



Licence number	L4611/1987/11
Licence holder	Agnew Gold Mining Company Pty Ltd
ACN	098 385 883
Registered business address	Level 4, 235 St Georges Terrace PERTH WA 6000
DWER file number	2012/006836-1
Internal number	INS-0001162
Duration	17/10/2013 to 17/10/2031
Date of amendment	30/05/2025
Premises details	Agnew Gold Mine Mining tenements M36/27, M36/32, M36/53, M36/55, M36/65, M36/91, M36/150, M36/171, M36/174, M36/208, M36/248, M36/293, M36/314, M36/383, M36/450, M36/635, L36/143, L36/154, L36/162, L36/173, L36/177, L36/211, L36/212, L36/228, G36/36, G36/37, G36/38, G36/39 and G36/42. LEINSTER WA 6437 As depicted in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	1,500,000 tonnes per annual period
Category 6: Mine dewatering	3,000,000 tonnes per annual period
Category 52: Electric power generation	22 megawatts
Category 54: Sewage facility	280 cubic meters per day
Category 64: Class II or III putrescible landfill site	8,000 tonnes per annual period

Department of Water and Environmental Regulation

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

MANAGER, RESOURCE INDUSTRIES

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

Licence history

Date	Reference number	Summary of changes
23/08/2004	L4611/1987/9	Licence reissue for 5 years tenure.
13/09/2004	W4029/2014/1	Works approval for construction of Acid Plant completed and closed.
15/10/2009	L4611/1987/10	Licence reissue for 4 years tenure.
1/11/2012	W5236/2012/1	Works Approval for construction of Waroonga Landfill completed and closed.
17/10/2013	L4611/1987/11	Licence transfer and reissue with 5 year tenure.
19/02/2015	W5768/2014/1	Works Approval for construction of replacement landfill for Waroonga and New Holland still current.
29/04/2016	L4611/1987	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.
26/05/2016	L4611/1987/11	Licence amendment – Addition of mining tenements from L5110 and prescribed activity category 6. Abandoned monitoring bores and redundant licence conditions were removed plus alignment to most recent licence format.
8/09/2017	L4611/1987/11	Amendment Notice 1: to construct and operate an In-pit TSF at the Songvang open pit site and increase dewatering throughput.
23/12/2019	L4611/1987/11	Amendment to reduce required freeboard on TSF3, add Waroonga North landfill facility and remove satisfied conditions. A consolidated licence was issued incorporating Amendment Notice 1 and updating to the current licence format.
07/07/2020	L4611/1987/11	This Amendment - to extend the area of the New Holland landfill
05/07/2021	L4611/1987/11	Amendment to construct dewatering pipeline to Crusader complex and construct new tertiary crusher at CIP plant.
26/07/2022	L4611/1987/11	Amendment to extend the expiry date.
07/09/2022	L4611/1987/11	Amendment to authorise operation of Waroonga Biomax Wastewater Treatment Plant, constructed under works approval W6572/2021/1.
17/10/2023	L4611/1987/11	Amendment to: <ul style="list-style-type: none"> • Increase Category 5 production capacity to 1,500,000 tonnes per annual period via tertiary crusher; • Store mine dewater at the Barren Lands turkeys nest; • Increase operating height of Songvang TSF4 to RL 422.0m and include measures to minimise impacts to wildlife; and • Authorise construction and operation of Tristar Wastewater Treatment Plant to replace the Waroonga Biomax Wastewater Treatment Plant.
30/05/2025	L4611/1987/11	Amendment (APP-0025954) to: <ul style="list-style-type: none"> • Incorporate L5110/1988/10 infrastructure and conditions into this licence (with exception to the Fairyland mining area and Daisy

		<p>Queen Pit);</p> <ul style="list-style-type: none"> • Add additional source mine dewater location (Barren Lands); • Include categories 52, 54 and 64 activities into the licence; • Remove categories 85 and 89 from the licence; • Reduce inspection for pipelines, TSFs, decant ponds, freeboards and discharge pits from weekly when not in use to monthly when in care and maintenance; • Change submission date of AER and AACR to 31 March.
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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

- The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Tristar Sequential Batch Reactor wastewater treatment plant (WWTP), comprising: <ul style="list-style-type: none"> 1x 50 kilolitres (kL) equalisation tank; 1x 80 kL aeration reactor tank; 1x 50 kL poly sludge storage tank; and 1x 50 kL irrigation tank. 	<ul style="list-style-type: none"> Treatment capacity of up to 80 m³/day; All sewage and storage treatment tanks, vessels, transfer pipelines and conveyance infrastructure must be impermeable and free of leaks or defects; Flow meter must be maintained on the WWTP inlet and outlet to the irrigation spray field; Alarm system to detect pump faults, high tanks levels and tank overflows must be maintained; Contingency storage capacity of up to two days of normal flow must be maintained, in the event that discharge is suspended; Sludge must be dewatered and disposed at an appropriately authorised facility; Spills of wastewater or chemicals outside of a vessel or container must be cleaned up immediately; and Maintained as per manufacturer's specifications. 	Specified as 'Waroonga WWTP' in Schedule 1, Figure 7.
Waroonga Biomax WWTP, comprising: <ul style="list-style-type: none"> 1x disinfection and pump tank; 1x settlement tank; 4x aerobic tanks; and 4x septic tanks. 	<ul style="list-style-type: none"> Treatment capacity of up to 80 m³/day; All sewage and storage treatment tanks, vessels, transfer pipelines and conveyance infrastructure must be impermeable and free of leaks or defects; Flow meter must be maintained on the WWTP inlet and outlet to the irrigation spray field; Alarm system to detect pump faults, high tanks levels and tank overflows must be maintained; Contingency storage capacity of up to two days of normal flow must be maintained, in the event that discharge is suspended; Sludge is contained within sealed sludge tanks prior to removal by a licensed waste contractor for disposal to an appropriately authorised facility; Spills of wastewater or chemicals outside of a vessel or container must be cleaned up immediately; and Maintained as per manufacturer's specifications. 	Specified as 'Waroonga WWTP' in Schedule 1, Figure 7.
Waroonga sprayfield	<ul style="list-style-type: none"> Irrigation area of at least four hectares must be maintained; 	Specified as

Site infrastructure and equipment	Operational requirement	Infrastructure location
	<ul style="list-style-type: none"> Irrigation area must be managed to prevent ponding and pooling of treated effluent on the ground surface of the irrigation discharge area; Irrigation area must be inspected weekly to ensure no surface runoff; and Fence with visible safety signage must be maintained. 	'Waroonga Sprayfield' in Schedule 1, Figure 7.
Village WWTP (Lawlers WWTP)	<ul style="list-style-type: none"> Treatment capacity of up to 200 m³/day; Wastewater sourced from Lawlers; accommodation camp and brine waste from the onsite Reverse Osmosis plant; Storage and treatment containment infrastructure lined or constructed to achieve a permeability of at least <10⁻⁹ m/s or equivalent; Minimum freeboard of 300 mm maintained or containment for a 1 in 100 year/72 hour storm event (whichever is greater) is maintained at all times; Overtopping of the wastewater treatment vessels must not occur; Stormwater runoff is to be prevented from entering the wastewater treatment vessels; There is to be no discernible seepage loss from the wastewater treatment vessels; and Vegetation and floating debris (emergent or otherwise) is to be prevented from growing or accumulating in the wastewater treatment vessels. 	Specified as 'Village WWTP' in Schedule 1, Figure 7.
Village sprayfield (Lawlers WWTP Irrigation area)	<ul style="list-style-type: none"> Treated wastewater is to be distributed evenly within the irrigation area and there is to be no surface ponding of wastewaters; No run-off or discharge is to occur beyond the boundary of the defined irrigation area; and An even covering of vegetation is to be maintained within the irrigation area. 	Specified as 'Village Sprayfield' in Schedule 1, Figure 7.
Power station and hydrocarbon storage areas comprising: <ul style="list-style-type: none"> Bulk lubricant: 1 x 10 kL self-bunded tank; and Waste Oil: 1 x 5 kL self-bunded tank. 	<ul style="list-style-type: none"> Maintained and operated with the manufacturers specifications; Power station drainage to bunded areas for accumulation of stormwater/other fluids to be disposed of off-site at an appropriately licensed facility; Hydrocarbon leaks spillages to be contained immediately, for disposal offsite at an appropriately licensed facility; and Hydrocarbons stored within bunded areas designed to contain at least 110% of the total volume of materials stored. 	Within power station, as shown in Schedule 1, Figure 9.
Power Station Gas generators (GG01-GG11)	<ul style="list-style-type: none"> Maintained and operated in accordance with manufacturers specifications; Generators housed in purposed built enclosure overlying 250 mm elevated concrete slab; and Generator exhaust to be directed to individual stacks 	Within power station, as shown in Schedule 1, Figure 9.

2. The licence holder must ensure that tailings, decant water, dewater effluent and hydrocarbon contaminated soil are only discharged into containment cells and/or a turkey's nest with the relevant infrastructure requirements and at the locations specified in Table 2 and identified in Schedule 1: Maps.

Table 2: Containment infrastructure requirements

Vessel or compound	Material	Requirements
Redeemer In-Pit TSF3	Tailings	<ul style="list-style-type: none"> In-pit facility with monitoring bore network to identify any environmental impacts. Minimum freeboard of 500 mm maintained at all times. Normal operating pond level to be at least 1 m below pit crest.
Songvang In-pit TSF	Tailings	<ul style="list-style-type: none"> In-pit TSF with monitoring bore network. Operate to final height of RL 422.0 m. Freeboard maintained to ensure water level does not exceed RL 422.0 m. Bird deterrent must be utilised daily between December and March, if birds are present at the in-pit TSF.
TSF2 ¹	Tailings	<ul style="list-style-type: none"> Lined with 200 mm of compacted clay. Minimum freeboard of 300 mm maintained or containment for a 1 in 100 year/72 hour storm event (whichever is greater) is maintained at all times
Waroonga Turkeys Nest	Mine dewater from Waroonga underground operations	<ul style="list-style-type: none"> Lined with 200 mm of compacted clay, or 150 mm of compacted clay and 1.5 mm High-density polyethylene (HDPE) liner to achieve a permeability of $<10^{-9}$ m/s or equivalent. Minimum freeboard of 300 mm maintained or containment for a 1 in 100 year/72 hour storm event (whichever is greater) is maintained at all times.
New Holland Turkeys Nest	Mine dewater from New Holland underground operations	
Barren Lands Turkeys Nest	Mine dewater from Barren Lands open pit and underground operations	
TSF2 Process Water Pond	Redeemer In-Pit TSF return water and Song Vang pit water	
Redeemer TSF Return Pond	Redeemer In-Pit TSF Return water	<ul style="list-style-type: none"> Lined with 150 to 200 mm of compacted clay with primary and secondary HDPE liners to achieve a permeability of $<10^{-9}$ m/s or equivalent. Spillway plus under wall return drain shall direct all overflow back to the Songvang In-pit TSF. Minimum freeboard of 300 mm maintained or containment for a 1 in 100 year/72 hour storm event (whichever is greater) is maintained at all times.
Songvang TSF Process Pond	Songvang In-pit TSF Return water	
Hidden Secret Pit	Mine dewater from Waroonga, Genesis, and New Holland and Vivien underground operations.	<ul style="list-style-type: none"> In-pit facility with water discharge monitoring to identify any environmental impacts.

Vessel or compound	Material	Requirements
		<ul style="list-style-type: none"> Minimum freeboard of 300 mm maintained or containment for a 1 in 100 year/72 hour storm event (whichever is greater) is maintained at all times.
New Holland Bioremediation pad	Hydrocarbon contaminated soil	<ul style="list-style-type: none"> Hydrocarbon contaminated material are either put in bioremediation area or taken off site by a licenced contractor. Any contaminated runoff from the treatment cell is contained.
Waroonga Bioremediation pad	Hydrocarbon contaminated soil	<ul style="list-style-type: none"> Hydrocarbon contaminated material are either put in bioremediation area or taken off site by a licenced contractor. Any contaminated runoff from the treatment cell is contained.
Cox, Pilgrim and Deliverer pits (Crusader Complex)	Mine dewater from Waroonga, Genesis, New Holland, Vivien mining operations, and Barren Lands Pit	<ul style="list-style-type: none"> In-pit facility with water discharge monitoring to identify any environmental impacts. Top of embankment freeboard of 3 m is maintained for each pit. Flow meter installed to calculate volumes of mine dewater discharged.
Lawlers TSF3	Tailings and Treated Sewage Water from Lawlers Camps	<ul style="list-style-type: none"> Lined with 200 mm of compacted clay, or 150 mm of compacted clay and 1.5 mm HDPE liner to achieve a permeability of <10⁻⁹ m/s or equivalent. Minimum freeboard of 300 mm maintained or containment for a 1 in 100 year/72 hour storm event (whichever is greater) is maintained at all times. Seepage collection and recovery system is provided and used to capture seepage from the TSF. Seepage is returned to the TSF or re-used in process. The supernatant pond on the TSF is minimised. The surface on the tailings storage facility is maintained to prevent, or minimise dust emissions.

Note 1: TSF2 currently decommissioned and not operational.

3. The licence holder must:

- (a) undertake inspections as detailed in Table 3;
- (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences; and
- (c) maintain a record of all inspections undertaken.

Table 3: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Mine dewater pipelines	Visual integrity	Daily when operating or monthly during care and maintenance.
Tailings delivery pipelines	Visual integrity	
Tailings return water lines	Visual integrity	
Tailings deposition	Visual assessment of beaching and record bird / other wildlife presence	
Decant Pond	Visual assessment of pond, size, location and record bird / other wildlife presence.	
External walls of Lawlers TSF3	Visual integrity	
Internal embankment freeboard of the TSF and decant ponds	Visual to confirm required freeboard capacity is available	
Cox, Pilgrim and Deliverer pits	Visual assessment to confirm required freeboard capacity is available	Twice daily when operating or between December and March. Weekly when not operating and between March and December.
Bird or wildlife mortality within the TSF infrastructure, decant pond and return water ponds	Record any mortality of birds or other wildlife. If safe to do so, retrieve any specimens of dead birds or other wildlife and preserve (freeze) to allow for identification / further study.	

4. The licence holder must ensure that all pipelines containing environmentally hazardous materials are either:
- equipped with automatic cut-outs in the event of a pipe failure; and/or
 - provided with a secondary containment sufficient to contain any spill for a period equal to the time between routine inspections; and/or
 - equipped with telemetry systems and pressure sensors along pipelines allowing the detection of leaks and failures.
5. The licence holder must ensure that where wastes produced on the Premises are not taken to third party premises for lawful use or disposal, they are managed in accordance with the requirements in Table 4. Additional trenches may be constructed and operated as required, providing they are done so in accordance with Table 4.

Table 4: Management of Waste

Waste type	Waste Code	Management strategy	Requirements ^{1,2}
Clean fill	N/A	Storage, handling and disposal of waste by landfilling	All waste types except sewage <ul style="list-style-type: none"> No more than 8,000 tonnes per year of all waste types cumulatively shall be disposed of by landfilling; Disposal of waste by landfilling shall only take place within the landfill areas shown on the map of emission points in Schedule 1, Figure 6;
Contaminated Solid Waste			
Inert Waste Type 1			
Inert Waste Type 2			
Putrescible waste			
Special Waste Type 1			

Waste type	Waste Code	Management strategy	Requirements ^{1,2}
Special Waste Type 2			<ul style="list-style-type: none"> Waste shall be placed in a defined trench, with the active tipping area restricted to a maximum linear length of 70 m and a width of 30 m; The separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 m; and Must meet the acceptance criteria for Class II landfills. <p>Asbestos Waste</p> <ul style="list-style-type: none"> Only to be disposed of into a designated asbestos disposal area within the landfill; Not to be deposited within 2 m of the final tipping surface of the landfill; and No works shall be carried out on that landfill that could lead to a release of asbestos fibres.

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 and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

6. The licence holder must ensure that cover is applied to waste in the tipping area in accordance with Table 5 and that sufficient stockpiles of cover are maintained on site at all times for the tipping area of the site to be covered, in accordance with this condition, at least twice.

Table 5: Cover requirements

Waste Type	Material	Depth	Timescales
Clean Fill	No cover required	N/A	None.
Inert Waste Type 1	No cover required	N/A	None.
Inert Waste Type 2	Inert Waste Type 1, soil or clay	100 mm	By the end of the fortnight in which the waste was deposited. Plastic waste with the potential to become windblown shall be covered as soon as practicable after deposit.
Putrescible waste	Inert Waste Type 1, soil or clay	150 mm	To be covered by the end of the week in which the waste was deposited with sufficient quantities of Type 1 inert waste, clean fill or other appropriate cover material to prevent the spread of fire and harbouring of disease vectors.
Special Waste Type 1 and	Inert Waste Type 1 or clean fill	Progressive cover 300 mm	Following deposition and prior to compaction.
Special Waste Type 2	Solid waste or soil	Final cover 1000 mm	By the end of the working day in which the waste was deposited.

7. The licence holder must ensure that wind-blown waste is contained within the boundary of the landfill and that wind-blown waste is returned to the tipping area on at least a monthly basis.

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8. The licence holder must operate the cyanide detoxification unit to ensure that the weak acid dissociable (WAD) cyanide concentration in the tailings decant pond is less than 50 parts per million at all times.

Emissions

9. The licence holder must record and investigate the exceedance of any descriptive or numerical limit specified in this Licence.
10. The licence holder must ensure that the emissions specified in Table 6, and Table 7 and Table 8 are discharged only from the corresponding discharge points and only at the corresponding discharge point location.

Table 6: Authorised point source discharge to pits

Discharge point reference	Description	Source including abatement	Authorised discharge volume
Hidden Secret, Cox, Deliverer and Pilgrim pits	Receiving environment – previously mined pit	Water from dewatering operations of Barren Lands, Waroonga, Genesis, New Holland and Vivien mine operations	3,000,000 tpa

Table 7: Authorised point source discharge to land

Discharge point reference	Description	Source including abatement	Authorised discharge volume
Waroonga sprayfield	Fenced area on Waroonga East waste rock dump	Treated wastewater from Waroonga Biomax WWTP and Tristar Sequential Batch Reactor WWTP	80 m ³ /day
Village Sprayfield	De-marked irrigation area	Treated wastewater from the Village WWTP	200 m ³ /day

Table 8: Authorised point source discharge to air

Discharge point reference	Emission point	Emission point height	Source, including any abatement	Discharge point location
GG01- GG11	Power station gas exhaust stacks GG01 to GG11	8.5 m	11x 2MW Cummins C2000 N5CB gas reciprocating generator sets	As shown in Figure 9 of Schedule 1.

11. The licence holder must ensure that emissions from the discharge point listed in Table 9 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 14.

Table 9: Emission and discharge limits

Discharge point	Parameter	Limit
Waroonga Sprayfield	Total Phosphorus (mg/L)	120 kg/ha/year
	Total Nitrogen (mg/L)	480/ha/year

12. The licence holder must target emissions to land at or below the levels specified in Table 10 for the Village WWTP irrigation tank and Waroonga Sprayfield.

Table 10: Emission targets to land

Emission point reference	Parameter	Target (including units)	Average period	Infrastructure location
Village WWTP Irrigation tank TK-108 And WWTP outlet at Waroonga Sprayfield	Biochemical Oxygen Demand	20 mg/L	Spot sample	As presented in Schedule 1, Figure 8.
	Total Suspended Solids	30 mg/L		
	Total Nitrogen	40 mg/L		
	Total Phosphorus	8 mg/L		
	pH	6.5 – 8.5		
	Escherichia coli	1000 cfu/100 ml		

Monitoring

13. 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 submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured (unless indicated otherwise in the relevant table).
14. The licence holder must undertake the monitoring in Table 11 according to the specifications in that Table.

Table 11: Monitoring of point source discharge

Discharge point reference	Parameter	Units	Frequency
Mine dewater discharged from Barren Lands, Waroonga, Genesis, New Holland and Vivien mine operations to the discharge outlets at: <ul style="list-style-type: none"> Hidden Secret Pit; Cox Pit; Deliverer Pit; and Pilgrim Pit. 	pH ¹	-	Six monthly ²
	Electrical conductivity at 25 °C ¹	µS/cm	
	Total dissolved solids (TDS ¹)	mg/L	
	Arsenic Cadmium Copper Mercury Selenium		
WWTP outlet at: Waroonga sprayfield	<i>E. coli</i> Total coliforms	cfu/100 mL	Quarterly ³
	pH ¹	-	

Discharge point reference	Parameter	Units	Frequency
	Residual chlorine ¹ Biological oxygen demand ¹ Total suspended solids Total nitrogen Total phosphorus	mg/L	
Village WWTP Irrigation tank TK-108	<i>E. coli</i> Total coliforms	cfu/100 mL	Monthly ⁴
	pH ¹	-	
	Biochemical oxygen demand Total nitrogen Nitrate + nitrite nitrogen Total phosphorus TDS (calculated from conductivity) Total suspended solids Ammonium-nitrogen	mg/L	

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

Note 2: Six monthly monitoring to be undertaken at least 5 months apart.

Note 3: Quarterly monitoring to be undertaken at least 45 days apart.

Note 4: Monthly monitoring to be undertaken at least 15 days apart.

15. The licence holder must undertake the monitoring in Table 12 according to the specifications in Table 12.

Table 12: Monitoring of inputs and outputs

Input/Output	Parameter	Units	Frequency
Mine dewater discharged from Barren Lands, Waroonga, Genesis, New Holland and Vivien mine operations to:	Cumulative volume	kL	Quarterly ¹
<ul style="list-style-type: none"> Hidden Secret Pit; Cox Pit; Deliverer Pit; and Pilgrim Pit 			
WWTP outlet at:		m ³	Continuous
<ul style="list-style-type: none"> Waroonga sprayfield; and Village Sprayfield 			

Note 1: Quarterly monitoring is undertaken at least 45 days apart.

16. The licence holder must undertake the monitoring in Table 13 according to the specifications in that table and record and investigate results that do not meet any limit or target specified.

Table 13: Monitoring of ambient groundwater quality and WAD cyanide concentrations

Monitoring point reference and location	Parameter	Target	Limits	Units	Averaging period	Frequency
EC473, EC476, EC477, EWB61, EWB62,	pH ¹	-	6.0 to 9.0	-	Spot sample	Quarterly ³
	Electrical Conductivity (EC)	-	-	µg/cm		

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Monitoring point reference and location	Parameter	Target	Limits	Units	Averaging period	Frequency	
EWB66, EWB67, EWB68.	Standing water level ² (SWL)	-	-	mbgl		Six monthly ⁴	
	TDS ¹	-	-	mg/L			
	Major Ions ⁷	-	-				
	Total cyanide	-	-				
	Weak acid dissociable cyanide	-	0.5				
	Selenium	-	-				
	Thallium	-	-				
	REDIPMW1, REDIPMW2, REDIPMW3, REDIPMW5, REDIPMW6, REDIPMW7, REDIPMW8, REDIPMW9, REDIPMW10. SV1-1, SV2-1, SV2-2, SV4-1, SV5-1, SV6-1.	pH ¹	-				6.0 to 9.0
Electrical Conductivity (EC)		-	-	µg/cm			
Standing water level ²		-	-	mbgl			
Total dissolved solids ¹		-	10,000	mg/L		Six monthly ⁴	
Major Ions ⁷		-	-				
Total cyanide		-	-				
Weak acid dissociable cyanide		-	0.5				
Selenium		-	-				
Thallium		-	-				
Decant (supernatant) pond of each operating tailings storage facility		Weak acid dissociable cyanide	-				50
	Decant (supernatant) pond at Songvang in-pit TSF	Dissolved arsenic (As)	-	-	mg/L	Weekly ⁶	
Lawlers TSF3 monitoring bores; MB1, MB2, MB3, MB4, MB5, MB6, MB7, MB8, MB9 and MB10	Standing water level ²	6	4	mbgl	Spot sample	Monthly ⁵	
L17, L18, L34, L52 and L53	Standing water level ²	-	4	mbgl	Spot sample	Quarterly ³	
	pH ¹	-	-	-			
	Total dissolved solids ¹	-	-	mg/L			
	Cadmium	-	-				
	Arsenic	-	-				
	Copper	-	-				
						Annual ⁸	

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Monitoring point reference and location	Parameter	Target	Limits	Units	Averaging period	Frequency
	Weak acid dissociable cyanide	-	-			
	Mercury	-	-			
	Selenium	-	-			
L8 and Satellite Well	Standing water level ²	6	4	mbgl	Spot sample	Quarterly ³
	pH ¹	-	6.0 – 9.0	-		
	Total dissolved solids ¹	-	2,000	mg/L		
	Cadmium	-	0.01			
	Arsenic	-	0.5			
	Copper	-	0.5			
	Weak acid dissociable cyanide	-	0.5			
	Mercury	-	0.002			
	Selenium	-	0.2			
⁹ Crusader complex monitoring bores: CMB1, CMB2, CMB3, CMB4 and CMB5	SWL ²	-	-	mbgl	Spot sample	Monthly ⁵
	pH	-	-	mg/L		Six Monthly ⁴
	TDS	-	-			
	WAD cyanide	-	-			
	Selenium	-	-			
	Thallium	-	-			
	Major Ions ⁷	-	-			

Note 1: Field sample results are to be reported as per condition 24. An exemption from NATA laboratory analysis is allowed given geographical remoteness of the sample site and the short holding time of the parameter.

Note 2: Standing water level shall be determined prior to collection of water samples.

Note 3: Quarterly monitoring to be undertaken at least 45 days apart.

Note 4: Six monthly monitoring to be undertaken at least 165 days apart.

Note 5: Monthly monitoring to be undertaken at least 14 days apart.

Note 6: Weekly monitoring to be undertaken at least four days apart.

Note 7: Major Ions include Ca, Na, Mg, K, SO₄, Cl, SiO₂, NO₃, HCO₃ and dissolved Al, Sb, As, B, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Ni, Mo, Se, Ag, Sn and Zn.

Note 8: Annual monitoring to be undertake at least nine months apart.

Note 9: Monitoring only required once bores have been constructed.

Groundwater Recovery plan

17. The licence holder must, upon becoming aware that groundwater level and/or groundwater quality exceeds the limits or targets in Table 13, design and implement a groundwater recovery plan.
18. The licence holder must, upon becoming aware that groundwater quality in monitoring bores L8 and/or Satellite Well exceed the limit for any parameter in Table 13, within 6 months, design and implement a groundwater recovery plan to protect water quality in downstream resources.
19. The licence holder must ensure that the groundwater recovery plan required by condition 17 and/or 18 of this licence includes:
 - (a) notification to the CEO in writing of when and in how many bores the limit could not be met;

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- (b) any significant environmental impacts observed;
 - (c) strategies to achieve the groundwater level and/or groundwater quality limit, including predicted increases in groundwater recovery and any additional recovery bores or trenches required;
 - (d) predicted timeframes to achieve the groundwater level and/or groundwater quality limit; and
 - (e) strategies to ensure the limit will be met in the future.
- 20.** The groundwater recovery plan outlined in condition 19 must be submitted to the CEO for review prior to implementation.

Records and reporting

- 21.** All information and records required by the licence must:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 21(d) be retained for at least 6 years from the date the records were made or until the expiry of the licence or any subsequent licence; and
 - (d) or those following records, be retained until the expiry of the licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.
- 22.** The licence holder must complete an Annual Audit Compliance Report indicating the extent to which the licence holder has complied with the conditions of the licence, and any previous licence issued under Part V of the Act for the premises for the previous annual period.
- 23.** The licence holder must implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the premises and any action taken in response to the complaint.
- 24.** The licence holder must:
- (a) prepare an Environmental Report that provides information in accordance with Table 14 for the preceding annual period; and
 - (b) submit the Environmental Report to the CEO by 31 March each year.

Table 14: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form ¹
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Condition 22	Compliance	Annual Audit Compliance Report (AACR)
Condition 23	Complaints summary	None specified
Table 2	Summary of bird deterrent utilised	None specified
Table 11	Monitoring of point source discharge	None specified
Table 12	Monitoring of inputs and outputs	None specified
Table 13	Monitoring of ambient groundwater quality	None specified
Table 5, Table 6, Table 7, Table 9 and Table 13	Limit exceedances or exceedances of authorised discharge volume	N1
-	Summary of the operational status (active or inactive) of each landfill location, depicted in Figure 6, during the annual period.	None specified

Note 1: N1 Forms are available in Schedule 3.

25. The licence holder must ensure that the Annual Environmental Report also contains:

- (a) an assessment of the information contained within the report against previous monitoring results and licence limits; and
- (b) a list of any original monitoring reports submitted to the licence holder from third parties for the annual period and make these reports available on request.

Notification

26. The licence holder must ensure that the parameters listed in Table 15 are notified to the CEO in accordance with the notification requirements of the table.

Table 15: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
Condition 9, 11 and 14	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable but no later than 5pm of the next usual working day.	N1

Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act

Note 2: N1 Forms are available in Schedule 3.

Construction phase

27. The licence holder must construct or install each infrastructure in Table 16 in accordance with the corresponding requirements and at the corresponding locations specified in Table 16 prior to commencement of their operation, as authorised by conditions 1 and/or 2 of this licence.

Table 16: Infrastructure construction requirements

Infrastructure	Design, construction, and installation requirements	Infrastructure location(s)
Stage 2 – Dewater discharge pipeline	<p>Construct and install the following:</p> <ul style="list-style-type: none"> • 1 x dewater discharge pipeline approximately 11.66 km long connecting the Waroonga, Genesis, New Holland and Vivien mining pits to the discharge outlets located at Cox, Pilgrim and Deliverer pits; • Pipeline to be constructed with white poly with a diameter of 200 mm; • Pipeline route located within containment bunding to contain any spill for a period equal to the time between routine inspections; • Sumps installed along the pipeline route where the pipeline intersects surface creek lines; • Pipeline route to be fixed with telemetry systems to allow the detection of leaks and failures; • Pipeline fixed with automatic cut-outs in the event of pipe failure; and • Evidence of the pipeline installation is required as part of compliance to condition 29. 	As depicted in Schedule 2: Construction plans, Figure 10.
Mine pit dewatering discharge points	<ul style="list-style-type: none"> • Installed at Cox, Pilgrim and Deliverer pits; • Flow meter must be installed at the discharge points at Cox, Pilgrim and Deliverer pits to calculate volumes of mine dewater discharged; and • Top of embankment freeboard of 3 m to be installed and maintained for Cox, Pilgrim and Deliverer pits. 	
Tristar Sequential Batch Reactor WWTP	<ul style="list-style-type: none"> • Infrastructure components must include: <ul style="list-style-type: none"> ○ 1x 50 kL balance (equalisation) tank; ○ 1x 80 m³ reactor (aeration) tank; ○ 1x 50 kL sludge storage tank; and ○ 1x 50 kL treated effluent irrigation tank. • Inlet must be equipped with a 2.5 mm bar screen; • Volumetric flow meter must be installed on the WWTP discharge pipe outlet; • WWTP must be fitted with alarms to notify of the following incidents: <ul style="list-style-type: none"> ○ Pump faults and failure; ○ Tank overflow; and ○ High tank water level. • WWTP must be installed on compacted and stabilised earthen pad; • WWTP must be constructed as per the specifications of 	Labelled as 'Waroonga WWTP Facility', as depicted in Schedule 2: Construction plans, Figure 11.

Infrastructure	Design, construction, and installation requirements	Infrastructure location(s)
	<p>Figure 11;</p> <ul style="list-style-type: none"> • WWTP must be capable of treating sewage to the minimum effluent equality performance criteria: <ul style="list-style-type: none"> ○ pH between 6.5 to 8.5 pH units; ○ Total suspended solids <30 mg/L; ○ Total nitrogen <30 mg/L; ○ Total phosphorus <8 mg/L; ○ Residual chlorine between 0.2 to 2.0 mg/L; ○ Biochemical oxygen demand <30 mg/L; and ○ <i>E. coli</i> <1,000 cfu/100mL. • WWTP must have contingency storage capacity of up to two days of normal flow in the event the discharge is suspended; and • WWTP must be hydro-tested prior to operation. 	
Dewater pipeline from Barren Lands Pit to Crusader Complex	<ul style="list-style-type: none"> • Pipeline installed in existing tails line bunding; • Flow meter installed and mechanical flow meters installed to monitor volume going into each pit; • Buried under creek crossings; and • Sumps constructed with enough capacity to hold spills or leaks from the pipeline in between inspections. 	As depicted in Schedule 2 Figure 12.

Construction compliance document

- 28.** The licence holder must, within 30 calendar days of each infrastructure being installed or construction completed:
- undertake an audit of their compliance with the requirements of condition 27; and
 - submit to the CEO an Environmental Compliance Report on that compliance.
- 29.** The Environmental Compliance Report required by condition 28 must include, as a minimum, the following:
- certification by a suitably qualified professional that the items of infrastructure, as specified in condition 27, have been constructed in accordance with the relevant requirements specified in condition 27;
 - as-constructed plans and a detailed site plan for each item of infrastructure specified in condition 27;
 - be signed by a person authorised to represent the licence holder and contain the printed name and position of that person within the company.
- 30.** The licence holder must, within design, construct and install groundwater monitoring bores in accordance with the requirements specified in Table 17.

Table 17: Infrastructure requirements – groundwater monitoring bores

Infrastructure	Design, construction and installation requirements	Monitoring bore location(s)	Timeframe
Groundwater monitoring bores: <ul style="list-style-type: none"> • CMB1; • CMB2; • CMB3; • CMB4; and • CMB5. 	<u>Bore design and construction:</u> Designed and constructed in accordance with <i>ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores</i> .	As depicted in Schedule 1, Figure 13 Map of groundwater monitoring well locations.	Must be constructed, developed (purged), and determined to be operational prior to the commencement of receiving mine dewater from Barren Lands.
	Bore screens must target the part, or parts, of the aquifer most likely to be affected by contamination ¹ . Where temporary/seasonal perched features are present, bores must be nested, and the perched features individually screened.		
	<u>Logging of borehole:</u> Soil samples must be collected and logged during the installation of the monitoring bores. A record of the geology encountered during drilling must be described and classified in accordance with the Australian Standard Geotechnical Site Investigations AS1726. Any observations of staining / odours or other indications of contamination must be included in the bore log.		
	<u>Bore construction log:</u> Bore construction details must be documented within a bore construction log to demonstrate compliance with <i>ASTM D5092/D5092M-16</i> . The construction logs shall include elevations of the top of casing position to be used as the reference point for water-level measurements, and the elevations of the ground surface protective installations.		
	<u>Bore development:</u> All installed monitoring bores must be developed after drilling to remove fine sand, silt, clay and any drilling mud residues from around the bore screen to ensure the hydraulic functioning of the bore. A detailed record should be kept of bore development activities and included in the bore construction log.		
	<u>Installation survey:</u> the vertical (top of casing) and horizontal position of each monitoring bore must be surveyed and subsequently mapped by a suitably qualified surveyor.		
	<u>Bore network map:</u> a bore location map (using aerial image overlay) must be prepared and include the location of all monitoring bores in the monitoring network and their respective identification numbers.		

Note 1: refer to Section 8 of Schedule B2 of the *Assessment of Site Contamination NEPM* for guidance on well screen depth and length

Department of Water and Environmental Regulation

- 31.** The licence holder must, within 60 calendar days of the monitoring bores being constructed, submit to the CEO a bore construction report evidencing compliance with the requirements of condition 30.

Definitions

In this licence, the terms in Table 18 have the meanings defined.

Table 18: Definitions

Term	Definition
acceptance criteria	has the meaning defined in Landfill Definitions
ACN	Australian Company Number
AHD	means the 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	a 12-month period commencing from 1 January until 31 December of the same year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i>
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i> ;
Assessment of Site Contamination NEPM	means the <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> , as amended from time to time
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. “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
contaminated solid waste	has the meaning defined in Landfill Definitions.
controlled waste	has the definition in Environmental Protection (Controlled Waste) Regulations 2004.
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.
<i>E. coli</i>	means <i>Escherichia coli</i> .
emission	has the same meaning given to that term under the EP Act.
environmentally hazardous material	means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm
EP Act	<i>Environmental Protection Act 1986</i> (WA)

Term	Definition
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
IWL	means Integrated Waste Landform
kL	means kilolitres
landfill definitions	means the document entitled "Landfill Waste Classification and Waste Definitions 1996 (as amended December 2009) published by the Chief Executive Officer and as amended from time to time.
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
mbgl	means meters below ground level
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.
PM	means total particulate matter including both solid fragments of material and miniscule droplets of liquid.
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 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 January to 31 March, 1 April to 30 June, 1 July to 30 September, and 1 October to 31 December in the same year.
Schedule 1 to 2	means Schedule of this Licence unless otherwise stated.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
SWL	means standing water level
TSF	means Tailings Storage Facility
USEPA	means United States Environmental Protection Agency
WAD	means weak acid dissociable
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

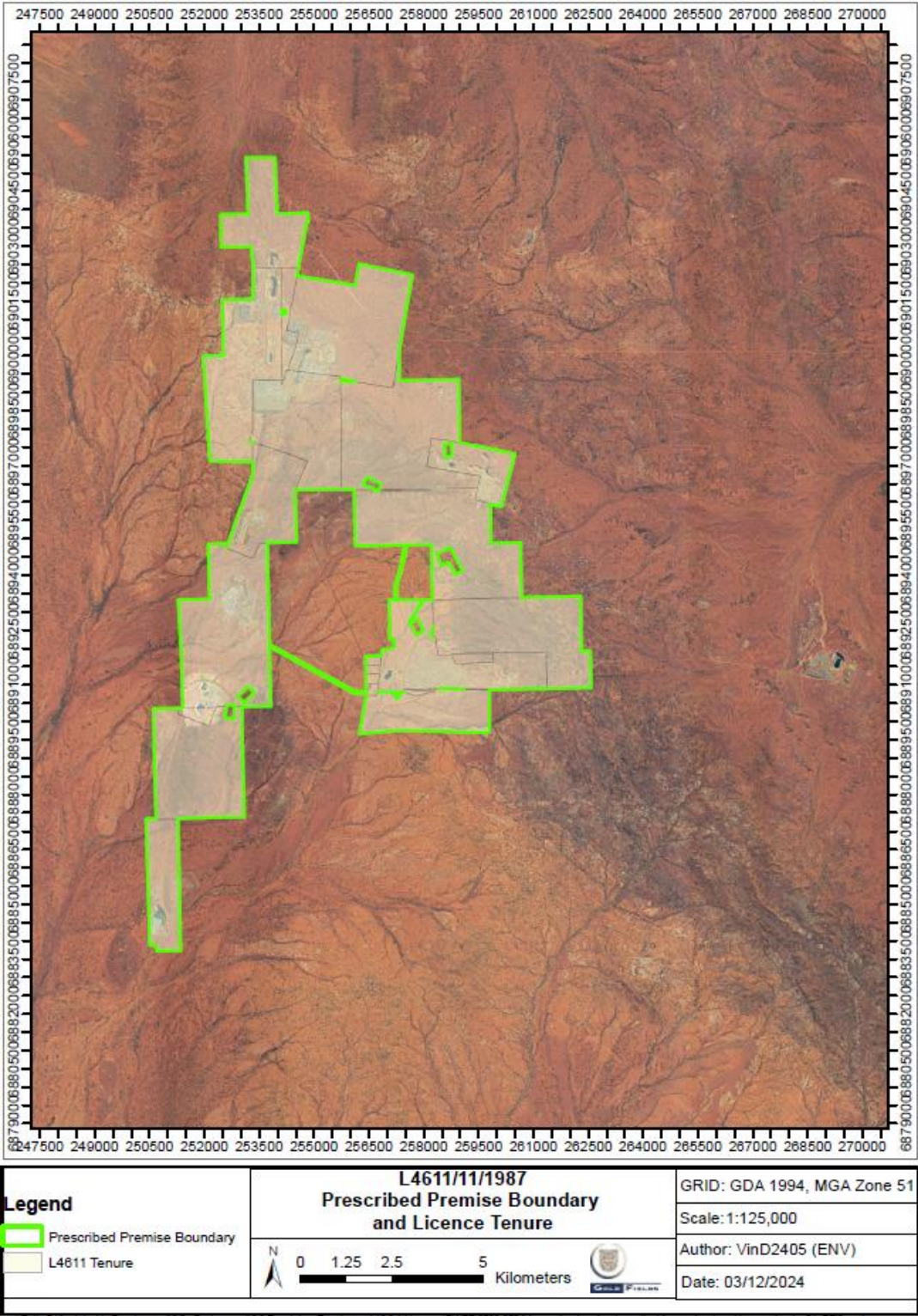


Figure 1: Map of the boundary of the prescribed premises

L4611/1987/11 (Amendment date: 30/05/2025)

IR-T06 Licence template (v7.0) (February 2020)

Map of monitoring bore locations

Monitoring bore locations as defined in Table 13 (Figure 2, Figure 3, Figure 4 and Figure 5).

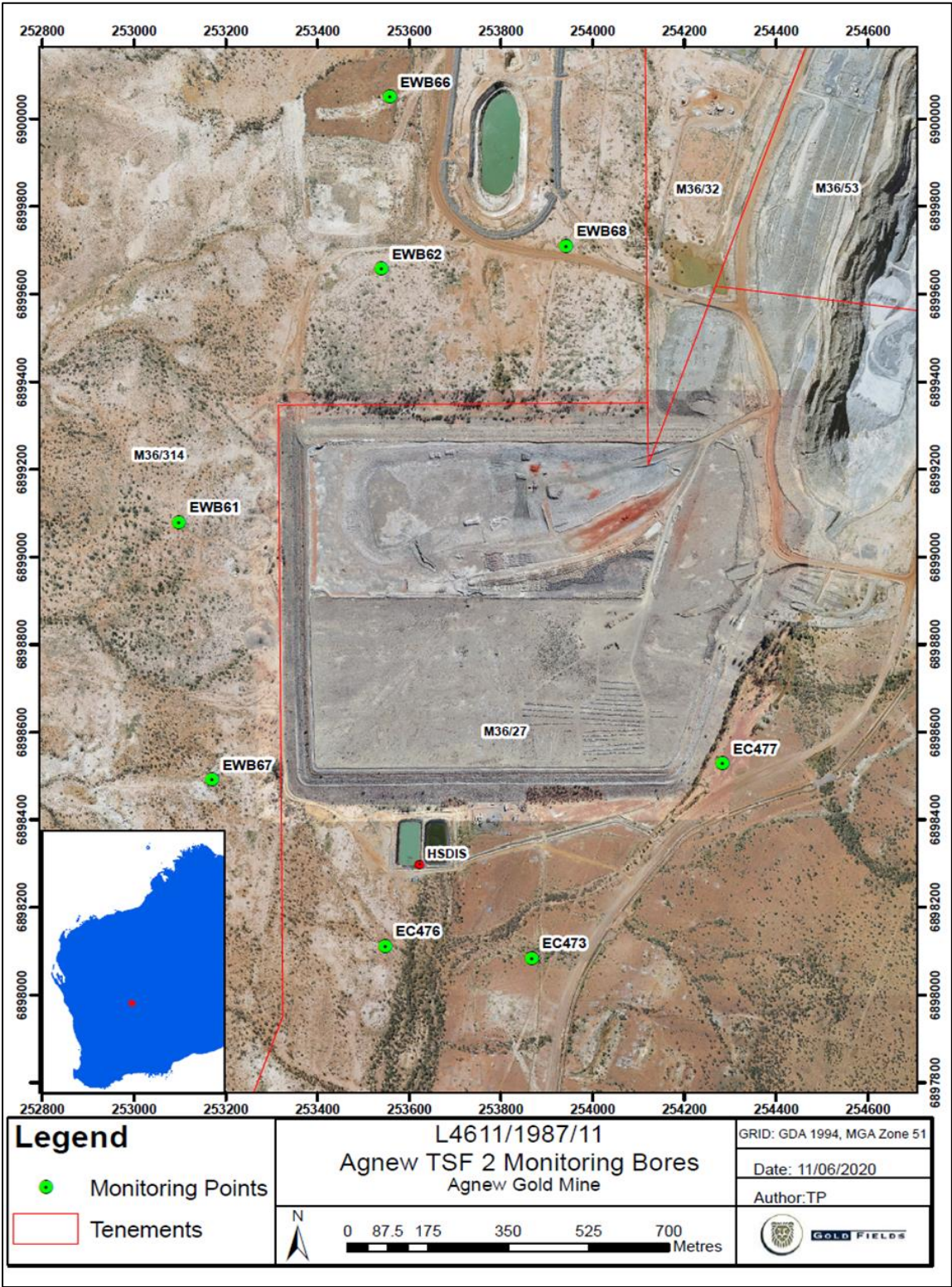


Figure 2: Agnew TSF2 monitoring bore locations

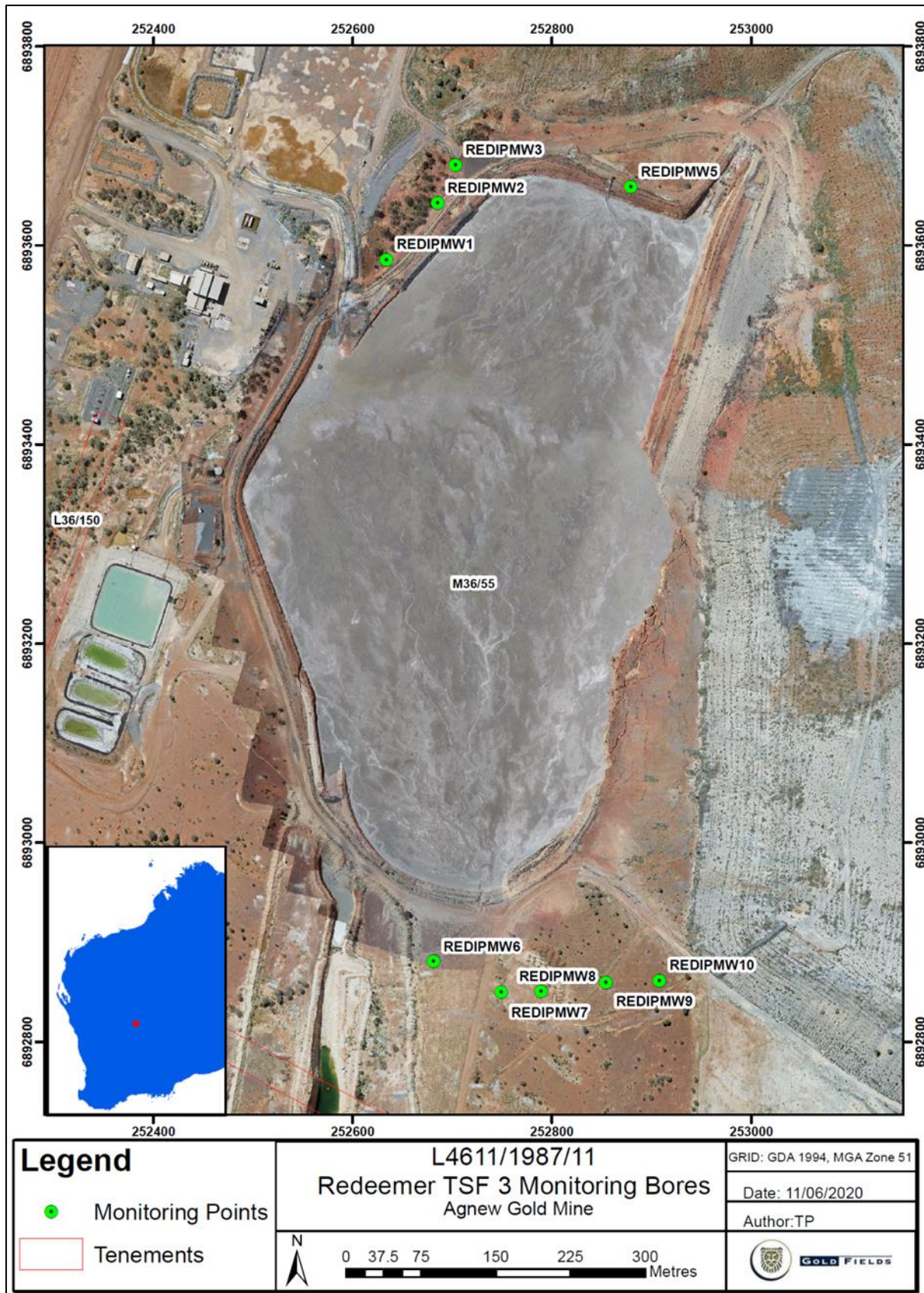


Figure 3: Redeemer TSF3 monitoring bore locations

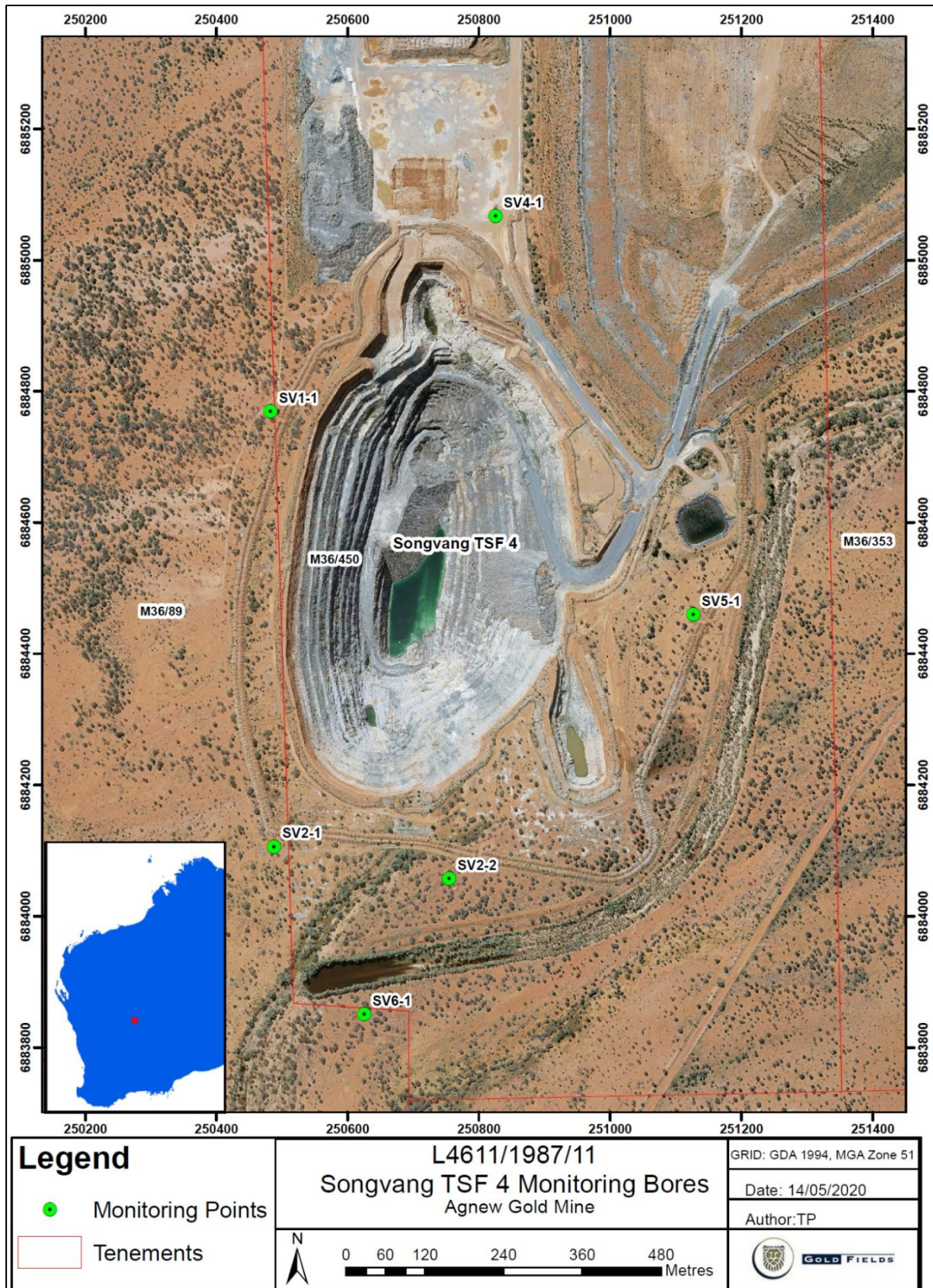


Figure 4: Songvang TSF4 monitoring bore locations

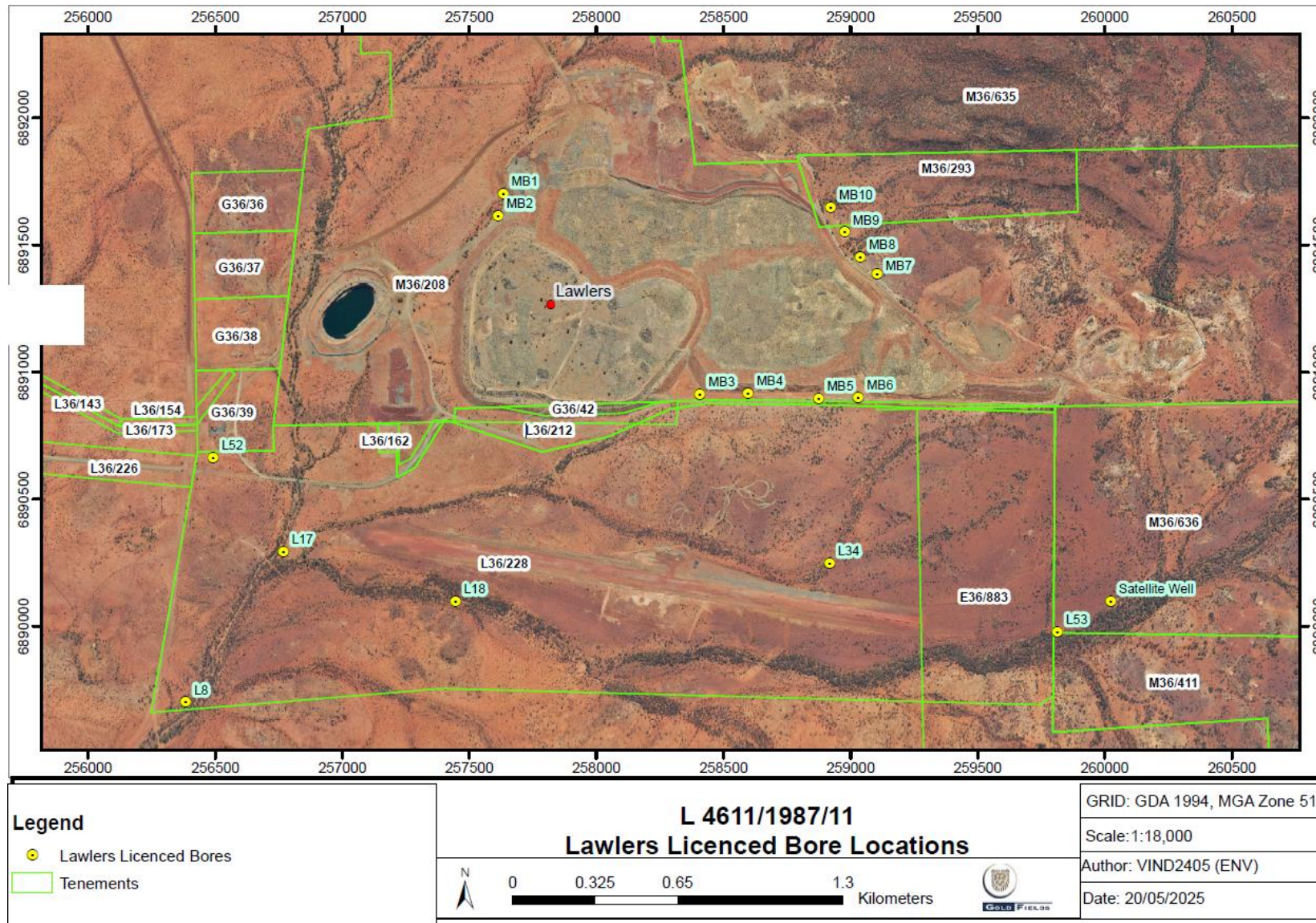


Figure 5: Lawlers TSF3 monitoring bore, L8 and Satellite well locations

L4611/1987/11 (Amendment date: 30/05/2025)

IR-T06 Licence template (v7.0) (February 2020)

Map of landfill locations

Site of New Holland Landfill, Redeemer Landfill, Waroonga Skyway Landfill and Waroonga North Landfill.

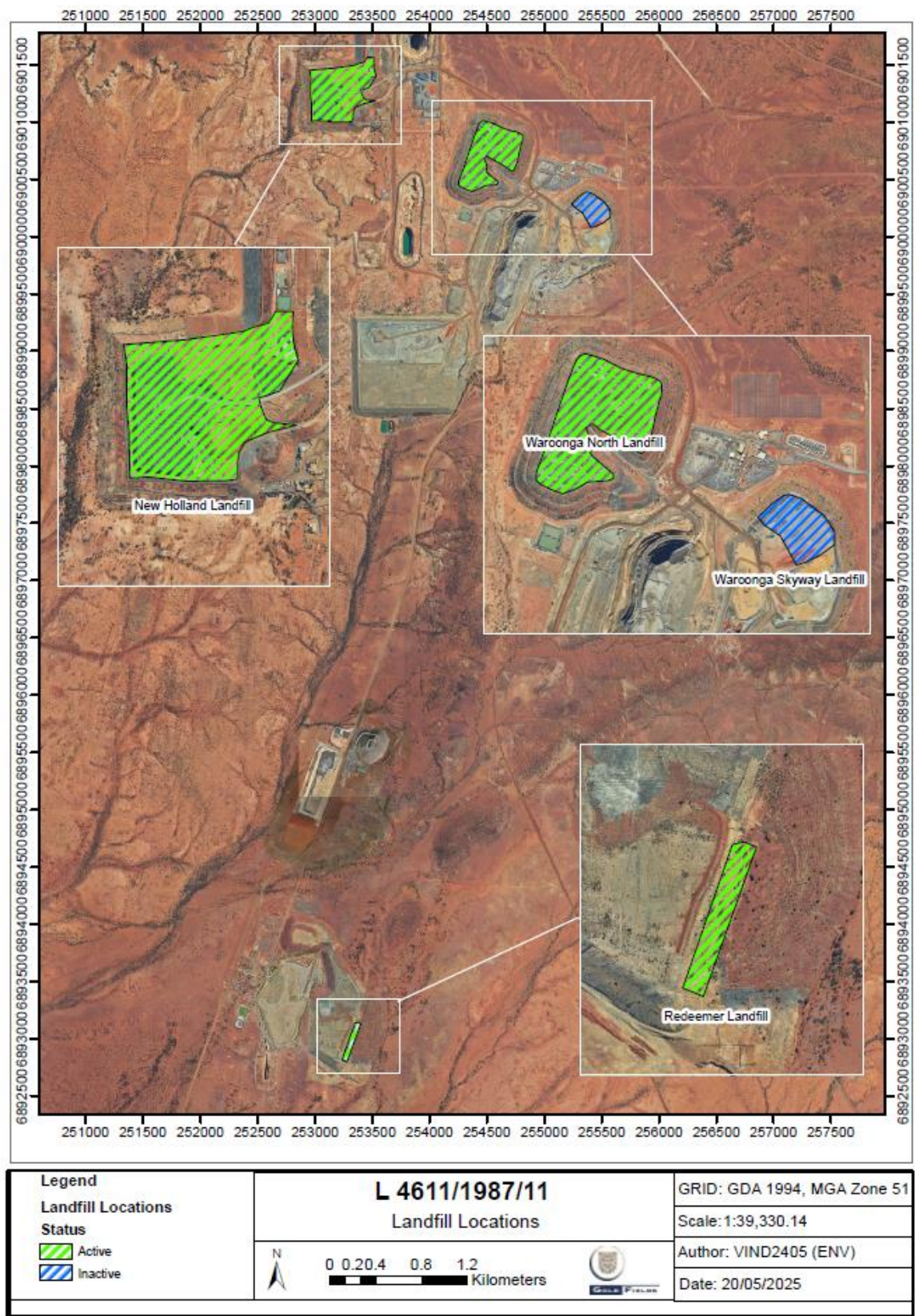


Figure 6: Map of landfill cells

L4611/1987/11 (Amendment date: 30/05/2025)

IR-T06 Licence template (v7.0) (February 2020)

Map of wastewater treatment plant location

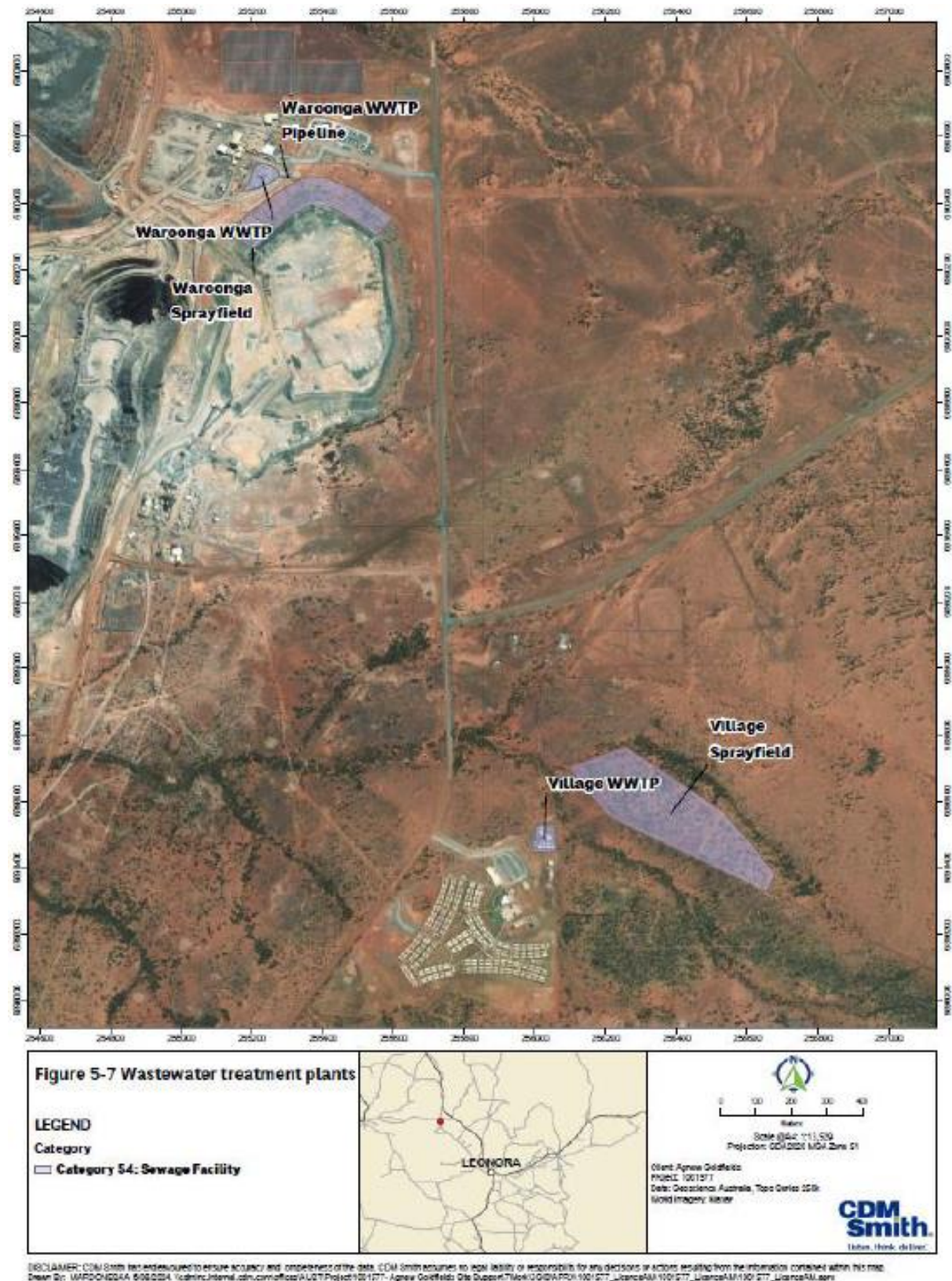


Figure 7: Location of the Waroonga and Village wastewater treatment plant and associated irrigation sprayfields

Other locations



Figure 8: Irrigation tank TK-108 at Village WWTP

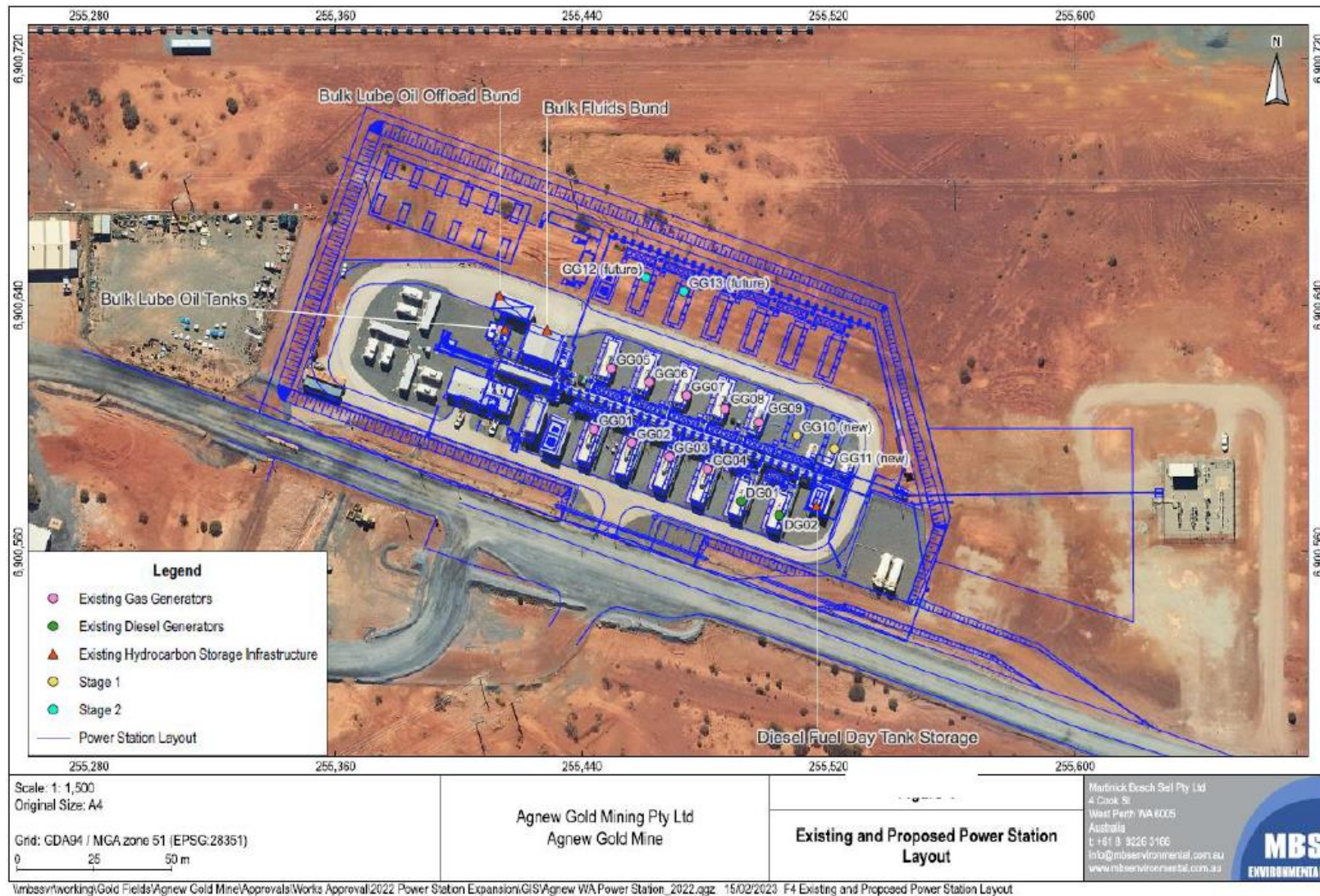


Figure 9: Power station layout

Schedule 2: Construction plans

Construction of dewater discharge pipeline

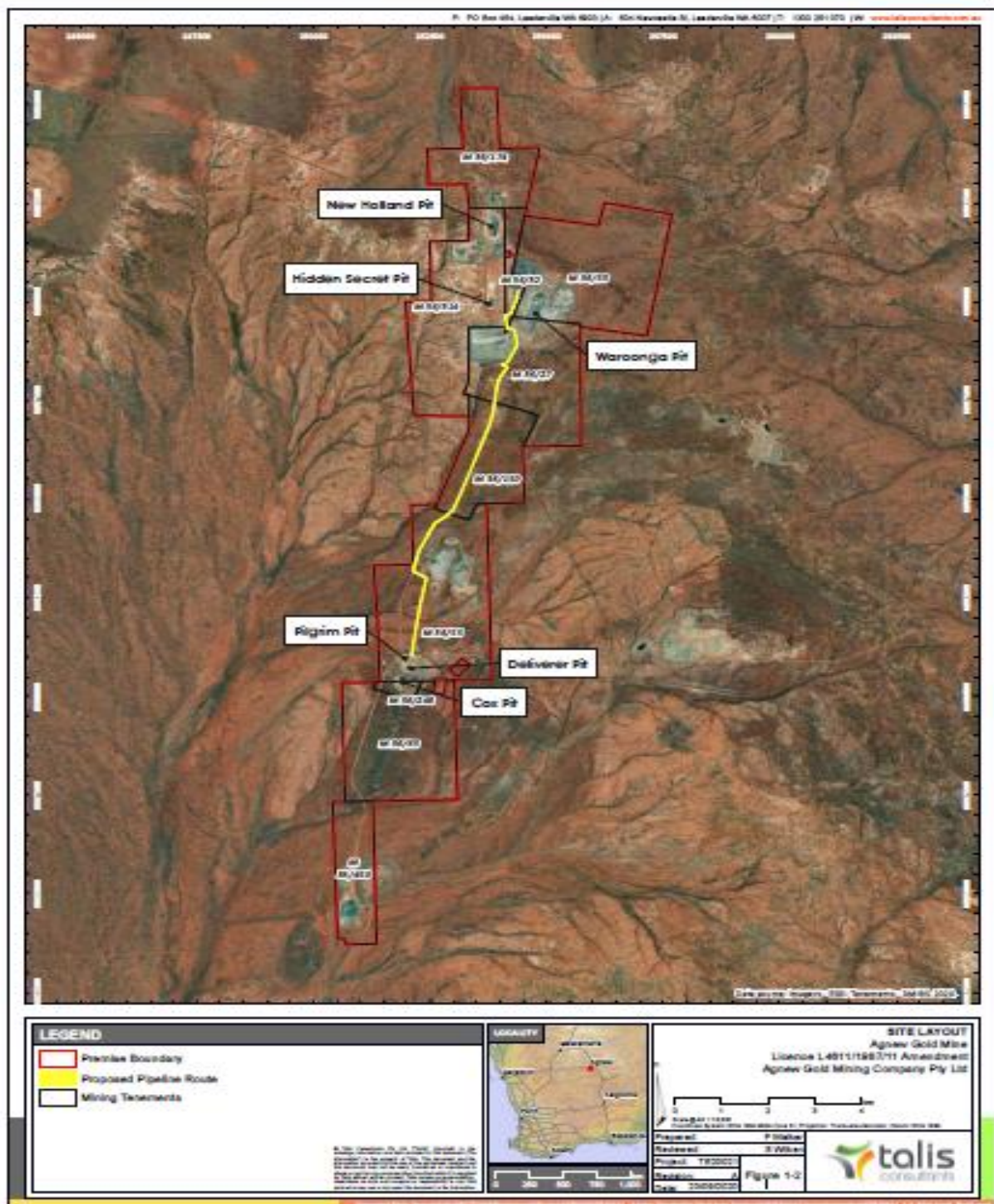


Figure 10: Location of dewater discharge pipeline infrastructure

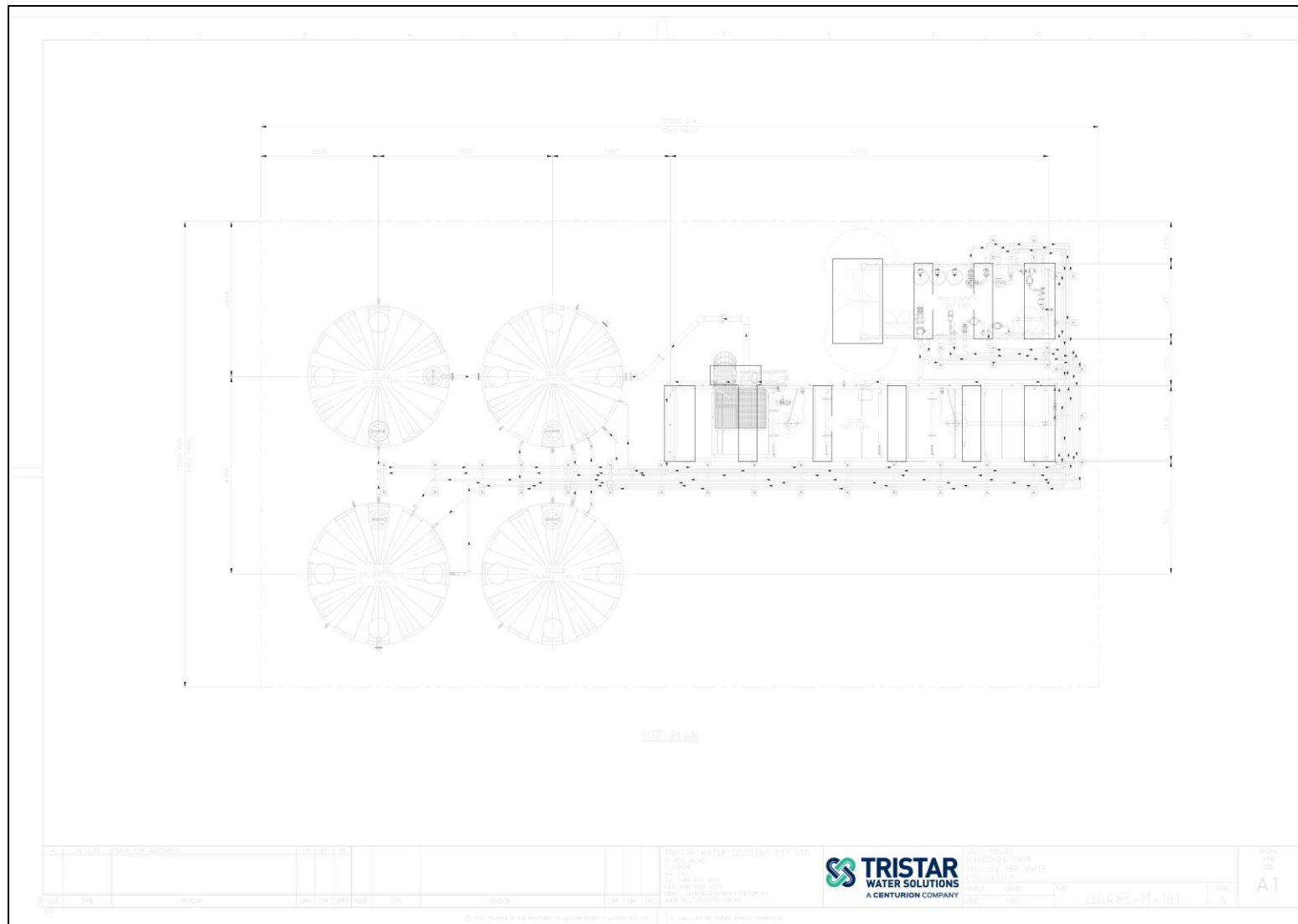


Figure 11: Design layout of Tristar Sequential Batch Reactor WWTP

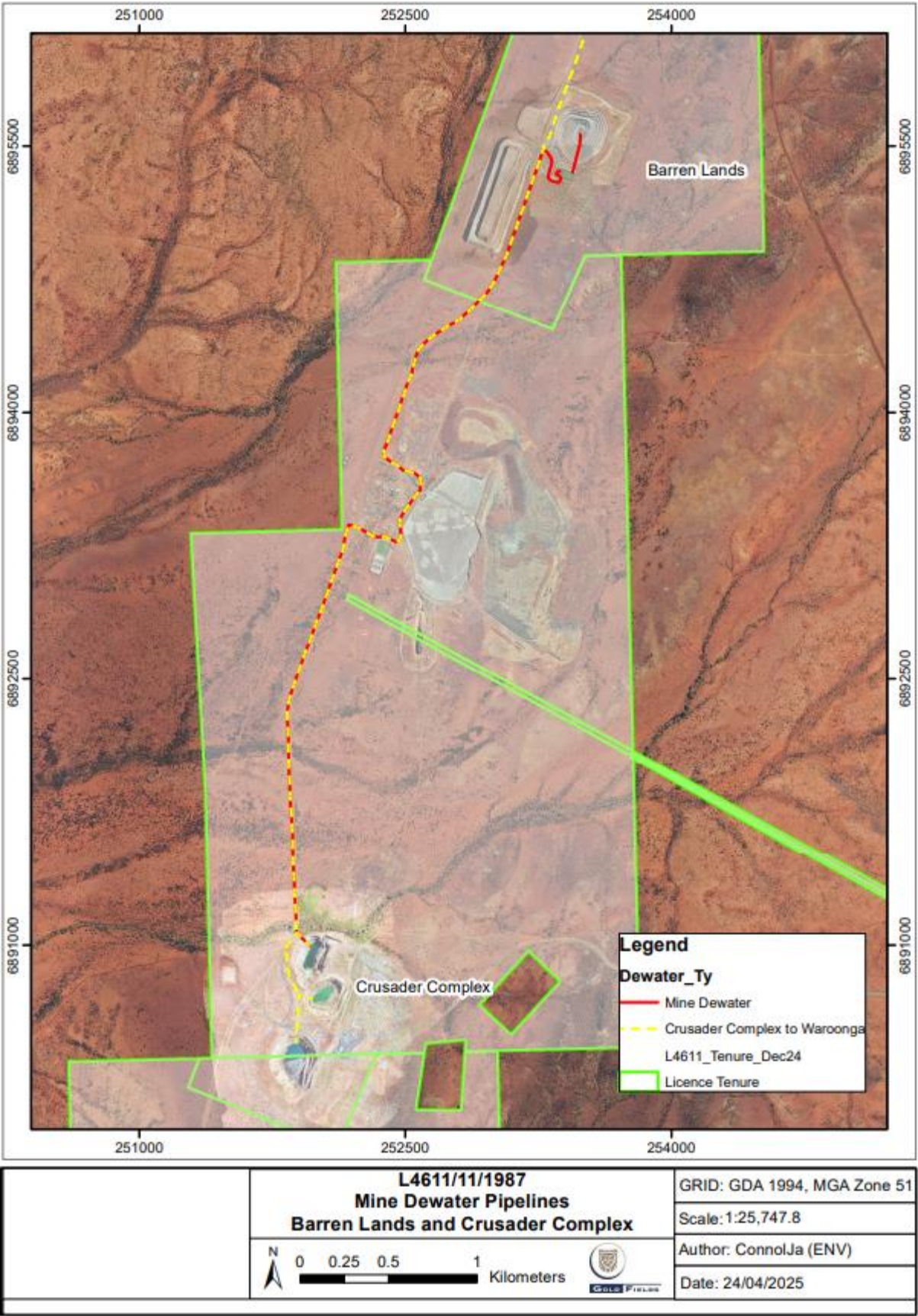


Figure 12: Barren Lands Pit to Crusader Complex pipeline

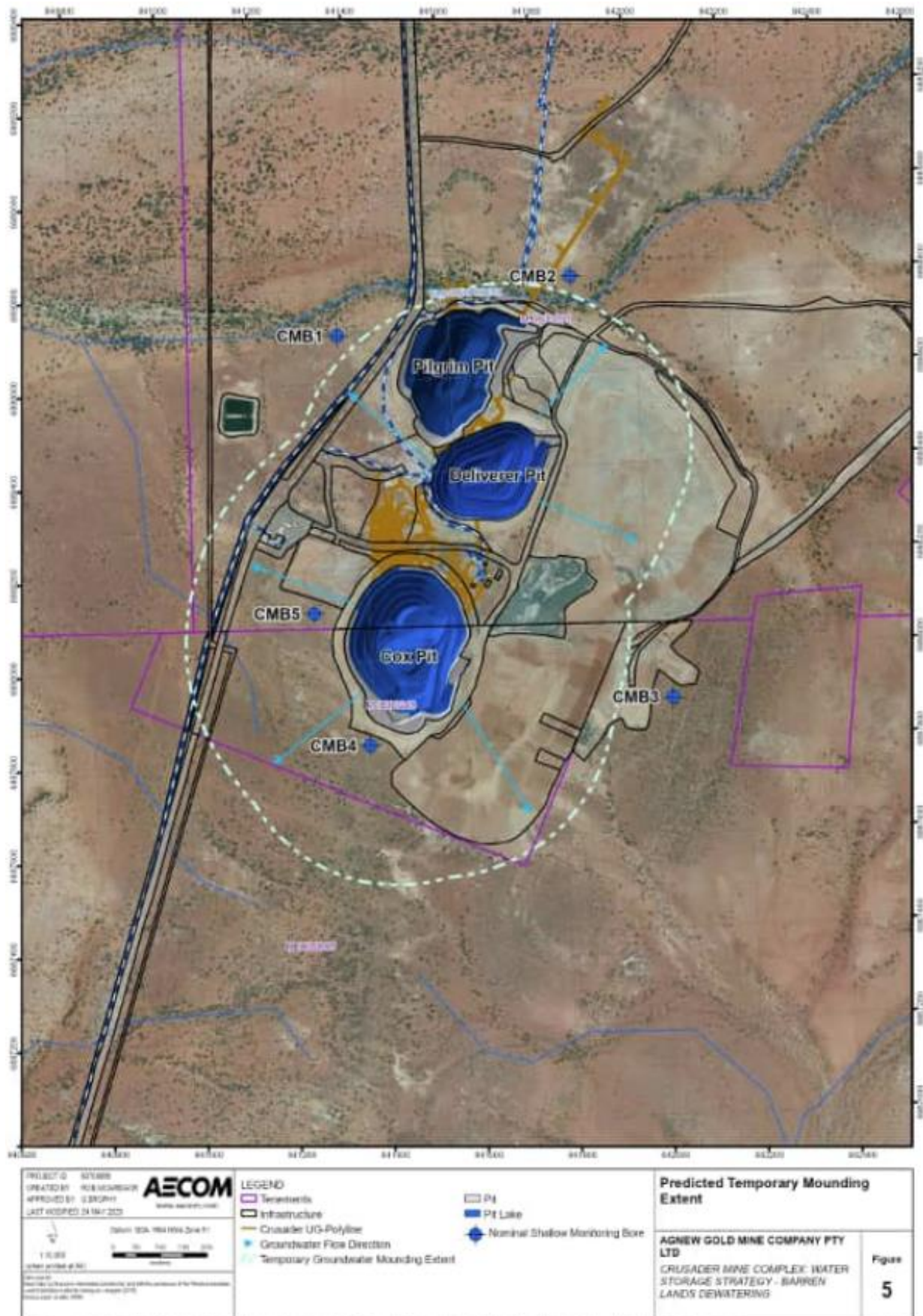


Figure 13: Crusader Complex monitoring bores

Schedule 3: N1 Notification & form

Licence: L4611/1987/11 Licence Holder: Agnew Gold Mining Company Pty Ltd
Form: N1 Date of breach:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

These pages outline the information that the operator must provide.

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

Part A

Licence Number	L4611/1987/11
Name of operator	Agnew Gold Mining Company Pty Ltd
Location of Premises	Leinster WA 6437
Time and date of the detection	

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

Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	
Date and time of event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken , or intended to be taken, to stop any emission	

Description of the failure or accident	
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Part B

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

Name	
Post	
Signature on behalf of: Agnew Gold Mining Company Pty Ltd	
Date	