



Licence number L9440/2024/1

Licence holder Australian Garnet Pty Ltd

ACN 646 741 157

Registered business address Level 3, 14 Walters Drive
OSBORNE PARK WA 6017

DWER file number INS-0002818

Duration 16/12/2024 to 15/12/2044

Date of issue 16/12/2024

Date of amendment 15/01/2026

Premises details Lucky Bay Garnet Project
George Grey Drive
YALLABATHARRA WA 6535

Legal description -

Tenements M70/1280, G70/253, L70/215, L70/134
and L70/178 within Lot 1 on Diagram 91564, Lot
300 on Plan 60565, and Lot 1431 on Plan 251608.

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 8: Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated, or otherwise processed.	8,400,000 tonnes per annual period.

This amended licence is granted to the licence holder, subject to the attached conditions, on 15/01/2026, by:

MANAGER, RESOURCE INDUSTRIES

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

Licence history

Date	Reference number	Summary of changes
16/12/2024	L9440/2024/1	Licence granted.
31/10/2025	L9440/2024/1	Licence amended to include changes required in accordance with Ministers Determination 001 of 2025.
15/01/2026	L9440/2024/1	<p>Licence amendment to authorise:</p> <ul style="list-style-type: none"> installation and operation of in-pit settlement ponds; use of clay by-product for dust suppression (including definition of clay by-product); and extend timeframe for installation of dust monitoring location 'M4'. <p>Ambient air monitoring requirements under condition 10 also updated to ensure monitoring requirements align with capabilities of monitoring equipment.</p> <p>Administrative errors identified with ambient air monitoring reference points and maps in Schedule 1 have also been corrected as part of this amendment.</p>

Interpretation

In this licence:

- the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- 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;
- where tables are used in a condition, each row in a table constitutes a separate condition;
- any reference to an Australian or other standard, guideline, or code of practice in this licence:
 - if dated, refers to that particular version; and
 - if not dated, refers to the latest version and therefore may be subject to change over time;
- unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- 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:

General

1. The licence holder must ensure the limits specified in Table 1 are not exceeded.

Table 1: Production or design capacity limit

Category ¹	Category description ¹	Premises assessed production capacity
8	Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated, or otherwise processed.	8,400,000 tonnes per annual period.

Note 1: Categories listed under Schedule 1 of the *Environmental Protection Regulations 1987*.

Infrastructure and equipment (construction)

2. The licence holder must:
 - (a) construct and/or install the infrastructure listed in Table 2;
 - (b) in accordance with the corresponding design and construction requirement; and
 - (c) at the corresponding infrastructure location.

Table 2: Design and construction requirements

Infrastructure	Design and construction requirement	Infrastructure location
In-pit Settlement Ponds	<ul style="list-style-type: none"> • Constructed within existing excavated area of the Menari Mine Pit with a minimum of 5 m separation distance from the outer pit boundary • Constructed with a minimum separation distance of 2.0 m between base of ponds and the highest seasonal groundwater level; • Constructed with a minimum 75 mm thick clay/slimes liner installed on base and walls of settling pond/s • Layout as specified in Schedule 2, Figure 6 	As shown in Schedule 2: Figure 6

3. The licence holder must within 30 days of all items of infrastructure required by condition 2 being constructed:
 - (a) undertake an audit of their compliance with the requirements of condition 2; and
 - (b) prepare and submit to the CEO an audit report on that compliance.
4. The report required by condition 3, must
 - (a) contain as constructed plans for the works that show the profile of all pond infrastructure in mAHD and mBGL; and
 - (b) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person within the company.

Premises operation

5. The licence holder must carry out mining and processing operations in accordance with that specified in Table 3.

Table 3: Mining and processing operations and hours of operation

Operations	Days and hours of operation
Mining operations	
Civil and earthmoving activities using mobile equipment includes but not limited to light vehicles, front-end loaders, tracked dozer, excavator, haul truck, grader, service truck, and water truck Other equipment used during mining operations are the fuel trailer, process water pond and reach stacker Topsoil and overburden removal	Monday to Saturday 7:00 AM to 7:00 PM ¹ Sunday and Public Holidays 9:00 AM to 7:00 PM
Processing operations	
Processing operations includes the Central Processing Area (WCP, DSP, generators, product and ilmenite sheds) Mobile Unit Plant Production bores, pumps, and pipelines Mobile equipment used includes front-end loader, light vehicles, bobcat, crane, and bus.	Monday to Sunday (including Public Holidays) 12-hr shifts

Note 1: Mining operations may be undertaken outside of these hours of operation only for the purpose of meeting the nighttime noise monitoring required by Condition 25.

Infrastructure and equipment

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

Table 4: Infrastructure and equipment requirements

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1	Dry Separation Plant (DSP) including the rotary dryer, baghouse, screening, and packaging.	<ul style="list-style-type: none"> must not exceed the design capacity of 47 tph; and. any contaminated surface water runoff must be contained within the plant or directed toward the drainage sumps and returned to the Process Water Pond. 	Schedule 1 Maps: Figure 3

	Site infrastructure and equipment	Operational requirement	Infrastructure location
2	Wet Concentrator Plant (WCP) including the thickener and associated pumps.	<ul style="list-style-type: none"> must not exceed the design capacity of 511 tph; and any contaminated surface water runoff must be contained within the plant or directed toward the drainage sumps and returned to the Process Water Pond. 	Schedule 1 Maps: Figure 3
3	Screening and Bagging Plant (SBP) (Product and Loadout Facility)	<ul style="list-style-type: none"> must not exceed the design capacity of 47 tph; and located within an enclosed shed. 	Schedule 1 Maps: Figure 3
4	Heavy Metal Concentrate (HMC) Stockpile	<ul style="list-style-type: none"> any contaminated surface water runoff must be diverted away from the stockpile and contained within a sump. 	Schedule 1 Maps: Figure 3
5	Process Water Pond	<ul style="list-style-type: none"> maximum storage capacity of 3,396 m³; maintain a minimum operational freeboard of 500 mm; contains process water for reuse in the CPA; and daily visual inspections must be undertaken to ensure integrity of HDPE liner. 	Schedule 1 Maps: Figure 3
6	Turkey Nest Pond	<ul style="list-style-type: none"> maximum storage capacity of 5,993.5 kL; stores abstracted groundwater; maintain a minimum operational freeboard of 500 mm; water to be used for dust suppression and / or for return to the processing plant; and daily visual inspections must be undertaken to ensure integrity of HDPE liner. 	Schedule 1 Maps: Figure 2
7	Mobile Mining Unit Plant (MUP) including slurry pipelines, pumps, and conveyors.	<ul style="list-style-type: none"> maintain sufficient secondary containment to completely contain any spills from pipeline leakage or breach for a period equal to the time between routine inspections; daily visual inspections must be undertaken to ensure integrity of pipelines and identify potential spills and leaks; and any contaminated surface water runoff must be contained. 	Schedule 1 Maps: Figure 2
8	Pipelines carrying ore, clay by-products, sand tailings, and water.	<ul style="list-style-type: none"> maintain sufficient secondary containment to completely contain any spills from pipeline leakage or breach for a period equal to the time between routine inspections; and daily visual inspections must be undertaken to ensure integrity of pipelines and identify potential spills and leaks. 	Schedule 1 Maps: Figure 2

	Site infrastructure and equipment	Operational requirement	Infrastructure location
9	Sand Tailings Storage Area	<ul style="list-style-type: none"> • stockpile height must not exceed 25mRL; • use of stockpile height markers; • dimensions must be maintained at 250 m x 806 m; • active areas must be maintained in a damp state; and • any surface water runoff must be contained within the perimeter bunds and drains. 	Schedule 1 Maps: Figure 2
10	Solar Drying Ponds	<ul style="list-style-type: none"> • located in the Solar Drying Pond Areas, within the Sand Tailings Storage Area, and / or in Mining Voids within the Menari Mine Pit; • maintain a minimum operational freeboard of 500 mm; • pond wall height must not exceed 4 m; and • the pond floor will be built to follow natural grades; and • supernatant water will be recovered for reuse. 	Schedule 1 Maps: Figures 2
11	Mining Void (Menari Mine Pit) for tailings deposition (i.e. sand tails and clay by-products)	<ul style="list-style-type: none"> • any contaminated surface water runoff must be diverted away from the storage area and contained. 	Schedule 1 Maps: Figure 2
12	In-pit Settlement Ponds	<ul style="list-style-type: none"> • only receive tailings cyclone overflow and decant water collected from solar drying ponds; • maintain a minimum operational freeboard of 300 mm at all times; • conduct daily visual inspections to ensure minimum operational freeboard is being maintained; and • decant infrastructure maintained within each pond for recovery of decant water. 	Schedule 1 Maps: Figure 2

Emissions and discharges

Discharges to land

7. The licence holder must ensure that tailings and saline wash water produced during operational activities are deposited in accordance with the requirements specified in Table 5.

Table 5: Discharges to land requirements

Emission	Requirements	Location
Sand tailings from the WCP and DSP, and excess	Must be: <ul style="list-style-type: none"> • temporarily stockpiled at the sand tailings storage area; OR 	Schedule 1 Maps: Figure 2

Emission	Requirements	Location
sediment collected from in-pit settlement ponds	<ul style="list-style-type: none"> deposited directly into the mined void using cyclone stackers. 	
Clay by-product from the thickener	<p>Must be pumped as a thickened slurry to:</p> <ul style="list-style-type: none"> solar drying ponds; OR deposited directly into solar drying ponds within the mined void; OR reused on non-trafficked exposed areas within the Premises as a dust suppressant. 	Schedule 1 Maps: Figure 2
Saline wash water	<ul style="list-style-type: none"> Saline wash water from the rinsing of final garnet concentrate must be transferred to the Process Water Pond. 	Schedule 1 Maps: Figure 3
Tailings cyclone stackers discharge (decant water)	<ul style="list-style-type: none"> Water discharged from the cyclone stackers must be discharged to the Process Water Pond or active In-Pit Settlement Pond/s; and Water recovered from in-pit settlement ponds and returned to Process Water Pond for reuse in the processing plant. 	Schedule 1 Maps: Figures 2 and 3

- The licence holder must immediately remove and dispose off-site any liquid resulting from spills or leaks of chemicals including fuel, oil, or other hydrocarbons, or other collected waste material whether inside or outside the low permeability compounds, by a licensed carrier to a licensed landfill facility.
- The licence holder must take all reasonable and practicable measures to prevent stormwater run-off becoming contaminated by the activities and operations undertaken at the premises.

Emissions to air

- The licence holder must ensure that waste emitted to air from the DSP during operational activities is emitted in accordance with the requirements specified in Table 6.

Table 6: Emissions to air requirements

Emission point and source	Emission point height (m)	Pollution control equipment	Location
DSP – rotary dryer stack (Baghouse 1)	3 (minimum)	Pulse jet fabric filter (baghouse) or equivalent	Schedule 1 Maps: Figure 3
DSP – rotary dryer stack (Baghouse 2)			

Dust

- The licence holder must implement the requirements / management actions list in Table 7 for each control specified in that table.

Table 7: Dust control requirements and management actions

Control	Requirements / management actions
Topsoil stripping	<ul style="list-style-type: none"> must be scheduled to avoid periods of high winds from unfavourable directions relative to off-site receptors (including George Grey Drive); where there is a risk of dust affecting off-site receptors, must conduct when soil conditions are moist; and must cease / suspend topsoil stripping operations during high wind conditions where there is a risk of dust impacting on off-site receptors.
Material handling	Must implement loading and unloading procedures to ensure that dust emissions from material handling is minimised.
Water carts / sprays	<ul style="list-style-type: none"> water cart/s to be used within the premises; must ensure an adequate supply of water is available onsite at all times to assist in dust mitigation; must operate when discernible levels of dust are generated from ground surfaces on the premises and there is a risk of dust affecting off-site receptors; must apply proactively subject to weather forecasting over a 24-hour period; and must ensure that any water used on the premises for dust suppression does not impact on the health of native vegetation.
Dust suppressant	<ul style="list-style-type: none"> types of dust suppressants must be used include, but are not limited to; <ul style="list-style-type: none"> groundwater; polymer emulsion; chemical stabilisers; hydromulch; and clay by-products (only used in non-trafficked areas i.e. sand tailings stockpiles and within inactive areas of the mine pit) clay by-product damp when applied to land or integrated with water application if required; must apply proactively to overburden / topsoil stockpiles; must apply dust suppressant polymer to all unsealed roads likely to cause dust lift-off; must apply proactively to the Sand Tailings Storage Area; and must apply proactively subject to visual inspection and weather forecasting over a 24-hour period with the onsite weather station.
Stockpiles	<ul style="list-style-type: none"> use of water carts where required; use of chemical stabilisers, polymer emulsion, clay by-products or hydromulch to reduce dust emissions on all stockpiles when material is not being used for long periods; limiting stockpiles numbers and size on the premises; and orientation and shape of stockpiles constructed to minimise impact of prevailing winds.

Control	Requirements / management actions
Cessation of activities	<ul style="list-style-type: none"> must cease an activity causing visible levels of dust where dust management measures have not prevented dust lift-off and there is a risk of dust affecting off-site receptors; and monitor and undertake visual inspection and weather forecasting over a 24-hour period with the onsite weather station.
Vehicle movement and transportation	<ul style="list-style-type: none"> design and implement a Traffic Management Plan: <ul style="list-style-type: none"> reduction in trafficable areas; clearly defined parking bays with the parking area covered in gravel or sealed; temporary use of a polymer chemical product for unsealed roads; reduce speed limits on the premises and on access routes; frequent trafficable roads to be sealed where applicable.
Open areas / laydown pads	<ul style="list-style-type: none"> laydown pads to be covered in gravel where practicable; and rehabilitation of disturbed area where possible; and open areas for short-term operational purposes must be bunded off, and where practicable treated with a polymer chemical product with no further access allowed until the area is required again.

Noise

12. The licence holder must implement the requirements / management actions listed in Table 8 for each control specified in that table.

Table 8: Noise control requirements and management actions

Control	Requirements / management actions
Heavy earthmoving equipment (front-end loaders, dozer, excavator)	<ul style="list-style-type: none"> must use the quietest equipment reasonably available; motors must be located in enclosed housings with sound-absorbing materials; mufflers used to manage exhaust noise; and baffles / loures used to control fan noise; must use broadband reversing alarms (e.g., squawkers / quackers) on all earthmoving equipment instead of standard single frequency 'beepers'; and mobile equipment must be equipped with flashing lights (to replace alarms) after dusk when headlights are in use.
MUP	<ul style="list-style-type: none"> must be located in the Menari Mine Void below the natural ground level at all times whilst operating; and maintain the location of the MUP as a minimum 1 km distance from the nearest sensitive receptor.

Monitoring

General

- The licence holder must ensure that monthly monitoring is undertaken at least 15 days apart.
- The licence holder must ensure that quarterly monitoring is undertaken at least 45 days apart.
- The licence holder must ensure that all monitoring equipment used in the premises

to comply with the conditions of this licence is calibrated in accordance with the manufacturer's specifications.

Process monitoring

16. The licence holder must undertake monitoring of the processes listed in Table 9, for the corresponding parameter and in the units specified in that table.

Table 9: Process monitoring requirements

Process description	Parameters	Units	Frequency
Overburden removal	Volume of overburden removed	m ³	Monthly
Processing of ore	Volume of ore processed through the WCP		
	Volume of HMC produced		
Tailings deposition	Volume and location of sand tailings deposited		
	Volume and location of clay by-product deposited		
Discharge to in-pit settlement ponds	Volume of water discharged from cyclone stackers		
Process water returned to the CPA	Volume of processing water returned to the CPA		

Ambient air quality and noise monitoring

17. The licence holder must undertake ambient air quality monitoring at the locations and for the parameters listed in Table 10, in the corresponding units and at the frequency specified in that table.

Table 10: Monitoring of ambient air quality

Monitoring point reference and location ¹	Parameter	Unit	Averaging period	Trigger value	Frequency	Method
Dust Deposition Gauges						
DDG1 and DDG2 as shown in Schedule 1 Maps: Figure 4	Deposited dust	g/m ² /month	30 \pm 2 days	4g/m ² /month; 2g/m ² /month Above background levels	Monthly	In accordance with AS/NZS 3580.10.1
DDG3				N/A		
Kunak Air Pro Micro-senor						
M1, M2, M3 and M4 As shown in Schedule 1 Maps: Figure 4	Particulates as PM ₁₀	µg/m ³	24-hours	50 µg/m ³	Continuous (10-minute intervals)	In accordance with manufacturer specifications
M1 as shown in	Particulates as PM ₁₀	µg/m ³	Instantaneous (10-minute	200 µg/m ³ if wind direction	Continuous (10-minute	

Monitoring point reference and location ¹	Parameter	Unit	Averaging period	Trigger value	Frequency	Method
Schedule 1 Maps: Figure 4			interval)	toward Receptor 2	intervals)	
M2 as shown in Schedule 1 Maps: Figure 4				200 µg/m ³ if wind direction toward Receptor 1 or Receptor 3		
M3 as shown in Schedule 1 Maps: Figure 4				200 µg/m ³ if wind direction toward the north		
M4 as shown in Schedule 1 Maps: Figure 4				200 µg/m ³ if wind direction toward Receptor 3		

High Volume Air Samplers

HV1, HV2, and HV3 as shown in Schedule 1 Maps: Figure 4	Particulates as PM ₁₀	µg/m ³	24-hours	50 µg/m ³	In accordance with AS/NZS 3580.9.6 Sample collected every sixth day. Sampler time clock set from midnight to midnight.	In accordance with AS/NZS 3580.9.6 In accordance with AS/NZS 3580.9.15
	Calcium	µg/m ³		-		
	Magnesium	µg/m ³		-		
	Potassium	µg/m ³		-		
	Sodium	µg/m ³		-		
	Sulfate	µg/m ³		-		
	Aluminium	µg/m ³		10 µg/m ³		
	Arsenic	µg/m ³		0.03 µg/m ³		
	Barium	µg/m ³		-		
	Boron	µg/m ³		-		
	Cadmium	µg/m ³		0.03 µg/m ³		
	Chromium (III)	µg/m ³		0.5 µg/m ³		
	Chromium (IV)	µg/m ³		0.3 µg/m ³		
	Cobalt	µg/m ³		0.1 µg/m ³		
	Copper	µg/m ³		1 µg/m ³		
	Iron	µg/m ³		-		
	Lead	µg/m ³		-		
	Lithium	µg/m ³		-		
	Manganese	µg/m ³		0.15 µg/m ³		

Monitoring point reference and location ¹	Parameter	Unit	Averaging period	Trigger value	Frequency	Method
	Mercury			-		
	Molybdenum			12 µg/m ³		
	Nickel			0.14 µg/m ³		
	Selenium			-		
	Thallium			-		
	Thorium			-		
	Titanium			-		
	Uranium			-		
	Vanadium			1 µg/m ³		
	Zinc			-		
	Respirable crystalline silica ²			10 µg/m ³		X-Ray Diffraction by NATA accredited lab

Note 1: The monitoring location is to be sited as per AS/NZS 3580.1.1

Note 2: PVC filter papers are required for Respirable Crystalline Silica analysis.

18. The licence holder must undertake noise monitoring at the locations and for the parameter listed in Table 11, in the corresponding units and at the frequency specified in that table.

Table 11: Noise monitoring schedule

Monitoring point reference	Parameter	Units	Averaging period	Frequency
Eastern Noise Monitor and Western Noise Monitor Schedule 1 Maps: Figure 4	LAS 90, 30min	dB	Continuous ¹ logging with 30-minute averages	At least 3 days per month ²
	LAS 10, 30min			
	L _{Aeq} (20Hz-500Hz), 30 min			

Note 1: Availability ≥90% of the measurement intervals on a monthly basis.

Note 2: Noise monitoring must be conducted when mining activities are occurring in areas of the premises that are closest to offsite residential receptors or when a noise complaint from a member of the public is received. In response to a noise complaint, the continuous logging must continue until the noise issue is resolved (i.e. noise is demonstrated to be below assigned levels).

19. The licence holder must record the results of all monitoring activities required by conditions 16, 17 and 18.

20. The licence holder must, in the event of a parameter in condition 17 exceeding the corresponding trigger value(s) specified in that condition, undertake the management action(s) that correspond with the relevant parameter(s) and corresponding monitoring location(s) within the corresponding timeframe(s) as specified in Table 12.

Table 12: Management actions required in the event of trigger value exceedance

Monitoring point location	Parameter	Management action	Timeframe
M1, M2, M3 and M4	Particulates as PM ₁₀	<ul style="list-style-type: none"> Investigate the cause(s) of any exceedances. Take relevant dust management action(s) in accordance with Australian Garnet Lucky Bay Operations Dust Management Plan¹ to minimise the likelihood of future exceedances of a similar nature. 	Within 48hrs of an exceedance being identified in accordance with condition 17
		<ul style="list-style-type: none"> Provide a written report to the CEO on the outcomes of the investigation and detail correct corrective actions. 	Within 14 days of an exceedance being identified in accordance with condition 17
HV1, HV2, and HV3	Particulates as PM ₁₀	<ul style="list-style-type: none"> Investigate the cause(s) of any exceedances. Take relevant dust management action(s) in accordance with Australian Garnet Lucky Bay Operations Dust Management Plan¹ to minimise the likelihood of future exceedances of a similar nature. 	Within 48hrs of an exceedance being identified in accordance with condition 17
		<ul style="list-style-type: none"> Provide a written report to the CEO on the outcomes of the investigation and detail correct corrective actions. 	Within 14 days of an exceedance being identified in accordance with condition 17

Note 1: Licence Holder must refer to the latest document version

21. Where the monitored ambient noise levels required by Table 11 indicates an exceedance of an assigned level specified in Table 1, Regulation 8 of the *Environmental Protection (Noise) Regulations 1997*, the licence holder must undertake an investigation of the exceedance, including but not limited to:

- the root cause analysis of the exceedance; and
- any common or contributory factors for the exceedance.

Ambient groundwater monitoring

22. The licence holder must ensure that:

- all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
- all laboratory samples are to be submitted to and tested by a laboratory with current NATA accreditation for the parameter being measured, unless indicated otherwise in the relevant table.

23. The licence holder must undertake monitoring of ambient groundwater quality at the locations and for the parameters listed in Table 13, in the corresponding units over the averaging period and at the frequency specified in that table.

Table 13: Groundwater monitoring schedule

Monitoring sites	Parameter	Unit	Trigger ³	Limit	Averaging period	Frequency
Production bore PB1, PB2, PB4, and PB5	Standing water level (SWL) ^{1,2}	mBGL	2.0	1.0	Spot sample	Monthly
	pH ¹	pH	-	-		
	Electrical conductivity ¹	µS/cm	-	-		
	Redox potential ¹	mV	-	-		
	Major ions					
	Calcium bicarbonate	mg/L	-	-	Spot sample	Quarterly
	Calcium		-	-		
	Chloride		-	-		
	Magnesium		-	-		
	Potassium		-	-		
	Sodium		-	-		
	Sulfate		-	-		
	Total Dissolved Solids		-	-		
Monitoring bore MB2, MB3, MB4, MB5, MB8, MB9, MB10, MB12, and MB13 Schedule 1 Maps: Figure 5	Metals and metalloids					
	Aluminium	mg/L	-	-	Spot sample	Quarterly
	Arsenic		-	-		
	Chromium (as CRVI)		-	-		
	Chromium (as total)		-	-		
	Cobalt		-	-		
	Copper		-	-		
	Iron		-	-		
	Mercury		-	-		
	Nickel		-	-		
	Selenium		-	-		
	Thallium		-	-		
	Uranium		-	-		
	Zinc		-	-		

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

Note 2: SWL to be determined prior to the collection of other samples.

Note 3: trigger value only applies to bores with descriptor 'MB'.

24. Upon exceeding the bore groundwater trigger value set in accordance with condition 23 (above), where the exceedance is attributed to the licence holder's activities, the licence holder must commence groundwater recovery within two months to limit any potential mounding effects to within one metre of the natural ground level.

Specified actions

Noise assessment

25. The licence holder must retain the services of a person qualified and experienced in the area of environmental noise assessment and who by their qualifications and experience is eligible to hold membership of the Australian Acoustical Society or the Australian Association of Acoustical Consultants to:

- (a) undertake assessment of noise emissions of mining operations during nighttime occurring from the premises;
- (b) review of the predicted noise levels with daytime and nighttime mining operations, taking into consideration potential penalty for tonality, variation in operation and weather conditions;
- (c) compile and submit to the licence holder within 90 calendar days, a report in accordance with condition 26.

26. A report pursuant to condition 25(c) must include:

- (a) details and the results of the investigation undertaken pursuant to condition 25(a); and
- (b) details and the results of the review on the predicted noise levels with daytime and nighttime mining operations occurring on the premises, against the relevant assigned levels in the *Environmental Protection (Noise) Regulations 1997* undertaken pursuant to condition 23(b).

27. The licence holder must submit to the CEO the report prepared pursuant to condition 25(c) within 14 calendar days of receipt.

28. Where an assessment pursuant to condition 25(a) indicates that the noise emissions do not comply with the relevant assigned levels in the Environmental Protection (Noise) Regulations 1997, the licence holder must:

- (a) within 30 calendar days of receiving the report pursuant to condition 25(c) prepare a plan which must include a set timeframe for action, detailing all measure to ensure there is no further contravention of the *Environmental Protection (Noise) Regulations 1997*; and
- (b) immediately action and provide to the CEO a copy of the plan prepared pursuant to condition 28(a).

Interim dust assessment and management plan

29. The licence holder must provide an interim Ambient Air Dust Monitoring Assessment Report. The report must be submitted to the CEO by 19 December 2025. The report must:

- (a) investigate for crystalline silica in ambient air to monitor potential impacts to offsite human receptors and develop mitigation measures;
- (b) undertake ambient air / dust monitoring analysis of data collected and provide an interpretation and assessment of the data; and

(c) undertake dust deposition analysis and provide an interpretation and assessment of the data.

30. The licence holder must prepare an interim Dust Management Plan and submit the plan to the CEO by 19 December 2025. The plan must:

- include specifications of the particle and meteorological monitoring instrument(s) used as well as calibration, maintenance, and operational requirements in the Dust Management Plan (DMP);
- revise the DMP to include regular data review including a focus on worst-case summer conditions;
- revise the DMP to include an assessment of data collection efficiency, identification of trends and QA/QC checks; and
- implement the interim revised dust management plan following submission to the CEO.

Revised dust assessment and management plan

31. The licence holder must retain the services of a person qualified and experienced in the area of environmental ambient air monitoring and assessment to prepare a revised Ambient Air Dust Monitoring Assessment Report and a revised Dust Management Plan. The Report and the Plan must be submitted to the CEO by 31 March 2026 and must consider a minimum of 12 months of monitoring data collected from 17 January 2025 and must cover the aspects specified in conditions 29 and 30. In addition the Plan must:

- revise the Trigger Action Response Plan framework in the Dust Management Plan utilising data presented in the revised ambient air / dust monitoring assessment report; and
- implement the revised dust management plan following submission to the CEO.

Installation of a new dust monitoring location

32. The licence holder must by 31 January 2026, install and operate a dust monitoring station (labelled 'M4') within the area shown in Figure 4 of Schedule 1. The additional dust monitoring station must consist of a PM₁₀ sampler to undertake ambient air quality monitoring required by Condition 17.

Records and reporting

Records

33. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:

- the name and contact details of the complainant, (if provided);
- the time and date of the complaint;
- the complete details of the complaint and any other concerns or other issues raised; and
- the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

34. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

- the calculation of fees payable in respect of this licence;
- the works conducted in accordance with condition 2 of this licence;
- any maintenance of infrastructure that is performed in the course of complying with condition 6 of this licence;
- monitoring programmes undertaken in accordance with conditions 16, 17, 18, and 23 of this licence; and
- complaints received under condition 33 of this licence.

35. The books specified under condition 34 must:

- be legible;
- if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
- be retained by the licence holder for the duration of the licence; and
- be available to be produced to an inspector or the CEO as required.

Reporting

36. The licence holder must:

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

37. The licence holder must:

- prepare an Environmental Report that provides information in accordance with Table 14 for the preceding annual period, and
- submit that Environmental Report to the CEO by 28 February each year.

Table 14 Environmental reporting requirements

Condition	Requirement
2, Table 2	<p>Summary of In-pit Settlement Ponds including:</p> <ul style="list-style-type: none"> as constructed plans to show location, layout and profile for all new pond infrastructure constructed during the annual period; separation distance between the base and highest seasonal groundwater level for each operational ponds; and details including location on decommissioned pond/s during the annual period.
16, Table 9	<p>Summary of the monthly and total volumes during the annual period for the following:</p> <ul style="list-style-type: none"> volume of overburden removed; volume of ore processed through the WCP; volume of HMC produced; and volumes and location of sand tailings and clay by-product disposed on the premises.
17, 19, and 20	<p>Dust monitoring results to be provided to the CEO, must include, but not limited to:</p> <ul style="list-style-type: none"> the dates at which monitoring was undertaken; all raw monitoring data in a tabulated form highlighting trigger value exceedances; cumulative time-series graphs in Microsoft excel or similar format for each monitoring site; and an assessment and interpretation of the dust monitoring results, any trigger value exceedances and the management actions undertaken.
18, 19, and 21	<p>Noise monitoring results to be provided to the CEO, must include, but not limited to:</p> <ul style="list-style-type: none"> the dates at which monitoring was undertaken; all raw monitoring data in a tabulated form highlighting exceedances; cumulative time-series graphs in Microsoft excel or similar format for each monitoring site; and an assessment and interpretation of the noise monitoring results, any exceedances and the management actions undertaken.
15, 22, 23, and 24	<p>Ambient groundwater monitoring results to be provided to the CEO, must include, but not be limited to:</p> <ul style="list-style-type: none"> the dates at which monitoring was undertaken; all raw monitoring data, for each parameter in a tabulated form; cumulative time-series graphs in Microsoft excel or similar format for each production / monitoring bore for SWL and those parameters resulting in exceedances; provide details and actions undertaken on groundwater recovery where a production / monitoring bore SWL exceeded the trigger value; and an assessment and comparison against previous monitoring data, ANZG 2018 guidelines values and highlighting any exceedances.
33	Summary of any complaints during the annual period and any action/s taken.
-	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/s taken.

Definitions

In this licence, the terms in Table 15 have the meanings defined.

Table 15: Definitions

Term	Definition
ACN	Australian Company Number
AHD	Australian Height Datum
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	means a 12-month period commencing from 16 December until 15 December in the following year.
AS/NZS 3580.1.1	means the recent version and the relevant parts of the Australian Standard AS/NZS 3580.1.1 <i>Methods for sampling and analysis of ambient air. Part 1.1: Guide to siting air monitoring equipment</i> .
AS/NZS 3580.10.1	means the recent version and the relevant parts of the Australian Standard AS 3580.10.1 <i>Methods for sampling and analysis of ambient air – Determination of particulate matter – deposited matter – gravimetric method</i> .
AS/NZS 3580.9.6	means the recent version and the relevant parts of the Australian Standard AS/NZS 3580.9.6 <i>Methods for sampling and analysis of ambient air. Method 9.6: Determination of suspended particulate matter – PM₁₀ high volume sampler with size selective inlet – Gravimetric method</i> .
AS/NZS 3580.9.15	means the recent version and the relevant parts of the Australian Standard AS/NZS 3580.9.15 <i>Methods for sampling and analysis of ambient air – Part 9.15: Determination of suspended particulate matter – Particulate metals high or low volume sampler gravimetric collection – Inductively coupled plasma (ICP) spectrometric method</i> .
AS/NZS 5667.1	means the recent version and the relevant parts of the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples</i>
AS/NZS 5667.11	means the recent version and relevant parts of the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i>
averaging period	means the 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.

Term	Definition
CEO	<p>means Chief Executive Officer of the Department.</p> <p>“submit to / notify the CEO” (or similar), means either:</p> <p style="padding-left: 40px;">Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919</p> <p>or:</p> <p style="padding-left: 40px;">info@dwer.wa.gov.au</p>
clay by-product	means a tailings waste generated from processing of mined materials and is also known as clay slimes.
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.
DSP	Dry Separation Plant
Australian Garnet Lucky Bay Operations Dust Management Plan	means the latest version of the document titled <i>Australian Garnet Lucky Bay Operations Dust Management Plan</i> , Document Number: AUG-PLN-EV-003-02-Dust Management Plan. Unpublished report prepared by A Resource Development Group Company (RDG) for Australian Garnet Pty Ltd
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)
g/m ² /month	grams per square metre per month
HDPE	High density polyethylene
high wind	means high wind conditions rating 7 or greater on the Beaufort Windforce Scale (i.e., wind speeds 50 km/h or greater).
HMC	Heavy Mineral Concentrate
kL	kilolitre
LAS _{90,30min} and LAS _{10,30min}	means the A-weighted equivalent noise level which is exceeded for more than 90% and 10%, respectively, of the time over 30 minutes with the sound level meter set to ‘Slow’ time weighting.
L _{Aeq(20Hz-500Hz),30min}	means the A-weighted equivalent level between 20 Hz and 500 Hz (one-third octave bands inclusive) averaged over 30 minutes.
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.

Term	Definition
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.
m	metres
m^3	cubic metres
mBGL	metres below ground level
mg/L	milligrams per litre
mm	millimetres
monthly period	means a one-month period commencing from first day of a month until the last day of the same month.
MUP	Mining Unit Plant
mV	millivolt
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.
QA/QC	quality assurance and quality control
RL	means Reduced Level which refers to the vertical height of a point relative to a common assumed datum.
SBP	Screening and Bagging Plant
spot sample	means a discrete sample representative of the time and place at which the sample is taken.
SWL	Standing water level
tph	tonnes per hour
$\mu\text{g}/\text{m}^3$	microgram per cubic metre
$\mu\text{S}/\text{cm}$	microsiemens per centimetre
waste	has the same meaning given to that term under the EP Act.
WCP	Wet Concentrator Plant

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

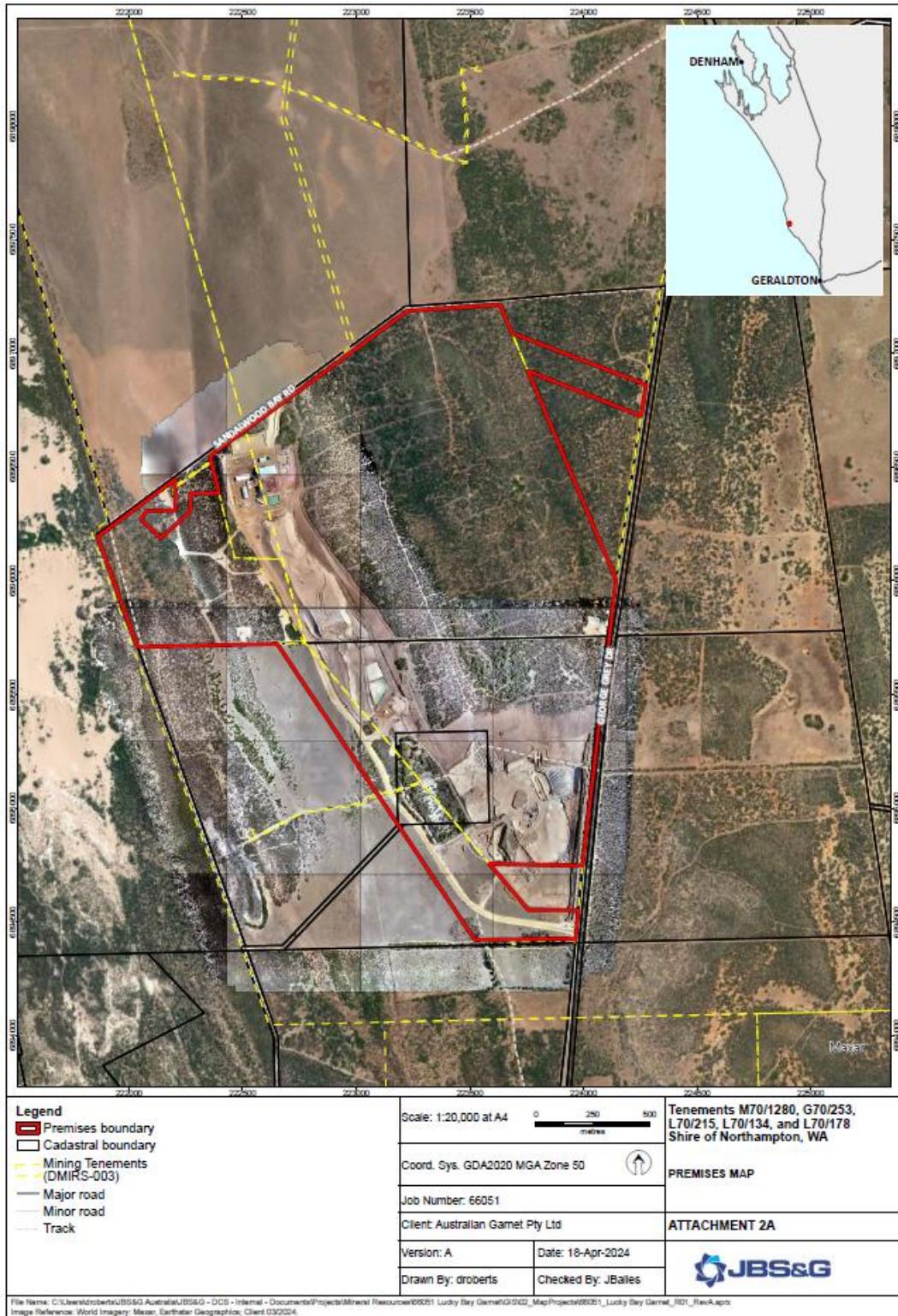


Figure 1: Map of the boundary of the prescribed premises

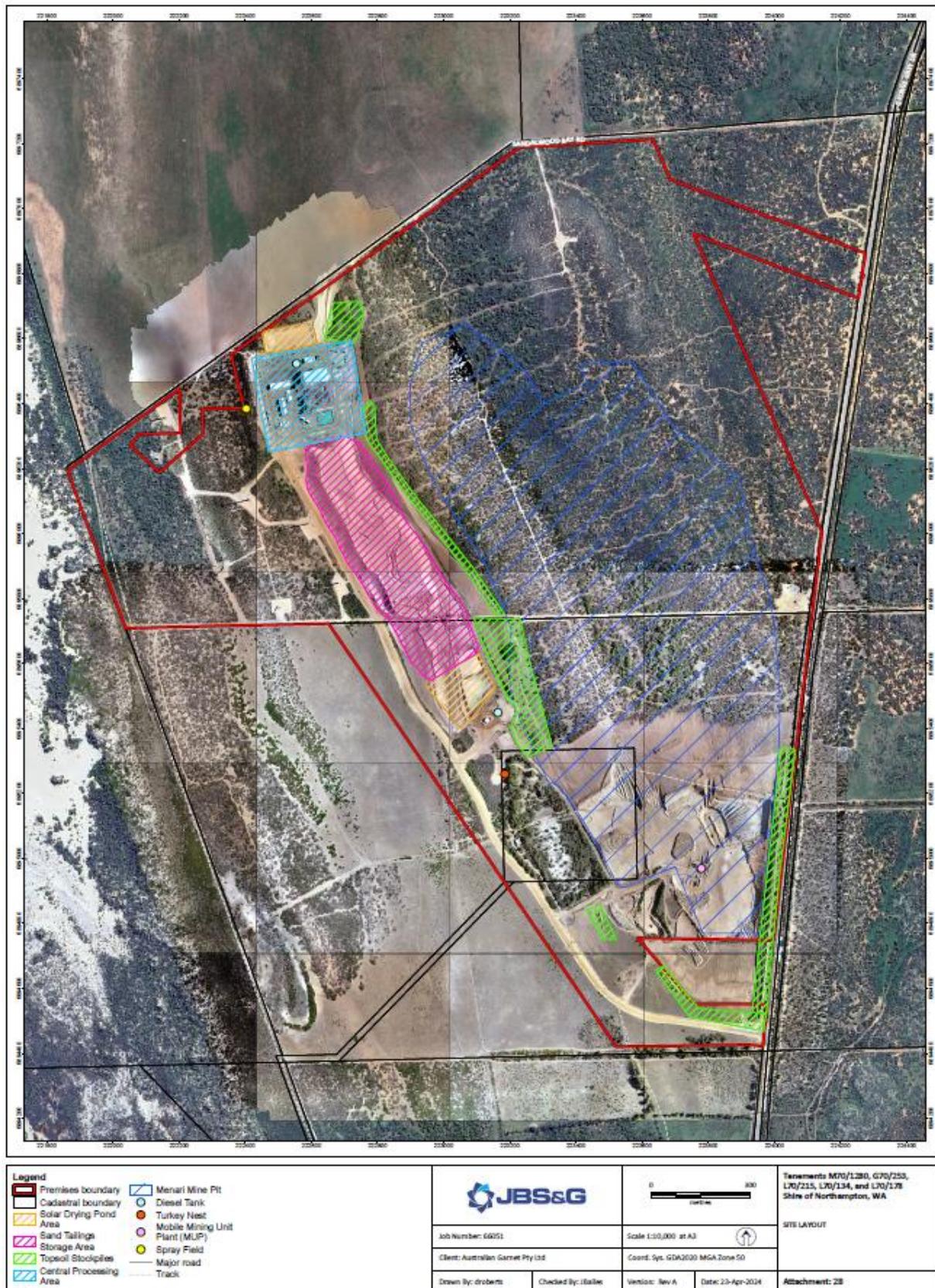


Figure 2: Map of the site layout

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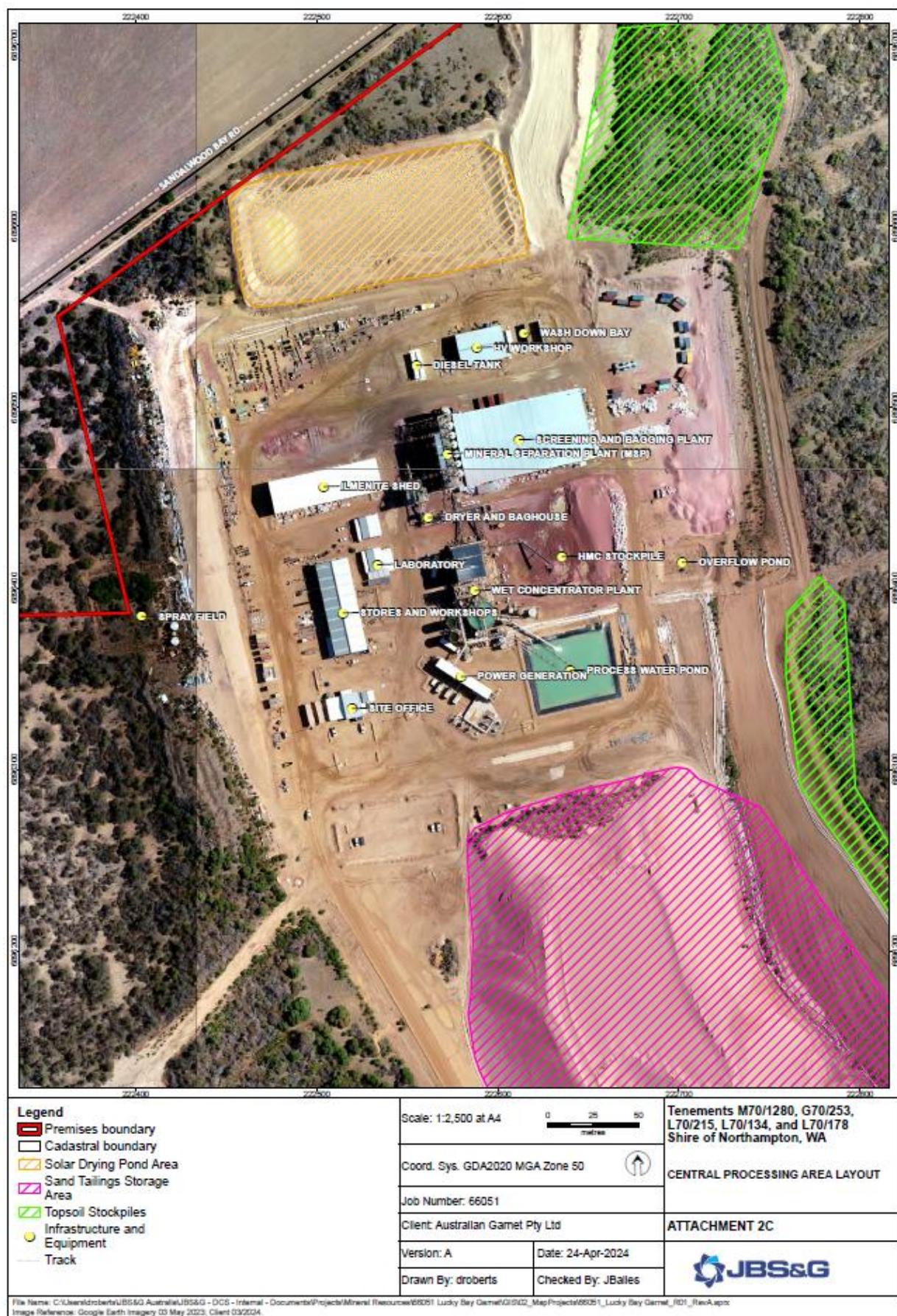


Figure 3: Map of the Central Processing Area layout

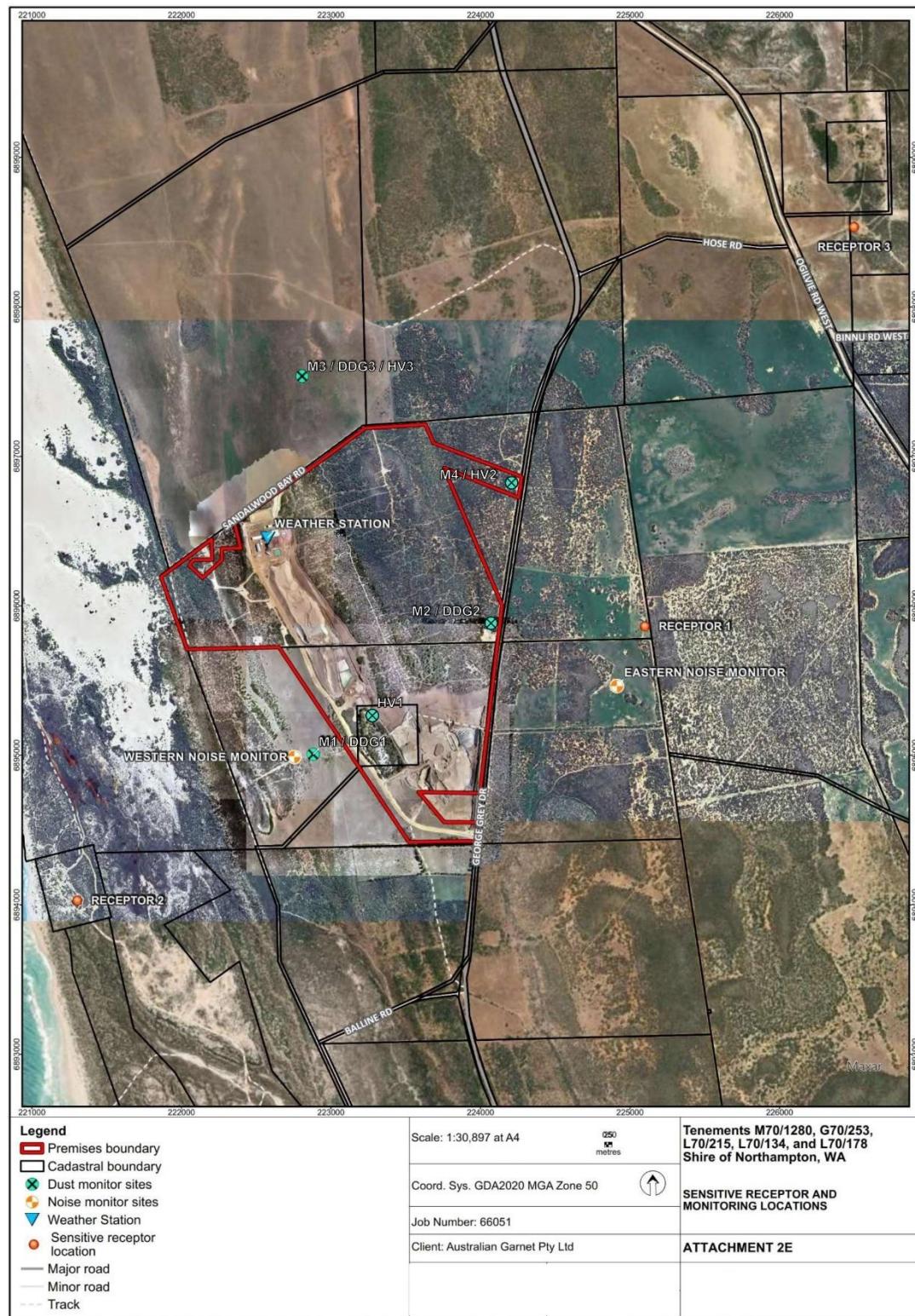


Figure 4: Map of dust and noise monitoring site locations

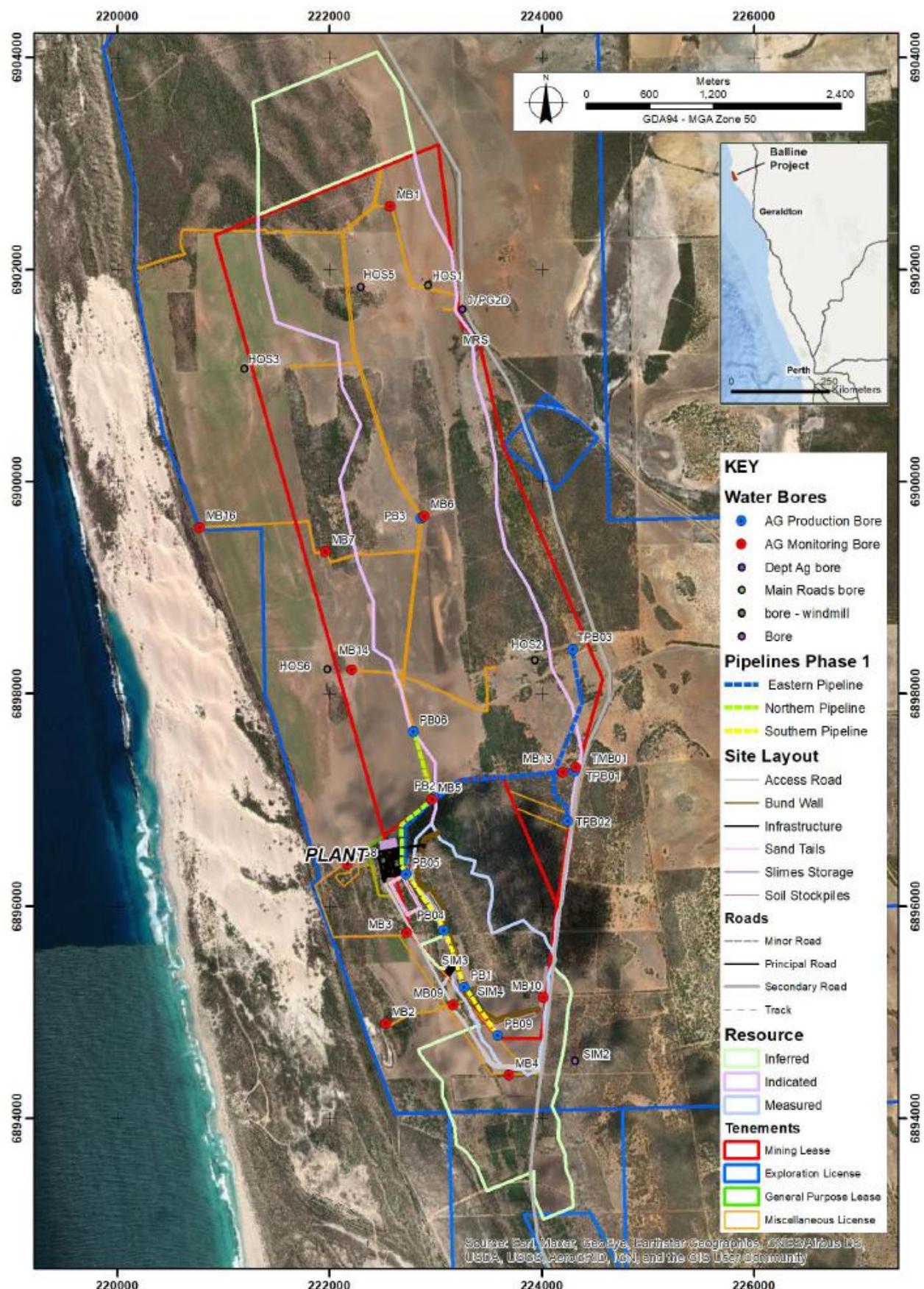


Figure 5: Map of the production bore and monitoring bore location

Schedule 2

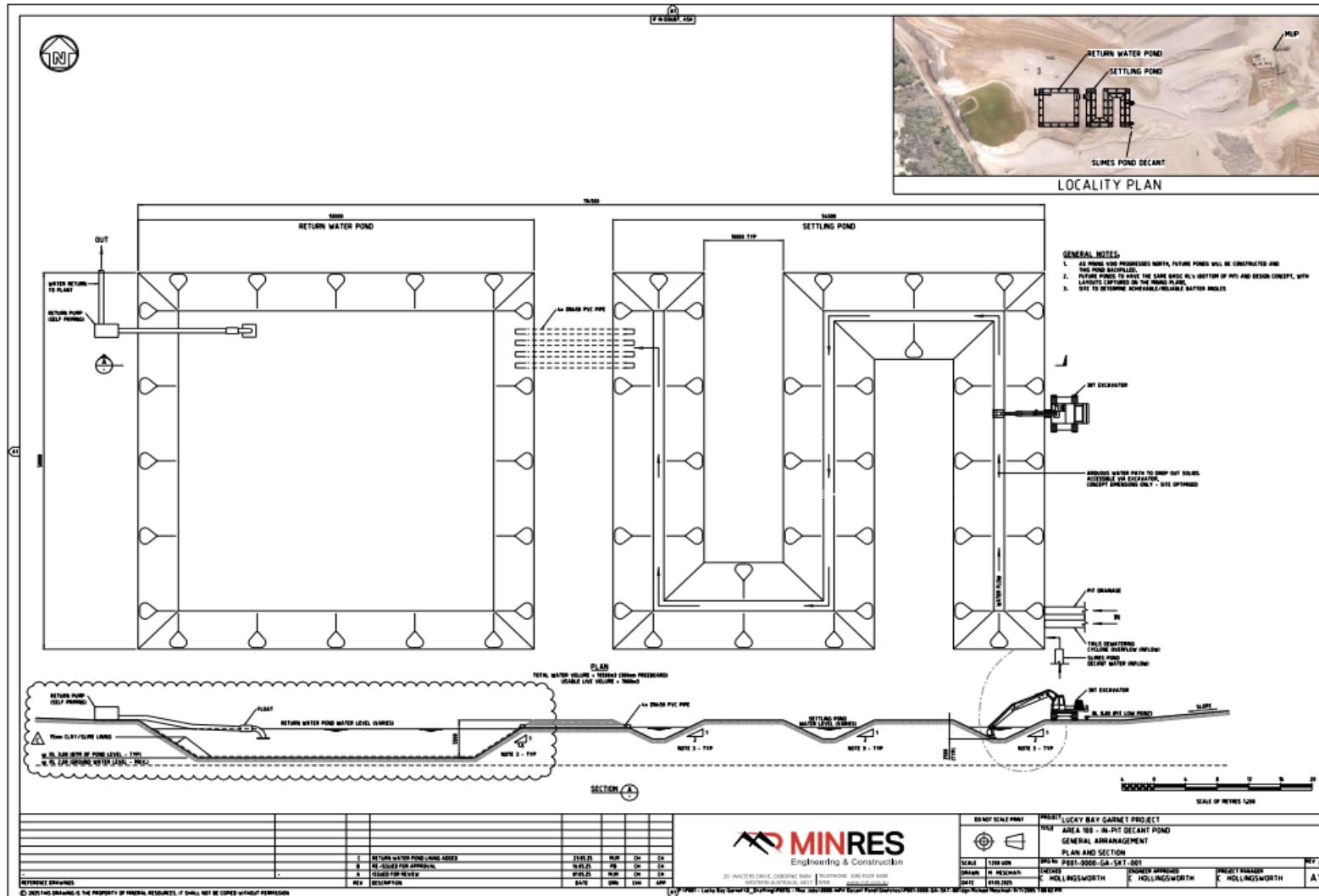


Figure 6: In-pit settlement pond design and construction requirements