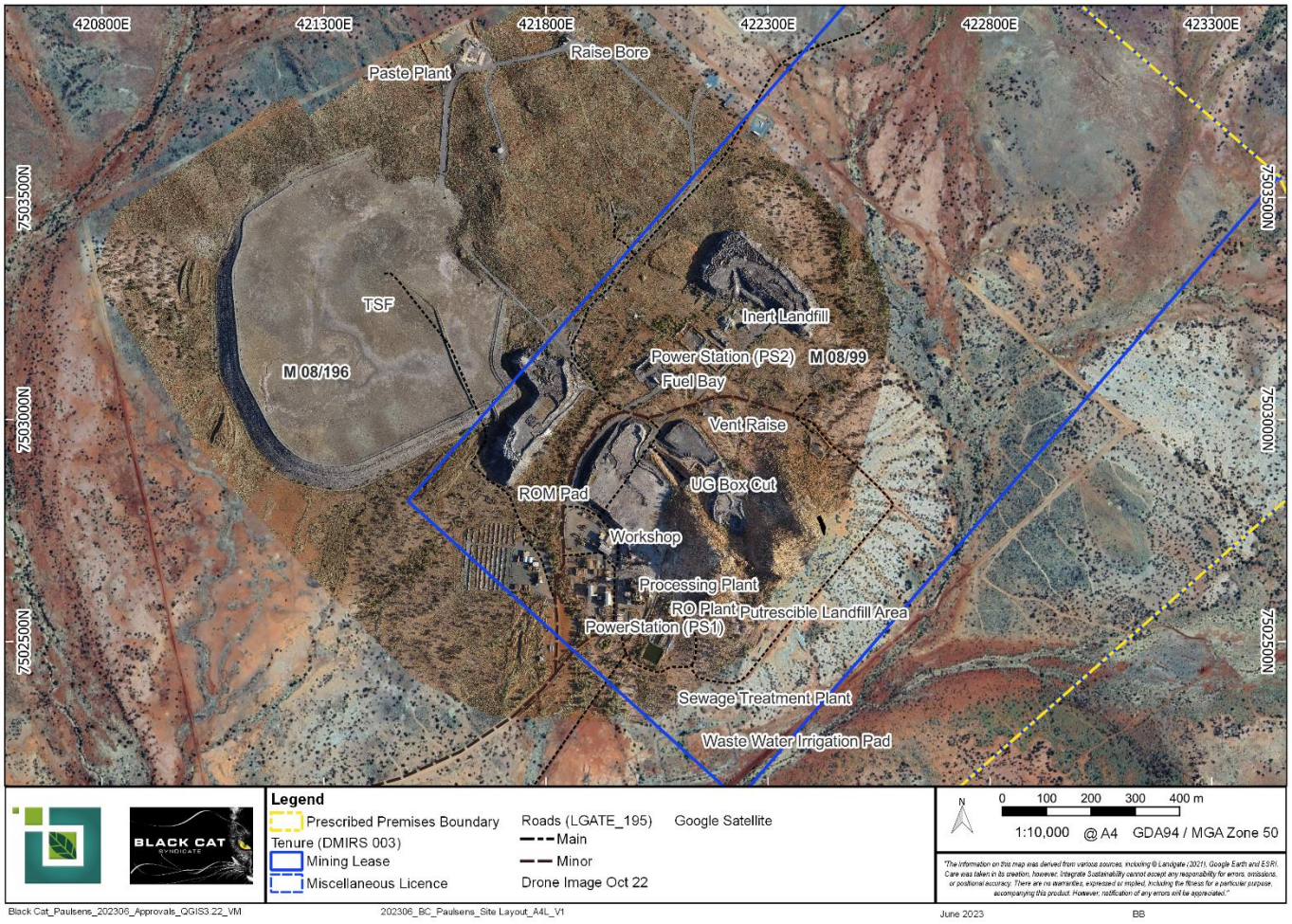

Figure 2: Map of mine site layout

Schedule 2: Power station emission points

Power Station 1 and Power Station 2 Locations

Figure 3: Map of power stations 1 and 2

Power Station 1 Emission Points

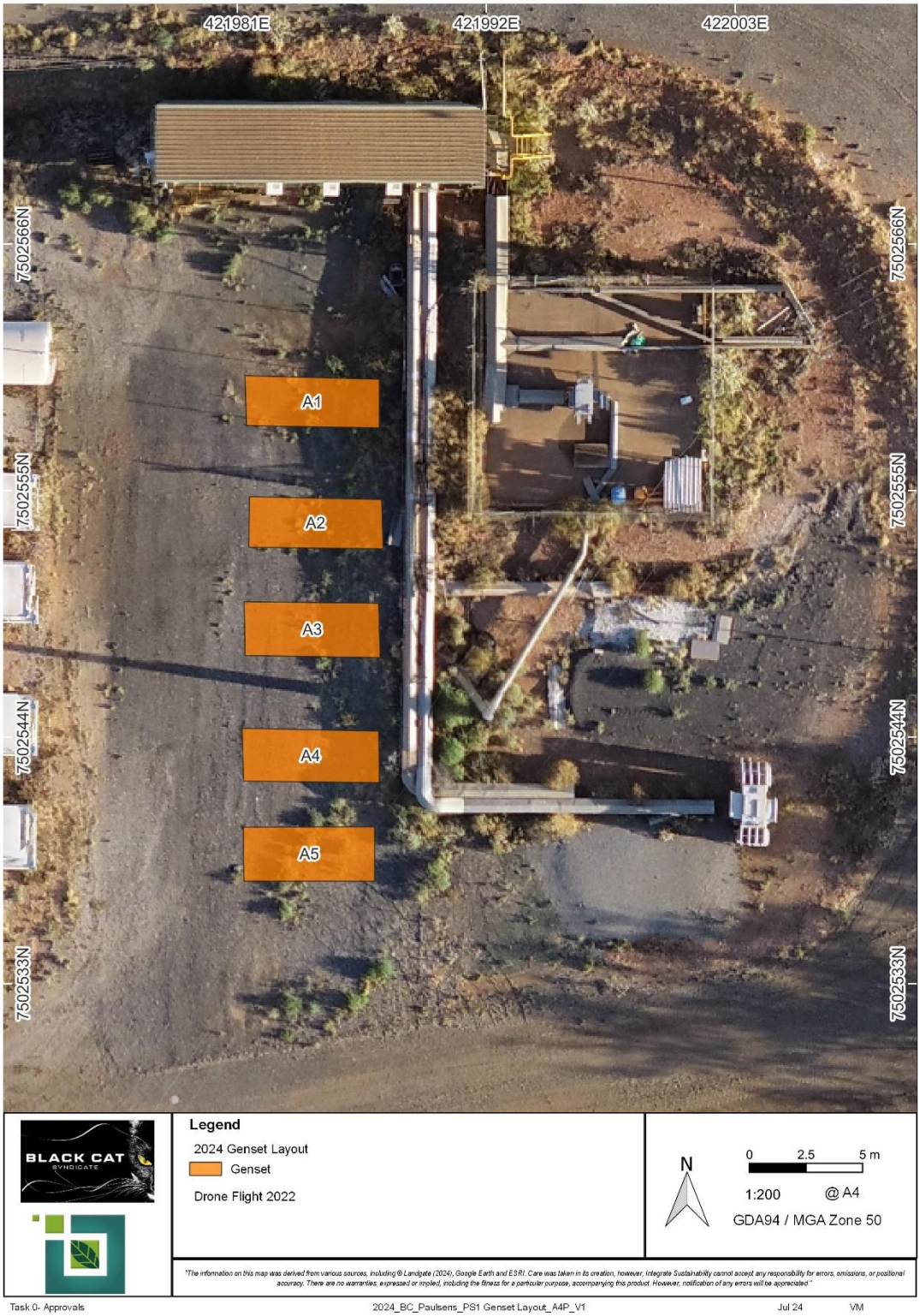

Figure 4: Power station 1 emission points

Power Station 2 Emission Points

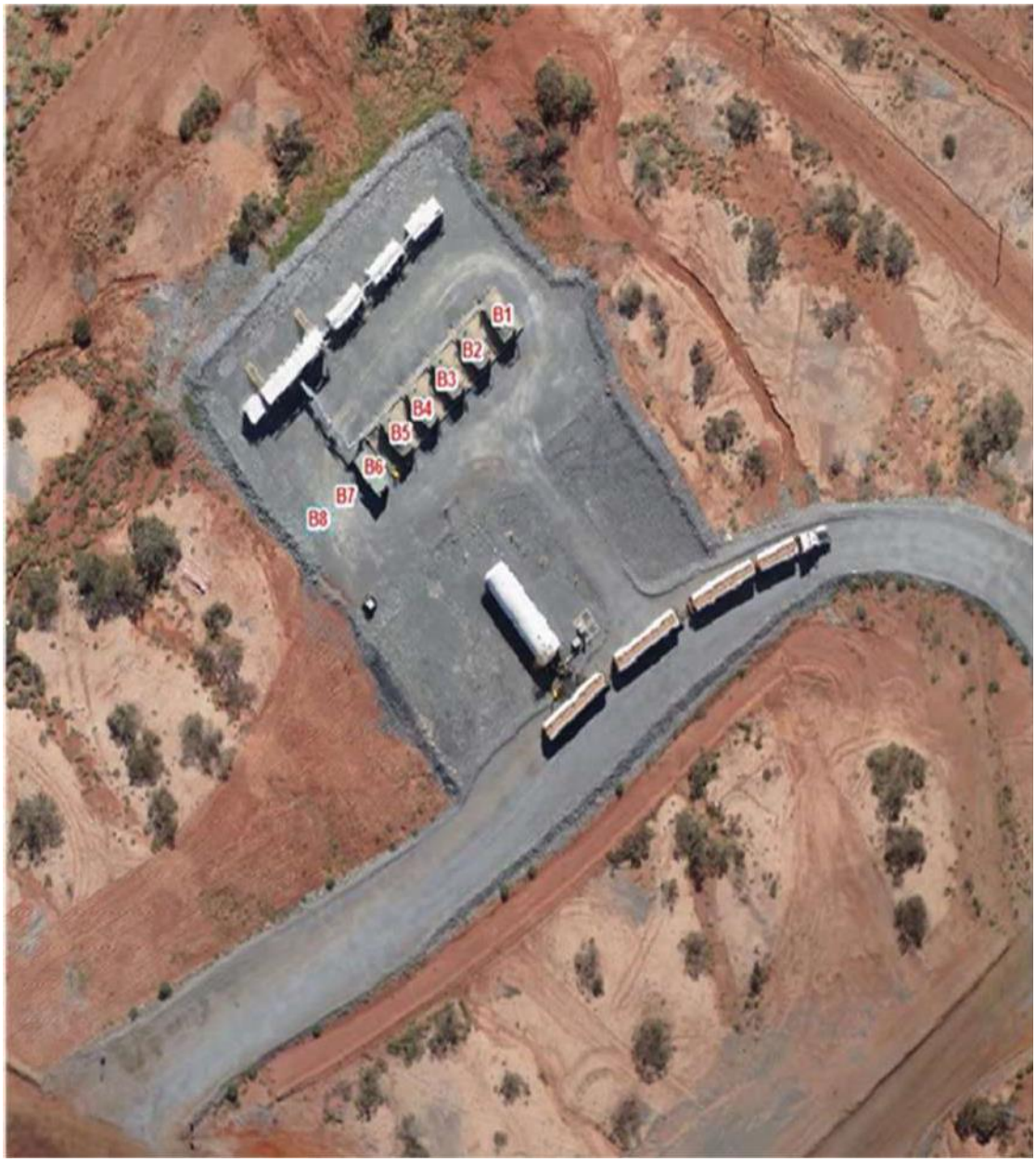

Figure 5: Power station 2 emission points

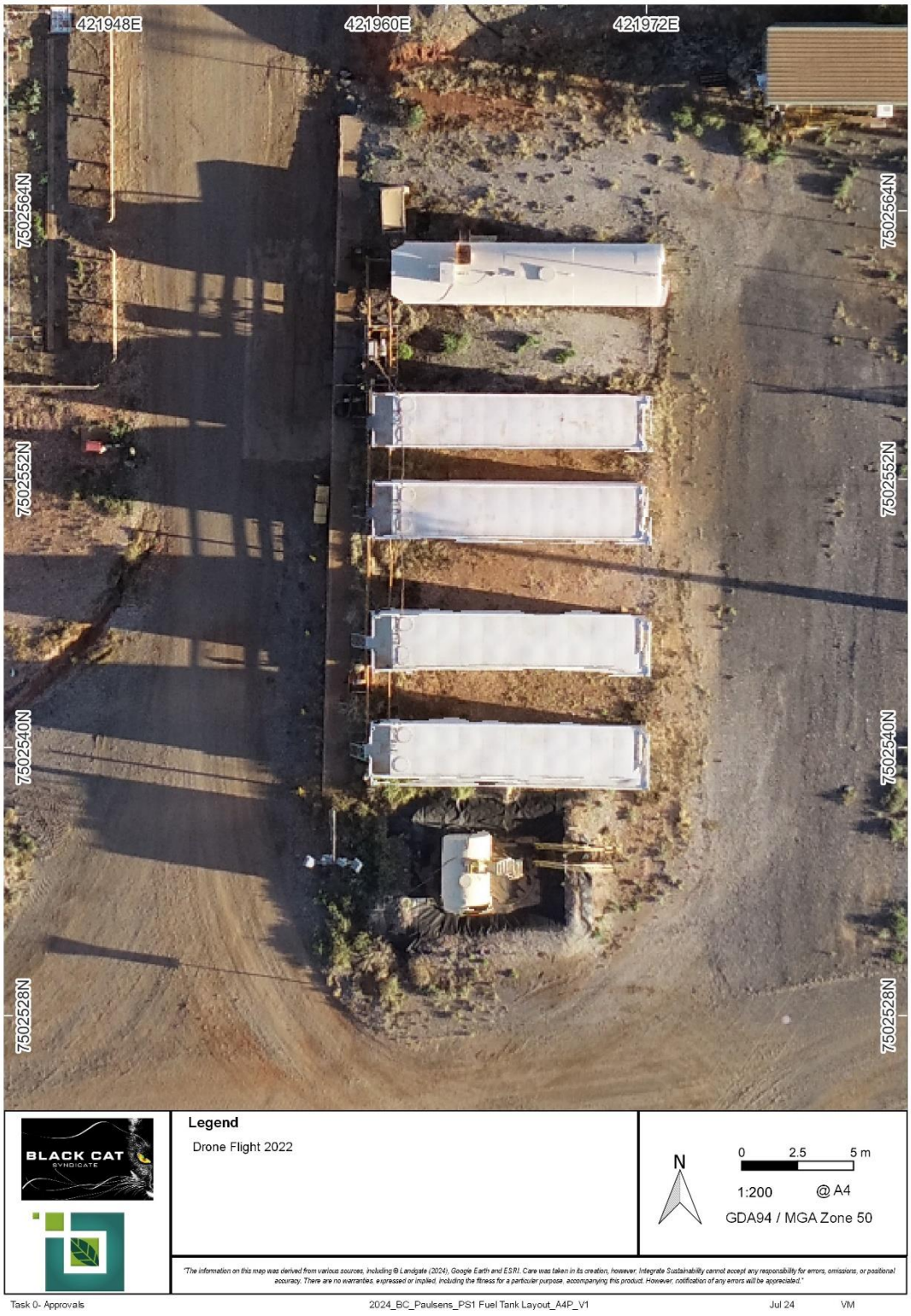

Figure 6: Power Station 1 fuel tank layout

Schedule 3
TSF monitoring bores

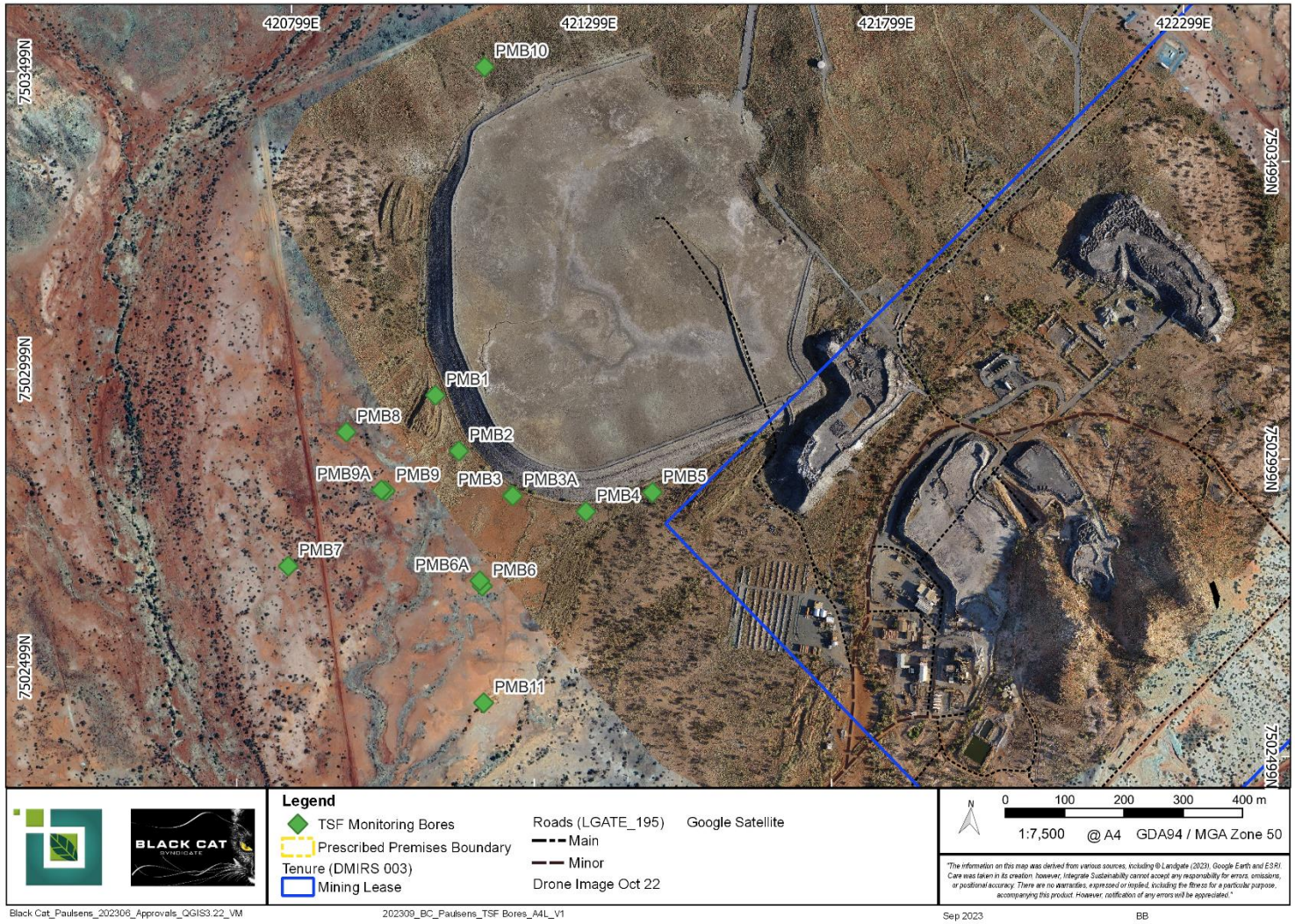

Figure 7: Tailings storage facility groundwater monitoring bores

Map of tailings hopper monitoring point

Figure 8: Tailings hopper monitoring point

Schedule 4

Sewage treatment facility and irrigation area

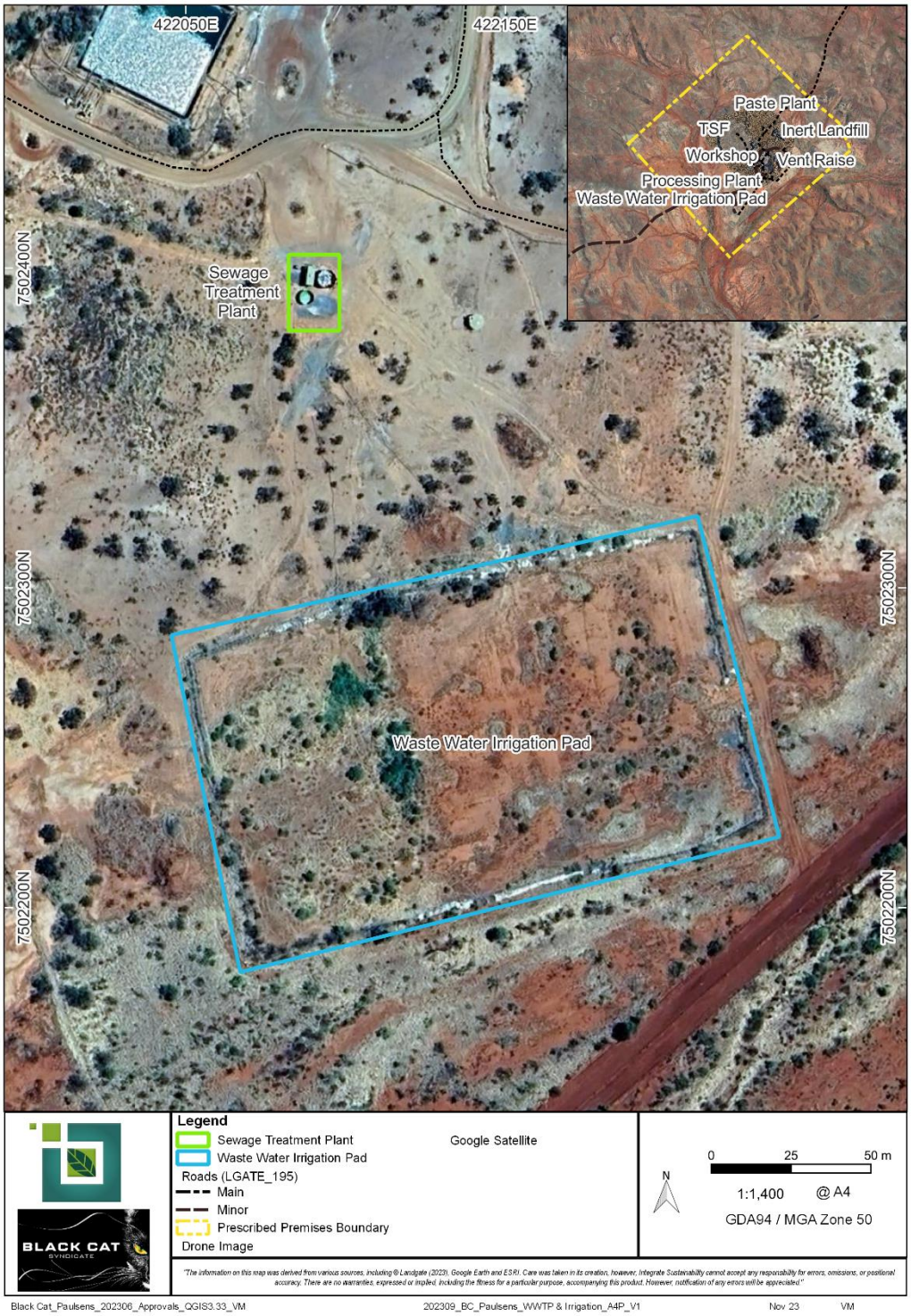

Figure 9: Wastewater treatment plant and irrigation area

Schedule 5
Location of landfill and tyre disposal

Figure 10: Landfill and tyre disposal sites

Schedule 6

Map of tailings groundwater monitoring points

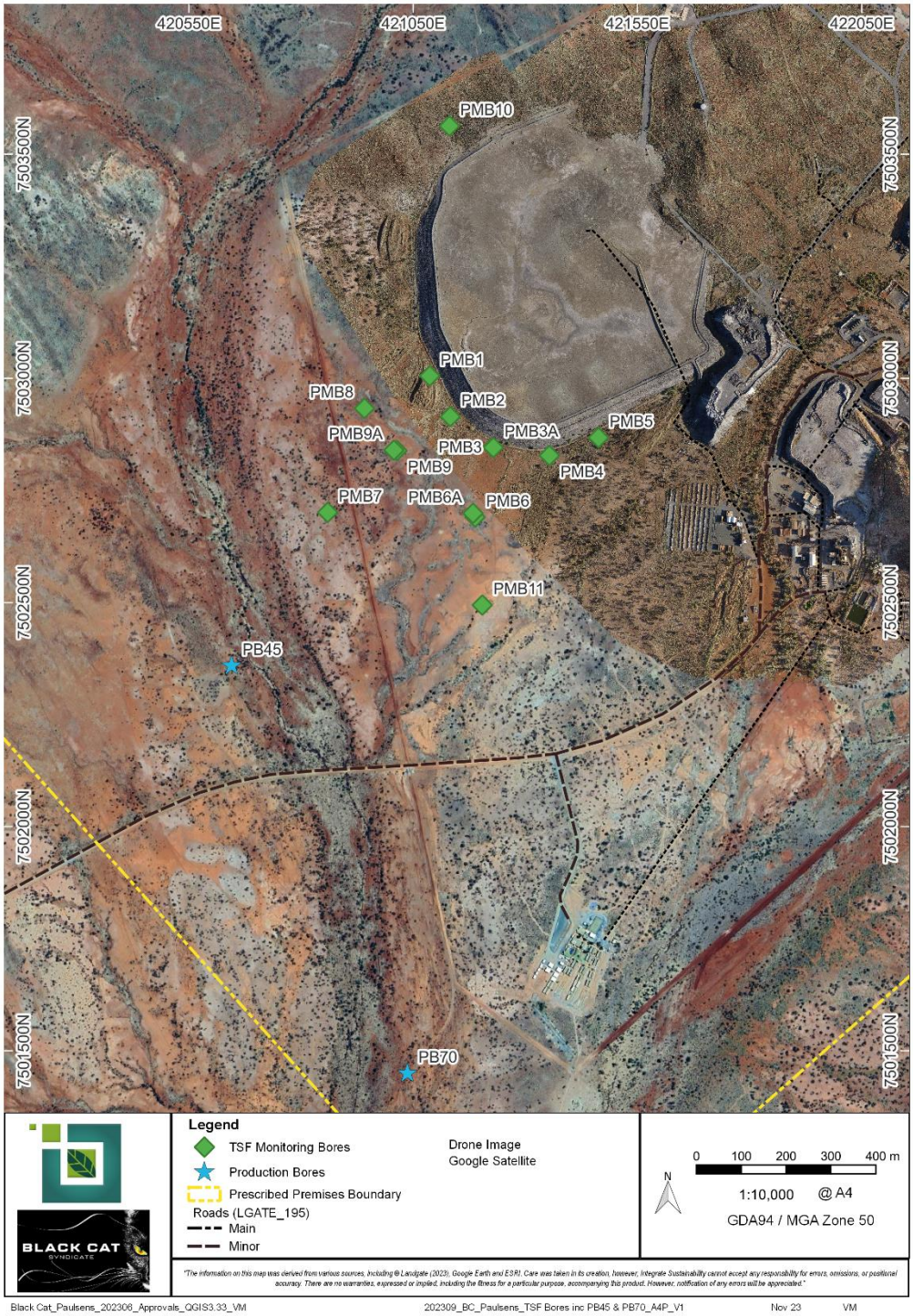

Figure 11: Locations of tailings groundwater monitoring points PB45 and PB70 (production bores)