Licence number L9324/2022/1

Licence holder Greenmount Resources Pty Ltd

ACN 607 613 650

Registered business address Level 3, 40 Kings Park Road

WEST PERTH WA 6005

DWER file number DER2022/000042

Duration 29/08/2022 to 28/08/2042

Date of issue 29/08/2022

24/12/2024 **Date of Amendment**

Premises details Karlawinda Gold Project

> Mining Lease – M52/1070 CAPRICORN WA 6642

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 5: Processing or beneficiation of metallic or non-metallic ore	4,400,000 tonnes per annual period
Category 6: Mine dewatering	186,338 tonnes per annual period
Category 64: Class II putrescible landfill site	1,500 tonnes per annual period
Category 85: Sewage facility	78 m³ per day

This licence is granted to the licence holder, subject to the attached conditions, on, 24 December 2024 by:

MANAGER, RESOURCES INDUSTRIES **INDUSTRY REGULATION (STATE-WIDE DELIVERY)**

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

Licence history

Date	Reference number	Summary of changes		
29/08/2022	L9324/2022/1	Licence granted.		
23/03/2023	L9324/2022/1	The following amendments include: Increase of tailings production from 3.75 million tonnes per annum (Mtpa) to 4.4 Mtpa on the performance of the Karlawinda Tailings Storage Facility; and minor administrative changes.		
24/12/2024	L9324/2022/1	Amendment for the construction and operation of TSF Stage 6 and Stage 7 embankment lifts. Addition of Category 6: Mine dewatering		

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 requirements

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

Table 1: Construction / installation requirements

	Infrastructure / equipment	Design and construction requirement	Infrastructure location
1	Stormwater management	Armouring landforms with competent rock.	Not shown
2	TSF	Downstream construction for Stages 3 to 7	As shown in
		 Stage 3 - Embankment level of 605.5 mRL and crest width of 24 m (minimum) 	Schedule 1: Figure 3, 4, 5 and 6
		Stage 4 - Embankment level of 610.5 mRL	
		Stage 5 – Embankment level of 615.5 mRL	
		Stage 6 - Embankment level of 620.5 mRL	
		Stage 7 - Embankment level of 623.0 mRL	
		Perimeter embankments:	
		 Design slopes of 1(V):2(H) upstream and 1(V):3(H) downstream. 	
		 Compacted upstream embankment will have a crest width of 6 m and the waste dump will have a crest width to suit the dump trucks utilised in mining (assumed to be a minimum of 20 m). 	
		The upstream embankment crest will have a 2% cross-fall towards the upstream side and 0.5 m (minimum) high waste windrow at the downstream crest.	

Compliance reporting

- 2. Subject to condition 1, within 30 days of the completion of the works specified in column 1 of Table 1, the licence holder must provide to the CEO an Environmental Compliance Report certified by a suitably qualified professional engineer that:
 - (a) lists and describes the completed works and any associated items of infrastructure and equipment listed in Table 1;

- (b) certifies whether or not each item of infrastructure or component of infrastructure specified in Table 1 has been constructed with no material defects and to the requirements specified in Table 1;
- (c) contains 'as constructed' plans for each item of infrastructure or component of infrastructure specified in Table 1; and
- (d) is signed by a person authorised by the licence holder and contains the printed name and position of that person within the company.
- 3. Subject to condition 2, where an item of infrastructure or component of infrastructure has been certified as not being constructed, or does not comply with the corresponding requirements, or contains material defects, the licence holder must:
 - (a) correct the non-compliant or defective works, prior to re-certifying in accordance with condition 2(b); or
 - (b) provide to the CEO a description of, and explanation for, any departures from the requirements specified in Table 1 that do not require rectification and do not constitute a material defect along with the report required by condition 2.
- **4.** Following the installation and construction of the items of infrastructure specified in condition 1, Table 1 and compliance requirements specified in conditions 2 and 3, the items of infrastructure specified in condition 1, Table 1 can be operated in accordance with the requirements specified in condition 5, Table 2.

Operation requirements

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
1	Ore processing activities	 Operate and maintain dust controls to manage dust emissions for processing and stockpiles; 	Schedule 1: Figure 2
		 Sprays used in the tipping area of the crusher during tipping / crushing activities; 	
		 Maintain stormwater diversion and flood protection around operational areas; 	
		 Daily visual inspections logs with recorded monthly inspections of the following: 	
		 Integrity of all reagents, process solution and process water lines, tanks and bunds; 	
		 Process solution, reagent, process water, product spills to ground and clean-up; 	
		 Reagent storage, pond freeboard levels, and bund integrity; 	
		 Ore, water, and reagent input volumes; and 	
		 Discharge tailings volume and density. 	
		 Provision of spill kits around hydrocarbon and chemical storage areas and in other appropriate locations; and 	
		 Process no more than 4,400,000 tpa of ore. 	
2	Process Water Pond (PWP)	 Implement Cyanide Emergency Plan (as required); 	Schedule 1: Figure 2
		 Maintain a minimum operating freeboard of 500 mm; 	
		 Ensure visible freeboard markers are in place; 	
		 Record the volume of water reused for the Processing Plant; 	
		• Ensure capacity does not exceed 16,050 m³; and	
		Daily visual inspections.	
3	Tailings Storage Facility (TSF)	Operate and maintain as per TSF Operations Manual;	Schedule 1: Figure 2
	general	 Minimum of 500 mm total freeboard comprising minimum operational freeboard (vertical height between the tailings beach and embankment crest) of 300 mm and a minimum beach freeboard 	

	Site infrastructure	Operational requirement	Infrastructure location
4	TSF deposition	of 200 mm plus allowance of the 1% AEP 72-hour event of 222 mm; Tailings discharge points, return water pump, beach, decant pond level and tailings level visually inspected twice every 24 hours to validate operation is in accordance with design and operational expectations and check for any evidence of embankment instability; and Sufficient capacity to contain the probable maximum flood (PMF) of 457,600 m³.	Schedule 1:
		 in thin discrete layers, not exceeding 300 mm thickness to allow optimum density and strength gain by subjecting each layer to a drying cycle; Deposition will take place via multiple spigots; Spigotting carried out such that the supernatant pond is maintained within and around the rock ring decant; and Daily visual inspections. 	Figure 2
5	Tailings delivery and decant return water pipelines	 Maintain pipeline flow sensors and telemetry; Groundwater monitoring bores must be maintained; Provision of spill kits around hydrocarbon and chemical storage areas and in other appropriate locations; and Tailings delivery and water return pipes and containment corridor to be visually inspected twice every 24 hours for any visible leakage or damage. 	Schedule 1: Figure 2
6	Decant system and pond	 Decant pond must be maintained away from the perimeter embankment at all times; Maintain and operate the submersible decant pump as per manufacturer's specifications; Decant pond water must be reclaimed and reused in the processing plant; and Pool area equal to approximately 5 ha (5% of tailings area). 	Schedule 1: Figure 2
7	Seepage recovery system	 Cased bores fitted with low flow 1-2 L/s pumps must be maintained when seepage is identified; Recovered groundwater pumped back into the TSF and onto the tailings beach where it will report to the decant system; Standing water level monitoring undertaken on a monthly basis as per the requirement in Table 5; 	Not shown

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		and	
		 Ambient groundwater monitoring undertaken on a quarterly basis as per the parameters in Table 5. 	
8	Inert and Putrescible landfill	a potato atta titalittani adot controlo to manago	
		 Tipping area not greater than 30 m in width and 3 m in depth; 	
		 Landfill covered on a fortnightly basis with inert material; 	
		 Weekly visual inspections; 	
		 Windblown waste collected and put back in the landfill; 	
		 Waste type and volumes recorded cumulatively (continuous and monthly); and 	
		 Produce no more than 1,500 tpa of inert and putrescible waste material. 	
9	Tyre landfill	 Used tyres disposed of within the north and south waste rock dump footprint; 	Schedule 1: Figure 2
		 Tyres to be disposed in batches not exceeding 1,000 used tyres; 	
		 Tyres covered at regular intervals such that no more than 1,000 used tyres are left exposed at any one time; and 	
		 Each batch separated by at least 100 mm of soil or another dense inert and incombustible material, with a final cover not less than 500 mm. 	
10	Wastewater	 Throughput of no more than 78 m³/day; 	Schedule 1:
	treatment plant (WWTP) Primary and Secondary	 Wastewater treated before being discharged to a dedicated evaporation / irrigation field; 	Figure 2 and 7
	Stabilisation Ponds	 Maintain pipeline flow meters and mechanical pump used to discharge treated effluent; 	
		 Daily inspections of fencing and pipelines integrity and damage; 	
		 Maintain pipeline bunding and visual inspection of any leaks; 	
		 Effluent discharge quality monitoring must be undertaken on a quarterly basis (Table 5); 	
		 WWTP effluent treated to the following effluent quality criteria prior to discharge: 	
		 Total Nitrogen <30 mg/L; and 	
		 Total Phosphorus 7.5 mg/L 	
		 WWTP emissions compared to the following 	

	Site infrastructure and equipment	Operational requirement	Infrastructure location		
		emissions guidelines:			
		pH 6.5 - 8.5 pH units;Biochemical Oxygen Demand <30 mg/L;			
		 Total Suspended Solids <40 mg/L; and 			
		 E.coli 10⁵ - 10⁶ cfu/100 mL. 			
11	Irrigation Field	 • 3 ha in size; • Monthly inspections of fencing integrity and damage; and • Daily inspections of any pooling of treated effluent when irrigation system is operating. 			
12	Dewatering pipeline	 Undertake weekly visual inspections of the dewatering pipelines to check for damage, ruptures and/or leaks; Flow meter to be maintained on pipeline discharge point to measure cumulative volumes (tonnes or m³) of mine dewater discharged; and 	Not shown		
		 Mine dewatering water used for dust suppression not to exceed 186,338 m³ per annum. 			
13	Mining Turkey Nest	 Maintain the HDPE liner on the turkey nest; and Maintain a 300 mm freeboard. 	Not shown		

Emissions

6. The licence holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 3: Authorised discharge points

Emission	Discharge point	Discharge point location
Tailings	TSF	As shown in Schedule 1: Figure 2
Treated wastewater from the Primary and Secondary Stabilisation Ponds	Irrigation Field	As shown in Schedule 1: Figure 7
Mine dewatering water used for dust suppression	Located within the Mine Active Area	As shown in Schedule 1: Figure 8

Monitoring

7. During operations, the licence holder must ensure that the emissions from the discharge point listed in Table 4 do not exceed the corresponding limits when monitored in accordance with condition 8.

Table 4: Emissions and discharges limits during operation

	Monitoring point	Parameter	Limit
1	Supernatant Pond	pН	8 to 10 pH units
	·	WAD-CN	<50 mg/L
		Hexavalent Chromium	<0.5 mg/L
		Copper	
		Total Chromium	<1 mg/L
		Arsenic	

8. The licence holder must monitor emissions in accordance with the requirements specified in Table 5 and record the results of all such monitoring.

Table 5: Emissions and discharges monitoring

	Monitoring point	Parameter	Frequency	Averaging period	Unit	Method sampling & analysis
1	Supernatant Pond	рН	Monthly	Spot sample	pH units	AS/NZS 5667.1
		WAD-CN			mg/L	AS/NZS 5667.10
		Copper				0001110
		Total Chromium				
		Arsenic				
2	WWTP Irrigation Tank	pH ¹	Quarterly	Cumulative quarterly	pH units	
	тапк	Biochemical Oxygen Demand		Spot sample	mg/L	
		Total Dissolved Solids				
		Total Suspended Solids				
		Total Nitrogen				
		Total Phosphorus				
		E. coli				
		Free Chlorine ¹				

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

Ambient groundwater monitoring

- 9. The licence holder must ensure that monitoring is undertaken in each monthly period such that there are at least 15 days in between the days on which samples are taken in successive months.
- **10.** The licence holder must monitor the groundwater:
 - (a) from each monitoring location;
 - (b) for the corresponding parameter;
 - (c) in the corresponding unit;
 - (d) for the corresponding averaging period;
 - (e) at the corresponding frequency; and
 - (f) using the corresponding method,

as set out in Table 6.

Table 6: Ambient groundwater monitoring during operations

Location	Parameter	Unit	Averaging period	Frequency	Method
KPB01A	Standing Water Level	mbgl	Spot	Monthly	-
KPB02A	рН	pH units	sample	Quarterly	AS/NZS
KPB03A	Electrical Conductivity	μS/cm			5667.1
	Total Dissolved Solids	mg/L			AS/NZS
KPB04A	Sodium				5667.11
KPB05A	Potassium				
KPB09	Magnesium				
KPB10	Calcium				
KPB11	Chloride				
	Sulfate				
KPB12	Bicarbonate				
KPB13	Aluminium				
KPB14	Antimony				
KPB15	Arsenic				
KPB16	Barium				
	Bismuth				
KMB17	Cadmium				
Marita de la contra de la	Chromium				
Monitoring bore for the PWP	Cobalt				
KMB18	Copper				
	Iron				
as shown in the	Lead				
Schedule 1: Figure	Manganese				
9	Mercury				
	Molybdenum				
	Nickel				
	Selenium				

Location	Parameter	Unit	Averaging period	Frequency	Method
	Silicon				
	Strontium				
	Thallium				
	Thorium				
	Tin				
	Titanium				
	Uranium				
	Vanadium				
	Zinc				
	WAD-CN				
	Total Cyanide				

- 11. The licence holder must ensure that all non-continuous sampling and analysis undertaken pursuant to conditions 8, 9, and 10 is undertaken by a holder of a current accreditation from the National Association of Testing Authorities (NATA) for the methods of sampling and analysis relevant to the corresponding relevant parameter.
- **12.** The licence holder must undertake monitoring of the water balance for the TSF each monthly period, and (as a minimum) record the following information:
 - (a) site rainfall;
 - (b) evaporation rate;
 - (c) decant water recovery volumes;
 - (d) volume of tailings deposited;
 - (e) volume of water reused for the Processing Plant; and
 - (f) estimate of seepage losses.

Records and reporting

- **13.** 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 5 of this licence;
 - (d) monitoring programmes undertaken in accordance with conditions 7, 8, 9, 10, 11, and 12 of this licence; and
 - (e) complaints received under condition 15 of this licence.
- **14.** The books specified under condition 13 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.

Complaints management

- 15. 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.

Annual Audit Compliance Report

- **16.** 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 an Annual Audit Compliance Report for that period in the approved form by 30 September each year.

Environmental Report

- **17.** The licence holder must:
 - (a) prepare an Environmental Report that provides information in accordance with Table 7 for the preceding annual period; and
 - (b) submit an Environmental Report to the CEO by 30 September each year.

Table 7: Environmental reporting requirements

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.
-	Any relevant information relating to the calibration of monitoring equipment, or reports comprising details of any modified calibration methods.
Condition 5 (Table 2)	Inspections of infrastructure of any failure or malfunction.
Condition 7 (Table 4)	Emissions monitoring results during operations. Tabulated and compared to design effluent criteria in Table 2 (row 10) under Condition 5.
and Condition 8 (Table 5)	Tabulated monitoring data results showing concentrations of all parameters highlighting exceedances.
	An interpretation of the monitoring data including comparison to historical trends and emission limits (where applicable).
	Copies of original monitoring, laboratory and analysis reports submitted to the licence holder by third parties.
Condition 9,	Ambient groundwater monitoring results during operations.
Condition 10 (Table 6), and Condition 11	Tabulated monitoring data results for each monitoring bore showing concentrations of all parameters highlighting exceedances.
	Time-series graphs in Microsoft excel format or similar for each monitoring location for standing water levels in mbgl.
	An assessment of the monitoring data including comparison to ANZG 2018 water quality values, previous monitoring results, and limits (where applicable).
	Copies of original monitoring, laboratory and analysis reports submitted to the licence holder by third parties.
Condition 12	Water balance monitoring results during operations.
	Tabulated monitoring data and / or time-series graphs in Microsoft excel format or similar results of all information recorded.
	An interpretation of the monitoring data including comparison to historical trends and limits (where applicable).
	Copies of original monitoring submitted to the licence holder by third parties.

Definitions

In this licence, the terms in Table 8 have the meanings defined.

Table 8: Definitions

Term	Definition
ACN	Australian Company Number.
AEP	means annual exceedance probability.
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 September until 31 August of the immediately following year.
ANZG 2018	means the most recent version and relevant parts of the Australia and New Zealand Guidelines for Fresh and Marine Water Quality (Australian and New Zealand Governments and Australian state and territory governments, Canberra, ACT, Australia) available at http://www.waterquality.gov.au/anz-guidelines
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.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters.
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.
CEO	means Chief Executive Officer of the Department.
	CEO for the purposes of notification means:
	Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919
	or:
	info@dwer.wa.gov.au
cfu	means colony forming units.
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.

Term	Definition
discharge	has the same meaning given to that term under the EP Act.
DWER	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).
EP Regulations	Environmental Protection Regulations 1987 (WA).
ha	means hectare(s).
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.
m	means metre(s).
m ²	means square metre(s).
m ³	means cubic metre(s).
mbgl	means metres below ground level.
mg/L	means milligrams per litre.
mL	means millilitre(s).
mRL	means metres Reduced Level.
mm	means millimetre(s).
monthly period	means a one-month period commencing from first day of a month until last day of the same month.
NATA	means the National Association of Testing Authorities, Australia.
PMF	means probable maximum flood.
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.
PWP	means Process Water Pond.
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.

OFFICIAL

Department of Water and Environmental Regulation

Term	Definition
Spot sample	means a discrete sample representative at the time and place at which the sample is taken.
suitably qualified professional engineer	means a person who: (a) holds a tertiary academic qualification in engineering; and/or (b) is eligible for membership of the Institute of Engineers, Australia; and (c) has a minimum of five years of experience working in the area of geotechnical engineering.
tpa	means tonnes per annum.
TSF	means tailings storage facility.
μS/cm	means microsiemens per centimetre.
WAD-CN	means Weak Acid Dissociable Cyanide.
waste	has the same meaning given to that term under the EP Act.
WWTP	means Wastewater Treatment Plant.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

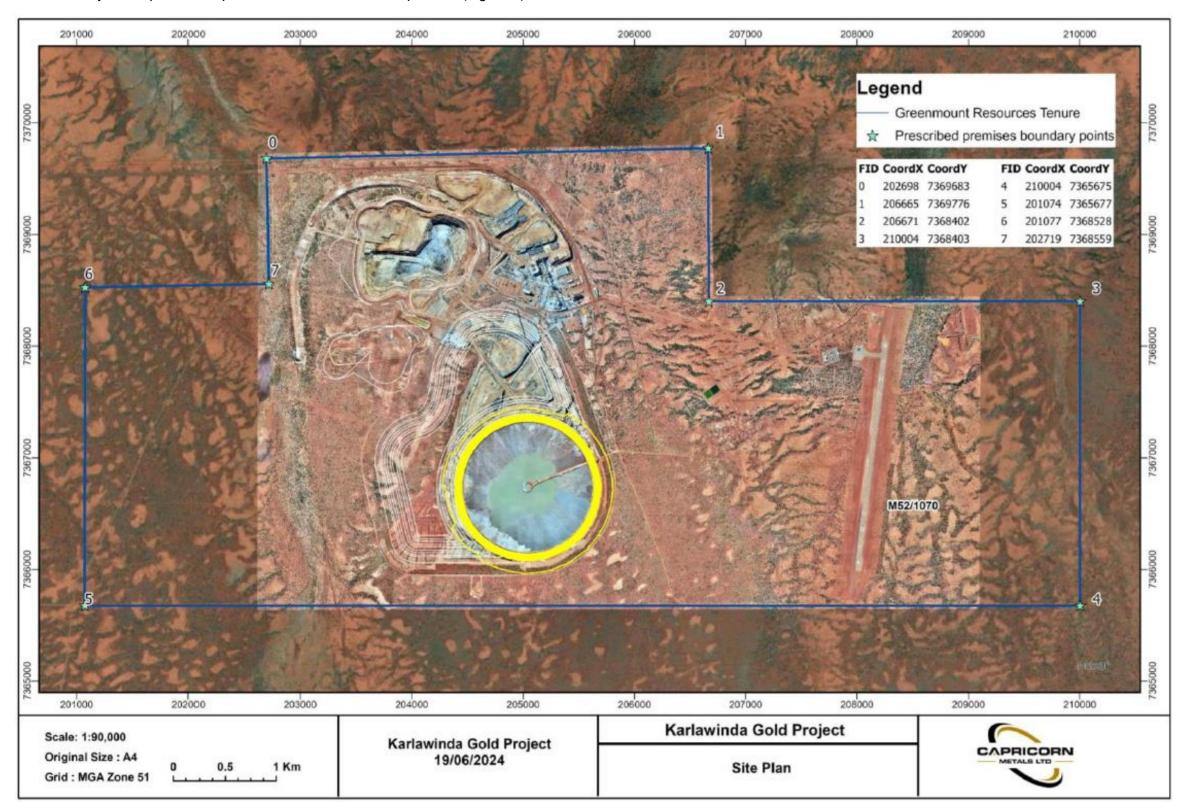


Figure 1: Map of the boundary of the prescribed premises

Infrastructure

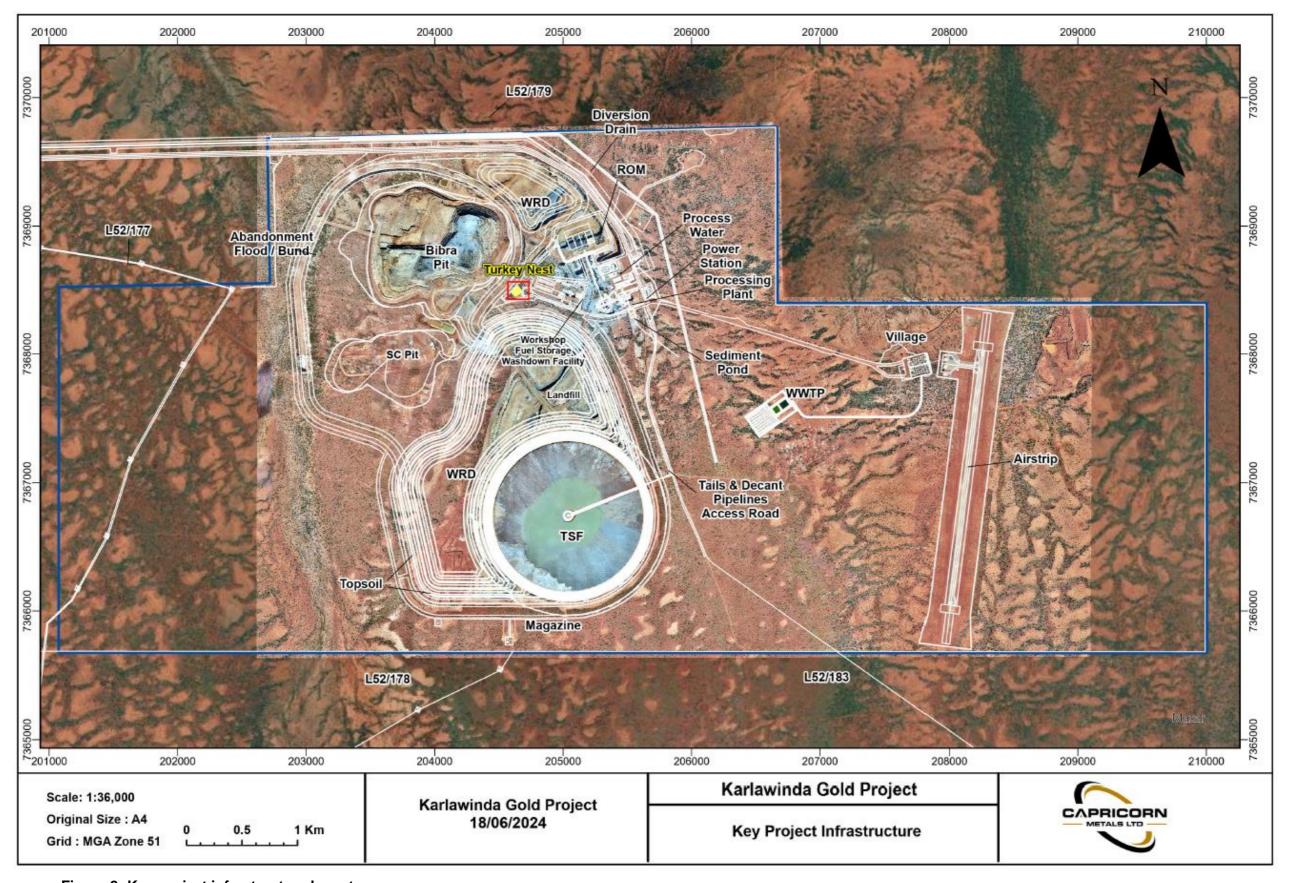


Figure 2: Key project infrastructure layout

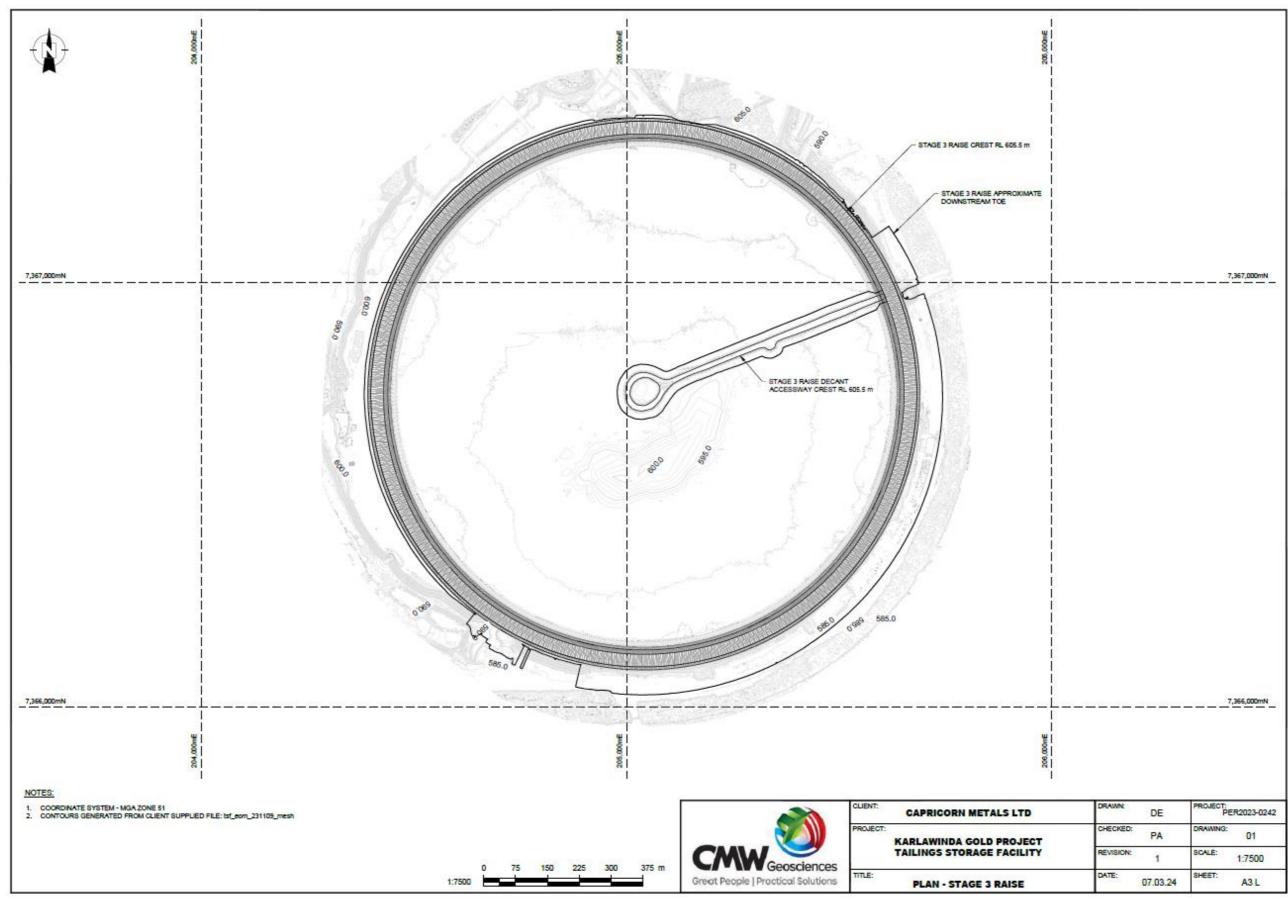


Figure 3 : TSF - Stage 3

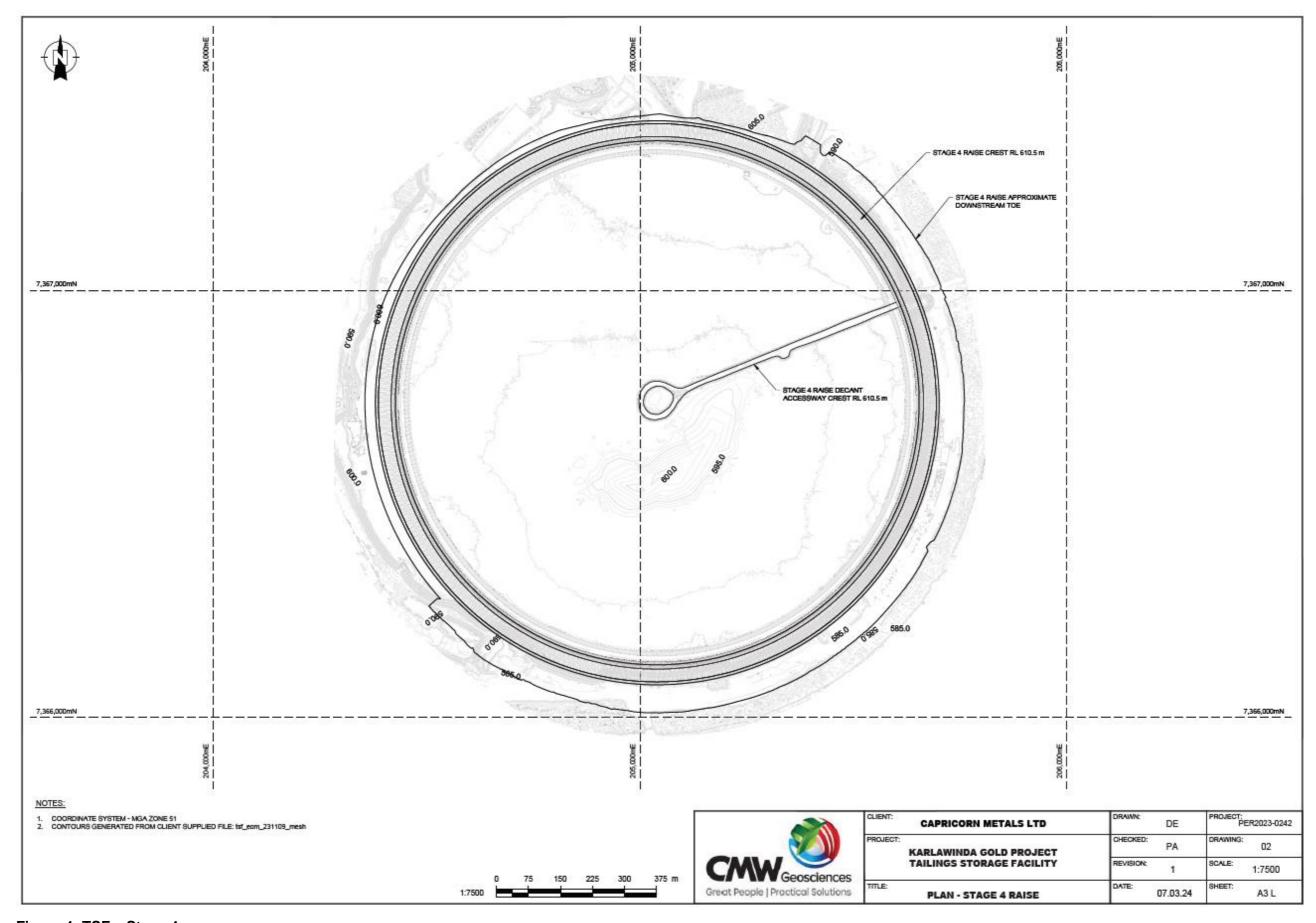


Figure 4: TSF - Stage 4

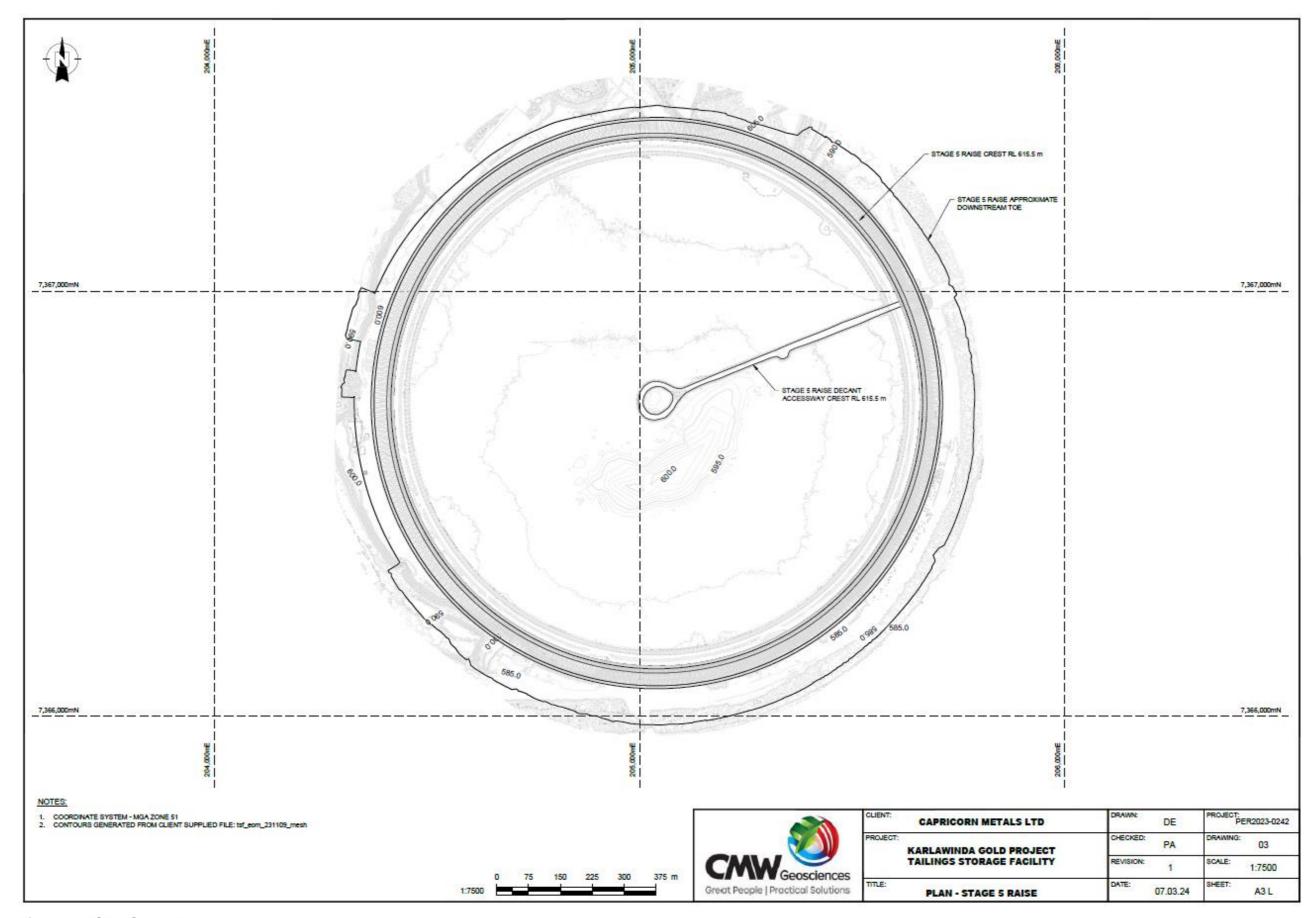


Figure 5: TSF – Stage 5

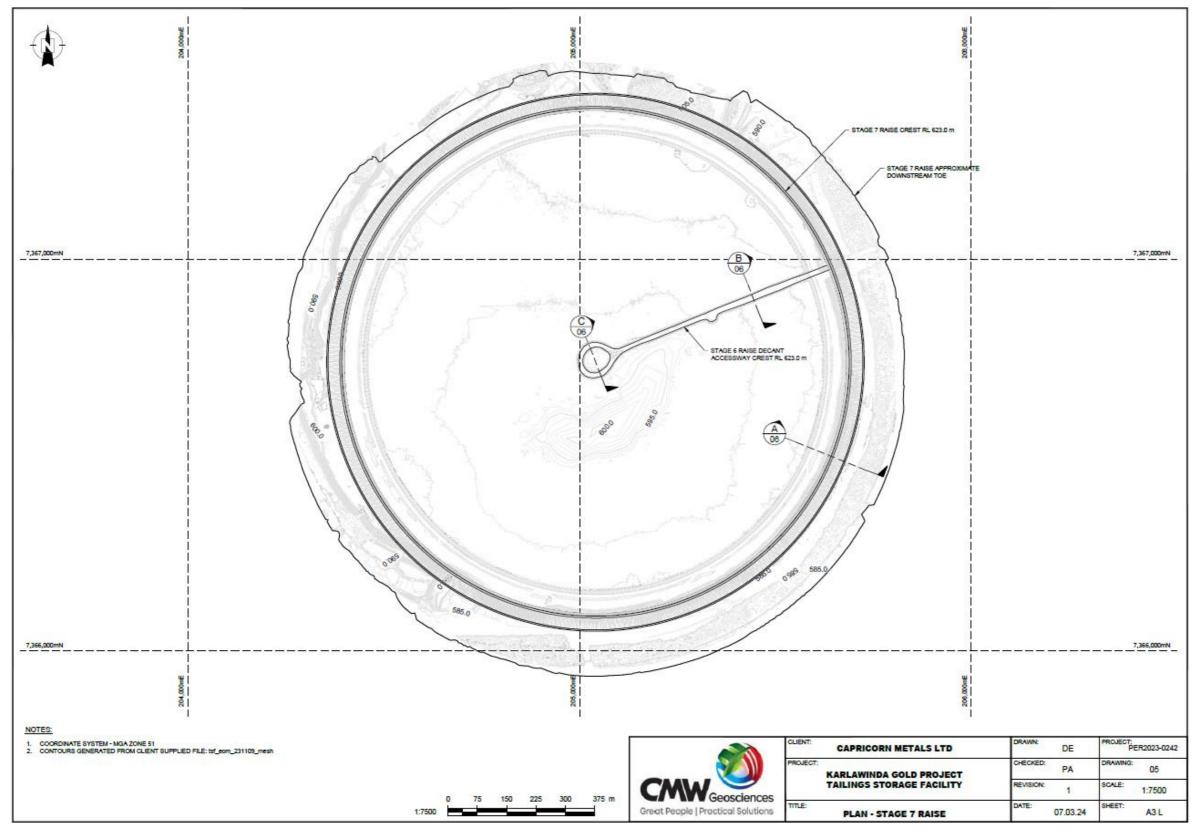


Figure 6 : TSF general arrangement -Stage 7 (Final)

Emission points

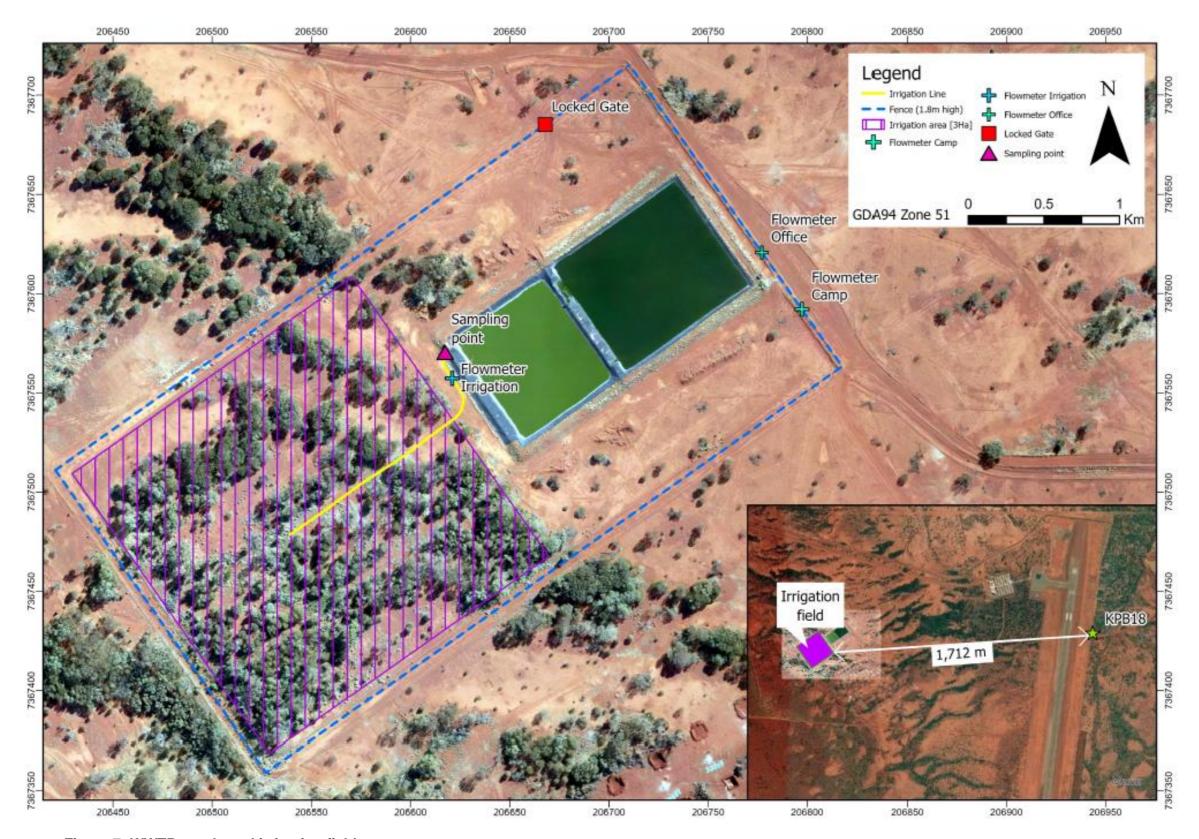


Figure 7: WWTP ponds and irrigation field

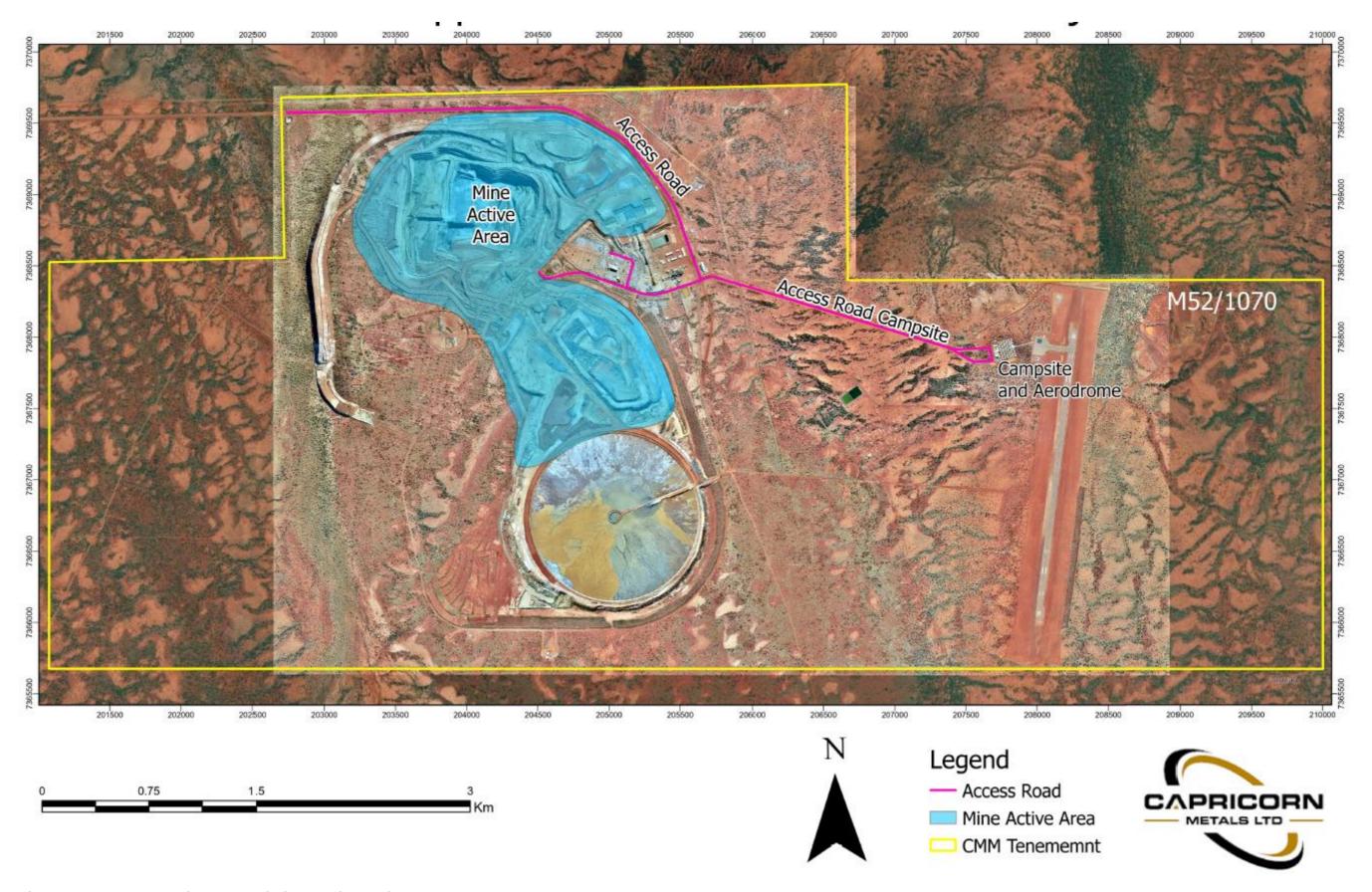


Figure 8: Dust suppression areas within the Mine Active Area

Monitoring

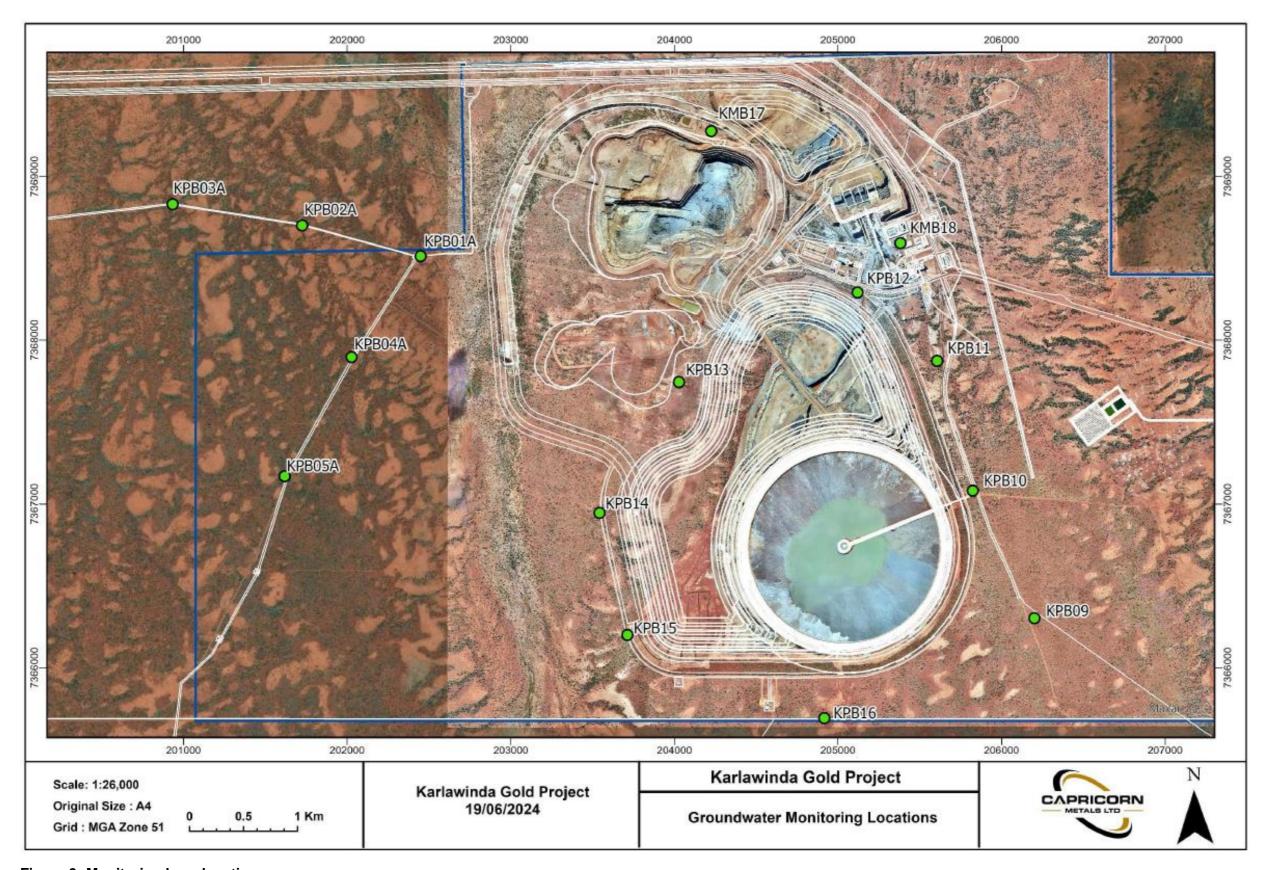


Figure 9: Monitoring bore locations