



Licence number L6145/1983/11

Licence holder GMA Garnet Pty Ltd
ACN 009 344 227

Registered business address Suite 2, Floor 18, Exchange Plaza
2 The Esplanade
PERTH WA 6000

DWER file number INS-0001280

Duration 01/10/2014 to 30/09/2034

Date of amendment 16/10/2025

Premises details GMA Garnet Narngulu
122 Goulds Road
NARNGULU WA 6532

As defined by the Premises map in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production/design capacity
Category 8: Mineral sands mining or processing	3,000,000 tonnes per annual period

This amended licence is granted to the licence holder, subject to the attached conditions, on 16 October 2025, by:

Manager, Resources Industries

STATEWIDE DELIVERY (Environmental Regulation)

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

Licence history

Date	Reference number	Summary of changes
31/07/2014	L6145/1983/11	Licence reissue and REFIRE format conversion
26/04/2016	L6145/1983/11	Notice of Amendment of Licence Expiry Dates (2016)
16/05/2022	L6145/1983/11	Notice of Amendment of Amended Reporting Conditions (2022)
04/08/2023	L6145/1983/11	Licence amended for the construction and operation of a small in-pit tailings storage facility (solar drying pond) for the storage of tailings produced by the onsite Laboratory. The Licence is also amended by removing conditions relating to emissions to land and monitoring requirements for the Diesel Storage Bunded Area and the Washdown Bay. The Licence has been updated to the latest licensing format.
16/10/2025	L6145/1983/11	APP-0027440: Amendment to construct and operate soak wells to discharge tailings from onsite laboratory, replacing previously assessed in-pit tailings storage facility (solar drying pond). Removed conditions associated with construction and operation of solar drying pond.

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 – Construction

1. The licence holder must:
 - (a) construct and/or install the infrastructure;
 - (a) in accordance with the corresponding design and construction requirement / installation requirement; and
 - (b) at the corresponding infrastructure location;
 as set out in Table 1.

Table 1: Design and construction/installation requirements

Item	Infrastructure	Design and construction/installation requirements	Infrastructure location
1	Concrete soak wells	- Must consist of at least two precast concrete soak wells, with total storage capacity of 5,000 L; - All soak wells must be connected, with connecting pipe no higher than 300 mm below ground; - All soak wells must be covered to prevent surface water ingress, except for primary soak well, which must be equipped with a trafficable spill grate; - Primary soak well must be configured to incorporate tailings pipeline and dewatering filter bag; - Base of soak well must consist of at least 300 mm thick compacted gravel for drainage; - Concrete hardstand must be constructed around soak well area, in accordance with Figure 2 of Schedule 1, including sufficient area to allow for drying of tailings in dewatering filter bags.	As shown in Figure 2 of Schedule 1.
	Tailings pipeline	- Must be installed to connect Shed E (building directly north of soak well area) to primary soak well; - Must be installed belowground and graded to allow for tailings to flow via gravity.	As shown in Figure 2 of Schedule 1.
	Groundwater monitoring bores MB01 and MB02	- Must be designed and constructed in accordance with ASTM D5092/D5092M-16: <i>Standard practice for design and installation of groundwater monitoring wells</i>; - Well screens must target the part, or parts, of the aquifer most likely to be affected by contamination, where temporary/seasonal	As shown in Figure 3 of Schedule 1.

Item	Infrastructure	Design and construction/installation requirements	Infrastructure location
		perched features are present, wells must be nested, and the perched features individually screened; and • Must be constructed, developed (purged), and determined to be operational prior to discharge of tailings wastewater to the concrete soak well.	

2. The licence holder must within 30 days of all items of infrastructure required by condition 1 being constructed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include, as a minimum, the following:
 - (a) be certified by a suitably qualified professional engineer that the item of infrastructure, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as-constructed plans, well construction and development logs and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
 - (c) be signed by a person authorised to represent the licence holder and contain the printed name and position of that person.

Infrastructure and equipment

4. The licence holder must ensure that the site infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Concrete soak wells and associated tailings pipeline	• Tailings and/or tailings supernatant cannot be discharged prior to the infrastructure being constructed in accordance with condition 1, the corresponding Environmental Compliance Report submitted in accordance with condition 2, and the corresponding ambient groundwater monitoring completed in accordance with condition 7. • Minimum freeboard of 300 mm must be maintained at all soak well(s) at all times. • Any spills of tailings or tailings supernatant must be contained and cleaned up as soon as practicable.	As shown in Figure 2 of Schedule 1.

Site infrastructure and equipment	Operational requirement	Infrastructure location
	Drying of tailings bag must be undertaken within concrete hardstand area.	
Washdown bays	Maintain an impervious, sealed collection sump for the storage of washdown water.	As shown in Figure 2 of Schedule 1.

5. The licence holder must:

- undertake inspections as detailed in Table 3;
- 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
- maintain a record of all inspections undertaken.

Table 3: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Concrete soak wells	Visual assessment to: - confirm minimum freeboard is being maintained; - confirm general integrity of soak wells; and - confirm potential fugitive dust liftoff is being managed from drying tailings.	At least once every 12-hour shift
Tailings pipeline	Visual assessment to check for any visible leakage or damage.	
Washdown bays	Visual to confirm the capacity of the collection sump is being maintained for the storage of wash water.	

Emissions and discharges

6. The licence holder must ensure that the emissions specified in Table 4, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 4: Authorised discharge point

Emission	Discharge point	Discharge point location	Authorised discharged volume
Discharge of tailings waste from processing of drill samples at the premises.	Concrete soak wells	As shown in Figure 2 of Schedule 1.	Maximum of 500 m ³ per annum

Monitoring

7. The licence holder must monitor the groundwater for concentrations of the parameters listed in Table 5:

- from each monitoring point;
- at the corresponding monitoring location;

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- (c) in the corresponding unit;
 - (d) at no less than the corresponding frequency;
 - (e) for the corresponding averaging period; and
 - (f) using the corresponding method,
- as set out in Table 5.

Table 5: Ambient groundwater monitoring

Monitoring point	Monitoring location	Parameter	Unit	Frequency	Averaging period	Method
MB01; MB02.	Labelled as '1' and '2', as shown in Figure 2 of Schedule 1.	Standing water level ¹	mbgl	At least one monitoring event prior to discharge of tailings wastewater into concrete soak well, then quarterly thereafter.	Spot sample	---
		pH ²	pH unit			AS/NZS 5667.1; AS/NZS 5667.11
		Electrical conductivity ²	µS/cm			
		Total dissolved solids	mg/L			
		Total hardness (as CaCO ₃)				
		Total alkalinity (as CaCO ₃)				
		Dissolved metals and metalloids, including: Aluminum, arsenic, iron, manganese, nickel, silica.				

8. The licence holder must monitor emissions:
- (a) from each discharge point;
 - (b) at the corresponding monitoring location;
 - (c) for the corresponding parameter;
 - (d) at no less than the corresponding frequency;
 - (e) for the corresponding averaging period;
 - (f) in the corresponding unit; and
 - (g) using the corresponding method,
- as set out in Table 6.

Table 6: Emissions and discharge monitoring

Discharge point	Monitoring location	Parameter	Unit	Frequency	Averaging period	Method
Primary concrete soak well (associated with dewatering filter bag)	Labelled as 'Concrete Sump', as shown in Figure 2 of Schedule 1.	Tailings slurry volume ¹	m ³	Monthly (where there is a discharge of tailings wastewater into concrete soak well).	None specified.	None specified.
		pH ¹	pH unit		Spot sample	AS/NZS 5667.1; AS/NZS 5667.10.
		Electrical conductivity ¹	µS/cm			
		Total dissolved solids	mg/L			
		Total hardness (as CaCO ₃)				
		Total alkalinity (as CaCO ₃)				
		Dissolved metals and metalloids, including:				

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Discharge point	Monitoring location	Parameter	Unit	Frequency	Averaging period	Method
		Aluminum, arsenic, iron, manganese, nickel, silica.				

Note 1: In-field non-NATA accredited analysis is permitted.

9. The licence holder must record the results of all monitoring activity required by condition 7 .
10. 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.

Records and reporting

11. 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.
12. 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 30 September of each year an Annual Audit Compliance Report in the approved form.
13. The licence holder must submit to the CEO an Annual Environmental Report by 30 September 2023, and biennially thereafter. The report must contain the information as set out in Table 7 of this licence.

Table 7: 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.
---	Summary of premises annual throughput of waste material and ore product produced.
---	Summary of all contaminated waste materials removed from the premises (liquid or solid) including, but not limited to: • Type of waste and waste volume; • Submission of contaminated waste tracking forms.
5	Inspections of infrastructure of any failure or malfunction.
7	Ambient groundwater monitoring results during operations. Tabulated monitoring data and / or time-series graphs showing concentrations of all parameters, in Microsoft Excel format or similar. Interpretation of the monitoring data, including comparison to historical trends and limits

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Condition	Requirement
	(where applicable). Copies of original monitoring, laboratory and analysis reports submitted to the licence holder by third parties.
8	Emission and discharge monitoring results during operations. Tabulated monitoring data results showing concentrations of all parameters. Copies of original monitoring, laboratory and analysis reports submitted to the licence holder by third parties.
11	Complaints summary
12	Annual Audit Compliance Report

- 14.** 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) the works conducted in accordance with condition 1 of this licence;
 - (c) any maintenance of infrastructure that is performed in the course of complying with condition 4 of this licence;
 - (d) monitoring programmes undertaken in accordance with condition 7 of this licence; and
 - (e) complaints received under condition 11 of this licence.
- 15.** The books specified under condition 14 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 8 have the meanings defined.

Table 8: 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 August until 31 July of the immediately following year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1: 1998. Water quality - Sampling - guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.11:1998. Water quality – Sampling – Part 10: Guidance on sampling of waste waters.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11:1998. Water quality – Sampling – Part 11: Guidance on sampling of groundwaters
Averaging period	means the time over which a limit is measured or a monitoring result is obtained
Biennial report	contains information and monitoring data as prescribed in the licence relating to the two previous annual periods.
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
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)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)

Term	Definition
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 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 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 1 January to 31 March and 1 April to 30 June in the following year.
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.

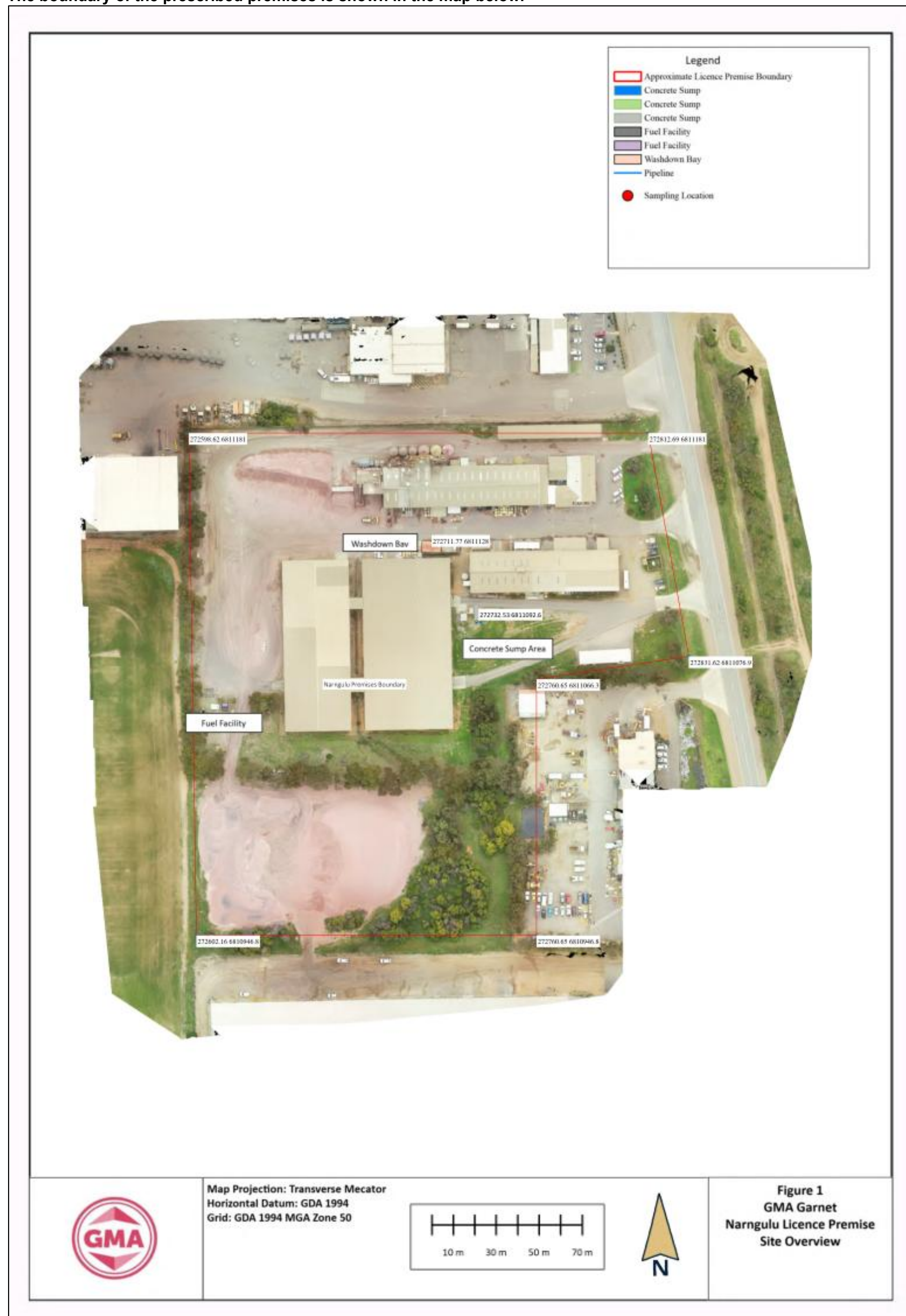


Figure 1: Map of the boundary of the prescribed premises



Figure 2: Map of infrastructure location

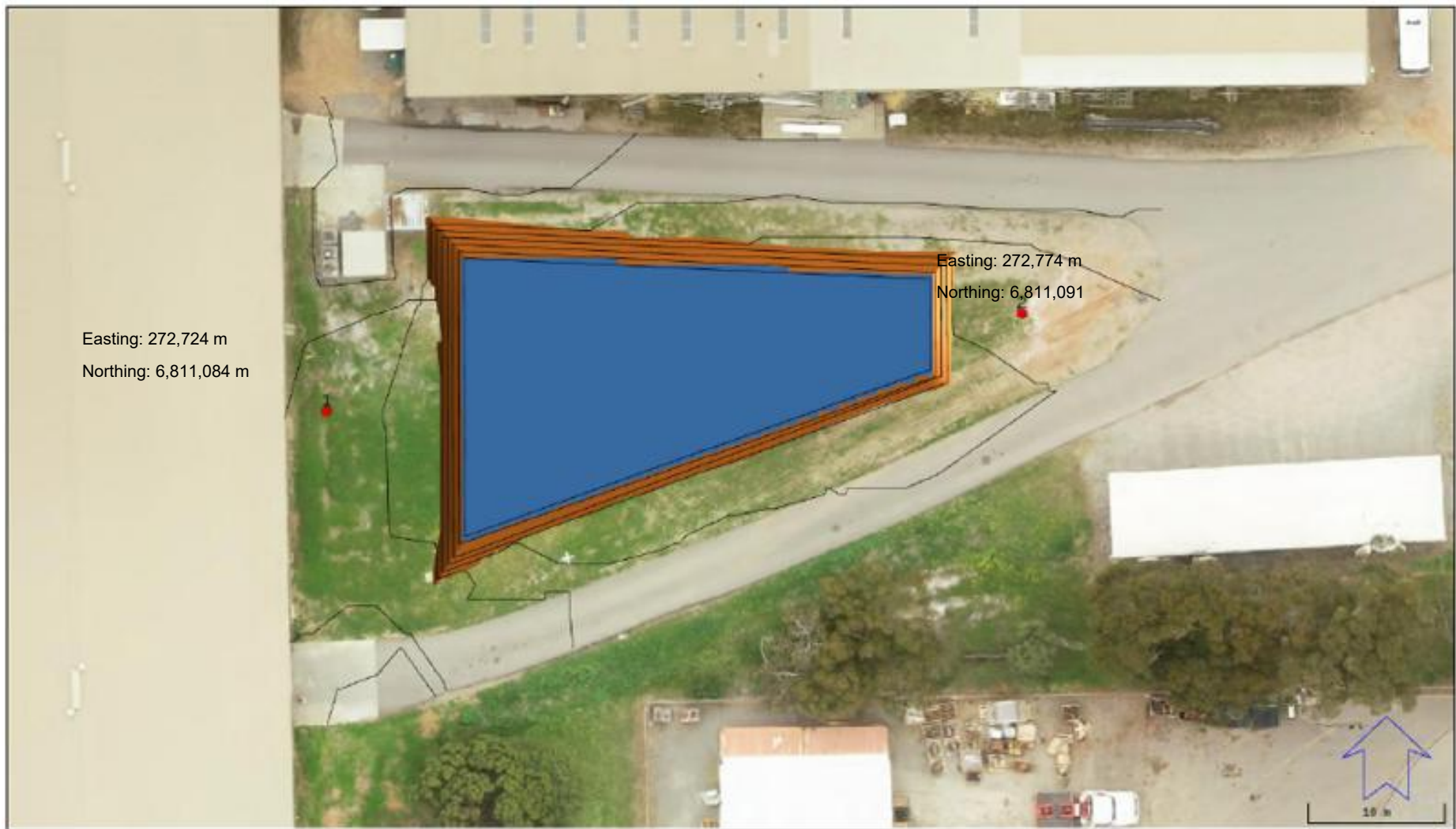


Figure 3: Location of groundwater monitoring bores