



Licence number L8249/2008/3

Licence holder Focus Operations Pty Ltd

ACN 115 821 255

Registered business address Level 5, 8 St Georges Terrace
PERTH WA 6000

DWER file number INS-0001497

Duration 27/09/2013 to 28/09/2042

Date of issue 27 September 2013

Date of amendment 1 May 2026

Premises details

Three Mile Hill Gold Project
COOLGARDIE WA 6429
Legal description -

Mining Tenements G15/7, G15/46, M15/23, M15/150, M15/237, M15/277, M15/412, M15/630, M15/827, M15/966, M15/1262, M15/1293, M15/1433, M15/1434, M15/1461, M15/1114, M15/154, M15/645, M15/646, M15/660, M15/958, M15/1294, M15/1432, M15/1788, L15/161, L15/95, L15/459, M15/877 and M15/595

As defined by the premises map 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	1.8 million tonnes per annual period
Category 6: Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore	950,000 tonnes per annual period
Category 12: Screening etc. of material	200,000 tonnes per annual period
Category 89: Putrescible landfill site	4,750 tonnes per annual period

This amended licence is granted to the licence holder, subject to the attached conditions, on 1 May 2026 by:

**SENIOR MANAGER, RESOURCE INDUSTRIES
STATE-WIDE DELIVERY (ENVIRONMENTAL REGULATION)**
Officer delegated under section 20 of the Environmental Protection Act 1986

Licence history

Instrument	Issued	Description
L8249/2008/1	25/09/2008	New application
L8249/2008/1	14/01/2010	Licence amendment to increase dewatering capacity
L8249/2008/1	20/12/2012	Licence amendment to included used tyre disposal conditions and groundwater levels and recovery plan conditions
L8249/2008/2	27/09/2013	Licence reissue
L8249/2008/2	21/11/2013	Licence amendment
L8249/2008/2	11/06/2015	Licence amendment to REFIRE format, to include the discharge from TMHWMB-5 to CNX pit and to change reporting month from September to August
L8249/2008/2	19/11/2020	The department-initiated licence amendment to rectify for Mining Tenement record M15/1114 and to update a site map. The Schedule 2: Reporting & notification forms and Annual audit compliance report proforma sections containing information were also deleted
L8249/2008/3	12/09/2022	Licence amendment to: <ul style="list-style-type: none"> Extend expiry date; Addition of mining tenement M15/1788 and miscellaneous tenement L15/161 to premises boundary; New dewatering infrastructure from Greenfields Pit; and New mine dewatering discharge locations
L8249/2008/3	06/07/2023	Licence amendment for construction and operation of a pipeline route from Lindsays pit to Bayleys dam for temporary dewatering of Lindsays pit (approximately 105,000KL) to provide additional water to the TMH Processing Plan to supplement its startup
L8249/2008/3	10/08/2023	Licence amendment to: <ul style="list-style-type: none"> Increase throughput capacity for category 89: Putrescible landfill site and; Add the construction and operation of Tindal's landfill
L8249/2008/3	03/11/2023	Licence amendment to allow the reprocessing of tailings from Bonnievale (off site)
L8249/2008/3	30/05/2024	Licence amendment to: <ul style="list-style-type: none"> Increase the embankment height at the existing TMH TSF by an additional 6 metres to RL428m (Stage 3); and Construction and operation of the Greenfields In-Pit TSF.
L8249/2008/3	14/10/2025	Licence amendment to: <ul style="list-style-type: none"> Operation of dewatering pipelines Operation of Water Ponds and Dams Operation and/or relocation of landfills Amendment to monitoring bores Installation of standpipes
L8249/2008/3	10/05/2026	Licence amendment for: <ul style="list-style-type: none"> Increase in category 5, 6 and 89 throughputs and addition of category 12 Construction and operation of Three Mile Hill plant upgrades and associated infrastructure Reprocessing of historic tailings and vat leach stockpiles Toll treating of third-party ores Construction and operation of additional dewatering pipelines to Big Blow and Empress pits Operation of two new crushing and screening plants Extension of premises boundary Construction and operation of the Three Mile Hill landfill

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:

General conditions

1. The licence holder must operate and maintain all pollution control and monitoring equipment to the manufacturer’s specification or any relevant and effective internal management system.
2. The licence holder, except where storage is prescribed in the Premises operation section, must ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.
3. The licence holder must immediately recover or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
4. The licence holder must:
 - (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
 - (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.¹

Note 1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.

5. Dust emissions from premises construction works and operations are to be managed via a water cart that is available at the premises at all times.
6. The licence holder must ensure that no visible dust generated from the premises crosses the boundary of the premises.

Premises operation

7. The licence holder must only accept onto the premises material which meets the corresponding requirements set out in Table 1.

Table 1: Material acceptance

Material type	Source	Storage requirements
Gold mine ore	Various surrounding underground and surface gold mines	To be stored at the ROM pad prior to processing in the Three Mile Hill processing plant
Historic tailings	Bonnievale historic mine	
	Perseverance	
	Lady Loch	
	Dreadnought	
	Redemption	
	Golden Bar	

8. The licence holder must ensure that all pipelines containing environmentally hazardous substances are either:
 - (a) equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures;
 - (b) equipped with automatic cut-outs in the event of a pipe failure; or

Department of Water and Environmental Regulation

- (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.
9. The licence holder must ensure that any saline dewatering effluent shall only be disposed of in the following manner:
- used for dust suppression in a manner that minimises damage to surrounding vegetation; or
 - discharged to previously mined pits;
10. The licence holder must ensure that tailings and decant water are only discharged into containment cells, dams, and ponds with the relevant infrastructure requirements and at the locations specified in Table 2.

Table 2: Containment Infrastructure

Containment cell or dam	Material	Infrastructure requirements
Three Mile Hill In-Pit TSF	Tailings	Constructed with a permeability of 10^{-7} m/s
CIL TSF	Tailings	Lined with in-situ clay to limit seepage to groundwater
Process water pond	<ul style="list-style-type: none"> Process water Mine dewater Underground mine dewater Borefield water 	<ul style="list-style-type: none"> Lined with HDPE liner to achieve a permeability of 10^{-9} m/s. Constructed with a minimum operational freeboard of 500 mm.
Bayley's dam	<ul style="list-style-type: none"> Underground mine dewater and dewater of no more than 105,000 KL from Lindsays Pit. Process Water Borefield Water 	Lined with HDPE liner to achieve a permeability of 10^{-9} m/s
Gravity dam	<ul style="list-style-type: none"> Underground mine dewater Mine Dewater Borefield Water Process / tailings decant water 	<ul style="list-style-type: none"> Lined with HDPE liner to achieve a permeability of 10^{-9} m/s A minimal operational freeboard of 500 mm to be maintained
Greenfields In-Pit TSF	Tailings	Constructed with a permeability equal to, or less, than 10^{-7} m/s.
Bonnievale Water Ponds	<ul style="list-style-type: none"> Underground mine dewater Borefield Water 	<ul style="list-style-type: none"> Constructed of compacted clay material and lined with HDPE. A minimum operational freeboard of 200 mm to be maintained on both ponds. Ponds to be inspected daily to ensure freeboard capacity.

11. The licence holder must manage containment cells, dams, ponds and turkey's nests in Table 2 such that:
- a minimum top of embankment freeboard of 500 mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained; and
 - methods of operation minimise the likelihood of erosion of the embankments by wave action.

Department of Water and Environmental Regulation

12. The licence holder must manage TSFs such that:
- a 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; and
 - the supernatant pond on the TSF is minimised as far as practicable.
13. The licence holder must undertake monitoring of the water balance for the TSFs specified in Condition 10 for each monthly period, and (as a minimum) record the following information:
- Site rainfall;
 - Evaporation rate;
 - Decant water recovery volumes;
 - Volume of tailings deposited; and
 - Estimate of seepage losses.
14. The licence holder must:
- undertake inspections as detailed in Table 3;
 - where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and
 - maintain a record of all inspections undertaken.

Table 3: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	<ul style="list-style-type: none"> Daily whilst in operation Weekly whilst in Care and Maintenance
Return water lines	Visual integrity	
Embankment freeboard	Visual to confirm required freeboard capacity is available	
Decant system	Visual integrity	
Dewatering pipelines	Visual integrity	
Borefield pipelines and pump stations	Visual integrity	
Bayley's dam	Visual to confirm required freeboard capacity is available	<ul style="list-style-type: none"> Daily whilst in operation Weekly whilst in Care and Maintenance Monitored during or immediately after heavy rainfall events.
Gravity Dam	Visual to confirm required freeboard capacity is available.	<ul style="list-style-type: none"> Daily whilst in operation Weekly whilst in Care and Maintenance Monitored during or immediately after heavy rainfall events.
Process Water Pond	Ponds to be inspected visually to ensure freeboard capacity.	Daily whilst in operation
Bonnievale Water Ponds		

Waste processing and operations

15. The licence holder must ensure that where wastes produced on the Premises which are not taken off-site for lawful use or disposal, they are managed in accordance with the requirements of Table 4.

Table 4: Management of waste

Waste type	Process(es)	Process Limits
Inert Waste Type 1	Disposal of waste by landfilling	<p><u>All waste types</u></p> <p>Storage of waste shall only take place within the landfill / waste dump areas shown in Schedule 1, Figure 7, Figure 8, Figure 9, Figure 10 and Figure 11.</p> <p>The licence holder must manage the landfill sites in a manner such that:</p> <ul style="list-style-type: none"> • Adequate measures shall be implemented to ensure that waste is contained within the landfill containment infrastructure. • Waste shall be stored within a defined trench or within an area enclosed by earth bunds. • Tipping area shall be less than 30 metres in length. • Each trench to have the dimensions of 30 m long, 2 m wide and 3 m deep. • A suitable barrier is maintained to prevent windblown waste leaving the trench. • Signage installed and clearly visible at the landfill identifying the following as a minimum: <ul style="list-style-type: none"> i. wastes that may be accepted; and ii. wastes that are not to be accepted. • No waste is to be burnt and fire fighting gear shall be readily available.
Inert Waste Type 2		
Putrescible waste ¹		
Clean Fill		
Special Wastes Type 1		<p><u>Used Tyres</u></p> <p>The licence holder must ensure that the following criteria are met when used tyres are buried:</p> <ul style="list-style-type: none"> • Used tyres from the premises shall only be buried at the Dreadnought waste rock dump and Bonnievale south landfill in the area depicted in Schedule 1, Figures 8 and 9 and labelled as 'Waste Dump'. • Not more than 2000 tyres are to be buried within the Dreadnought waste dump within any 12-month period. • Not more than 500 tyres are to be buried within the Bonnievale south landfill within any 12-month period. • The location of all tyre burial areas within the Dreadnought waste rock dump and Bonnievale south landfill shall be accurately recorded with GPS coordinates.

Waste type	Process(es)	Process Limits
Special Wastes Type 1 (continued)	Disposal of waste by landfilling	<p><u>Conveyor Rubber</u></p> <p>The licence holder must ensure that the following criteria are met when conveyor rubber is buried:</p> <ul style="list-style-type: none"> Conveyor rubber from the premises shall only be buried at the Greenfields or Three Mile Hill landfills depicted in Figure 11. Not more than 20 tonnes per annum of rubber is to be buried within the Greenfields or Three Mile Hill landfills within any 12-month period. <p><u>Special Wastes Type 1 – (Asbestos waste)</u></p> <p>The licence holder must ensure that the following criteria are met when asbestos waste is buried:</p> <ul style="list-style-type: none"> Asbestos waste shall only be disposed of into a designated asbestos disposal area within the Greenfields, Dreadnought or Bonnievale south landfills. The location of all asbestos burial areas within the Dreadnought, Greenfields and Bonnievale south landfills shall be accurately recorded with GPS coordinates. Disposal must not be within 2 m of the final tipping surface of the landfill. Must be wrapped in heavy duty plastic prior to acceptance at the landfills. No works shall be carried out on the landfills that could lead to a release of asbestos fibres.

Note 1: Defined in the Landfill Definitions

Note 2: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 3: Additional requirements for landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

16. The licence holder must ensure that cover is applied and maintained on landfilled wastes in accordance with Table 5 and that sufficient stockpiles of cover are maintained on site at all times.

Table 5: Cover Requirements¹

Waste Type	Cover requirements
Putrescible wastes	Waste is covered monthly with sufficient depth to ensure the waste is completely covered and that no waste is exposed.
Inert Waste Type 1	No cover required
Inert Waste Type 2 (Tyres ¹)	A minimum depth of 500 mm of soil is maintained over all the Inert Waste Type 2 following disposal.
Special Waste Type 1	To be covered with 300 mm of soil or 1000 mm of Inert Waste Type 1 as soon as practicable and before compaction.

Note 1: Additional requirements for final cover of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

17. The licence holder must take all reasonable and practical measures to ensure that no wind-blow waste escapes from the Premises and that wind-blown waste is collected on at least a weekly basis and returned to the tipping area.

Infrastructure and equipment

Construction

18. The licence holder must construct the infrastructure listed in Table 6, in accordance with:
- (a) the corresponding design and construction requirement; and
 - (b) at the corresponding infrastructure location, as set out in Table 6.

Table 6: Design and construction requirements

Item	Infrastructure	Design and construction requirements	Infrastructure location
1.	Dewatering pipeline from Greenfields Pit to CNX Pits	<ul style="list-style-type: none"> a) Constructed with DN160 PN16 poly pipe; and b) Constructed to meet requirements of condition 8. 	As shown in Schedule 1, Figure 6
2.	Embankment height raise at existing TMH TSF	<p>TSF:</p> <ul style="list-style-type: none"> (a) Tailings storage capacity of approximately 2,730,000 tonnes; (b) Embankment elevation from RL422 m up to RL428 m; (c) Embankment to be constructed with a low-permeability clay zone and waste material on either side of the low-permeability zone; (d) North embankment comprises a low-permeability core surrounded by waste rock; (e) South embankment comprises a low-permeability zone on the upstream side to be constructed against the existing WRD on the downstream side. A layer of erosion protection is to be placed on the upstream side of the low-permeability zone (f) Stage 3 north embankment will be raised upstream and partially founded on tailings. <p>Stormwater controls:</p> <ul style="list-style-type: none"> (a) 1:100 AEP, 72-hour runoff storm capacity; and (b) Total freeboard 500 mm with sub-minimum of 300 mm operational freeboard <p>VWPs:</p> <ul style="list-style-type: none"> (a) 5 monitoring sections, with different numbers of VWPs in each section. <p>Pipelines:</p> <ul style="list-style-type: none"> (a) Tailings pipelines and decant return pipelines fitted with pressure monitors and automatic shut off valves; (b) Tailings pipelines and decant return pipelines located in a V drain or bunded area; and (c) Flow meter on the decant pipeline. 	As shown in Schedule 1, Figure 12 and Figure 20.

Item	Infrastructure	Design and construction requirements	Infrastructure location
3.	Greenfields In-Pit TSF	<p>TSF:</p> <ul style="list-style-type: none"> (a) Conversion of Greenfields Pit to Greenfield In-Pit TSF; and (b) Tailings storage capacity of approximately 6,570,000 tonnes. <p>Stormwater controls:</p> <ul style="list-style-type: none"> (a) 1:100 AEP, 72-hour runoff storm capacity; (b) Total freeboard 500 mm with sub-minimum of 300 mm operational freeboard; and (c) Flood control bund breaks with competent rock armour located at the main streamlines entering the pit to assist in drainage of surface rainfall-runoff water from the external catchment area above the pit. The rainfall-runoff water will then eventually flow into the Greenfields In-Pit TSF supernatant pond and be pumped back to the TMH Processing Plant for reuse. <p>Pipelines:</p> <ul style="list-style-type: none"> (a) Tailings pipelines and decant return pipelines fitted with pressure monitors and automatic shut off valves; (b) Tailings pipelines and decant return pipelines located in a V drain or bunded area; and (c) Flow meter on the decant pipeline. <p>Installation of three ambient groundwater monitoring bores¹ prior to discharge of tailings into Greenfields In-Pit TSF, to establish baseline concentrations:</p> <ul style="list-style-type: none"> (a) IPTSFMB1 (b) IPTSFMB2 (c) IPTSFMB3 <p>Note 1: Monitoring bores must be installed in accordance with the requirements specified in Schedule 3</p>	As shown in Schedule 1, Figure 13.
4.	Standpipes	<ul style="list-style-type: none"> (a) The standpipe to be comprised a pump (submersible or floating from pits), genset and pipeline from the water source to a standpipe. (b) The standpipe to be installed as a modular system and secured at the base to prevent toppling. (c) The standpipe to be located within a bunded area. (d) Flow to be manually controlled by the water cart operator (gate valve) and/or with telemetry (button press start and stop). (e) Flow rate to be determined by pump installation (4-8 inches, dependent on-site requirements). 	As shown in Schedule 1, Figure 15

Department of Water and Environmental Regulation

Item	Infrastructure	Design and construction requirements	Infrastructure location
5.	Three Mill Hill Plant Upgrade	<p>(a) Three Mile Hill Plant upgrade to be constructed in accordance with Figure 21, Schedule 1.</p> <p>(b) The Three Mile Hill Plant upgrade with a design capacity of 1.8 mtpa to include:</p> <ul style="list-style-type: none"> i) Product screen replacement ii) Larger gravity screen iii) Larger trash screen iv) Elution capacity 2.4 t to 6 t v) Second oxygen pump installation vi) ROM bin refurbishment 	As shown in Schedule 1, Figure 21
6.	Dewatering pipeline to the Empress and Big Blow Pits	<p>(a) High density Poly-ethylene (HDPE) pipelines to the Empress and Big Blow pits</p> <p>(b) Dewatering pipelines located in a V drain or bunded area</p> <p>(c) Dewatering pipelines fitted with pressure monitors and automatic shut off valves</p> <p>(d) Scour pits to be placed at low points along the pipeline route with adequate capacity to contain any spill for a period equal to the time between routine inspections</p> <p>(e) Dust suppression using water carts must be undertaken during construction / installation</p>	As shown in Schedule 1, Figure 5
7.	Washdown bays, oily water separators and refuse drying pads	<p>(a) Washdown bays constructed on an impermeable surface (either concrete or modular steel/aluminium trays)</p> <p>(b) Sides are constructed to a height of approximately 300 mm</p> <p>(c) Drying cells constructed of compacted waste rock</p> <p>(d) Drying cells to retain a perimeter bund up to 1 meter in height to prevent water ingress or egress</p>	As shown in Schedule 1, Figure 22
8.	Three Mile Hill and Dreadnought landfills	<p>(a) The perimeter bund to be installed to the height of a dumped load of waste rock (1.8 – 2 m high)</p> <p>(b) Tipping area is less than 30 m in length</p> <p>(c) Landfill is not constructed within 100 m of a surface water feature</p> <p>(d) Base of the landfill is at least 3 m above groundwater level</p> <p>(e) Windrows / bunding constructed and maintained to divert stormwater around the landfill cells</p>	As shown in Schedule 1, Figure 11

- 19.** The licence holder must within 30 days of each item of infrastructure required by condition 18 being constructed:
- (a) undertake an audit of their compliance with the requirements of condition 18; and
 - (b) prepare and submit to the CEO an audit report on that compliance.
- 20.** The report required by condition 19 must:
- (a) be certified by a suitably qualified professional that each item of infrastructure listed in Table 6 meets the corresponding specifications and at the locations set out in Table 6 and has been constructed with no material defects;
 - (b) contain as constructed plans or photographs for the works; and
 - (c) be signed by a person authorised to represent the licence holder and contains the printed name and the position of that person within the company.

Department of Water and Environmental Regulation

21. The licence holder must operate the infrastructure specified in condition 18, Table 6 in accordance with the conditions of this Licence, following submission of the compliance documents required under condition 20.

Operation

22. The Licence Holder must ensure that the premises infrastructure and equipment listed in Table 7 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 7.

Table 7: Infrastructure and equipment requirements during operations

Item	Infrastructure	Infrastructure requirements	Infrastructure location
1.	Mobile crushing and screening plants and associated stockpiles	<ul style="list-style-type: none"> Plants to be maintained in accordance with manufacturers specifications. Water cart must be present at all times during operation to manage dust emissions. Stockpiles of material to be wetted down before crushing and screening occurs as required to reduce dust emissions. Contaminated or potentially contaminated stormwater from within the crushing and screening processing area to be captured and prevented from being released into the environment. Volume of ore processed to be recorded. 	Schedule 1, Figure 16
2.	Oily Water Separators	<ul style="list-style-type: none"> Oily wastewater to be directed to an Intermediate Bulk Container for off-site disposal Treated water to be directed to tanks for dust suppression 	Schedule 1, Figure 17

Emissions and discharges

General

23. The licence holder must record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of the Emissions and discharges section of this Licence.

Emissions to land

24. The licence holder is permitted, subject to conditions in the Licence, to emit waste to land through the emissions points listed in Table 8 and identified in locations listed in Table 8.

Table 8: Emissions to land

Emission point reference and location on Map of emission points	Description	Source including abatement	Infrastructure location
CNX Pit	Receiving environment – previously mined pit	<ul style="list-style-type: none"> Water from dewatering of bore 5 Water from Greenfields Pit. 	As shown in Schedule 1, Figure 6
Brilliant Pit	Receiving environment – previously mined pit	Water from dewatering of Alicia and Dreadnought open pits and Tindals underground mine	As shown in Schedule 1, Figure 6.
Big Blow Pit	Receiving environment – previously mined pit		As shown in Schedule 1, Figure 6
Empress Pit	Receiving environment – previously mined pit		As shown in Schedule 1, Figure 6

25. The licence holder must not cause or allow emissions to land greater than the limits specified in Table 9.

Table 9: Emissions to land - limits

Emission point reference	Parameter	Limit (including units)	Averaging period
Brilliant pit, Empress pit and Big Blow pit.	Freeboard	4 m below crest level	Spot sample
CNX pit	Weak acid dissociable cyanide	0.5 mg/L	
Oily water separator (OWS) reclaim water	Total Petroleum Hydrocarbons	< 15 mg/l	Quarterly

26. The licence holder must target emissions to land at or below the levels specified in Table 10.

Table 10: Emission targets to land

Emission point reference	Parameter	Target (including units)	Averaging period
Brilliant pit, CNX pit, Empress pit and Big Blow pit.	Freeboard	6 m below crest level	Spot sample

Monitoring

General monitoring

27. 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.

Department of Water and Environmental Regulation

28. The licence holder must ensure that:
- quarterly monitoring is undertaken at least 45 days apart; and
 - six monthly monitoring is undertaken at least 5 months apart;

Monitoring of emissions to land

29. The licence holder must undertake the monitoring in Table 11 according to the specifications in that table.

Table 11: Monitoring of emissions to land

Emission point reference	Parameter	Units	Frequency
<ul style="list-style-type: none"> • CNX pit • Brilliant pit • Empress pit • Big Blow pit 	Volumetric flow rate	kL	Monthly
	Freeboard	metres below crest level	
	pH ¹	-	Quarterly
	TDS ¹		
<ul style="list-style-type: none"> • CNX pit • Brilliant pit 	Total cyanide	mg/L	
	WAD cyanide		
	Cadmium (Cd), copper (Cu), lead (Pb), mercury (Hg), zinc (Zn), arsenic (As), chromium (Cr), iron (Fe), magnesium (Mg), nickel (Ni), sodium (Na), gold (Au), potassium (K), calcium (Ca) and chloride (Cl)		
Oily water separator (OWS) reclaim water	Total Petroleum Hydrocarbons	mg/L	Quarterly

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

30. The Licence Holder must conduct a soil sampling and data evaluation programme (validation programme¹) across the full footprint of the historic tailings stockpiles, after all tailings have been removed, to assess soil quality and confirm whether any residual impacts remain that could potentially cause adverse effects on the environment, including, but not limited to, impacts to wildlife and livestock in these areas. The validation programme must be designed and carried out in line with the *National Environment Protection (Assessment of Site Contamination) Measure 1999* (ASC NEPM).
31. The Licence Holder must prepare and submit a Validation Report detailing the findings from the investigations carried out under condition 30, within 180 days of the stockpiles being removed. If any residual impacts are identified, the report must also include clear proposals for management and/or clean-up actions, along with defined timeframes for their implementation.

Process monitoring

32. The licence holder must undertake the monitoring in Table 12 according to the specifications in that table.

¹ Licence Holder must ensure to adopt a systematic grid sampling approach for the validation programme

Table 12: Process monitoring

Process description	Parameter	Units	Frequency	Method
Mine dewatering	Cumulative volumes of dewatering water discharge into approved pits	kL	Monthly	None specified
	Cumulative volumes of dewatering water from Lindsays Pit discharged into Bayleys dam.			
	Bonnievale underground excess dewatering water to CNX pit or Lindsays Pit (Roger Springs dewatering line).			
	Bonnievale underground excess dewatering water to Bayley's underground (Roger Springs dewatering line).			
Tailings deposition	Volumes of tailings deposited into respective TSFs (refer to Condition 10)	tonnes	Continuous	
	Volumes of water recovered from respective TSFs (refer to Condition 10)			
	Volume of seepage recovered from respective TSFs (refer to Condition 10)			

33. The licence holder must undertake the monitoring in Table 13 according to the specifications in that table.

Table 13: Monitoring of decant water

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
<ul style="list-style-type: none"> • Decant water from the TMH TSF • Decant water from the CIL TSF • Decant water from the Greenfields In-Pit TSF 	pH ¹	pH units	Spot sample	Six monthly
	TDS ¹	mg/L		
	Total cyanide			
	WAD cyanide			
	Arsenic (As)			
	Bicarbonate (HCO ₃)			
	Cadmium (Cd)			
	Calcium (Ca)			
	Chloride (Cl)			
	Chromium (Cr)			
	Copper (Cu)			
	Gold (Au)			
	Iron (Fe)			
Lead (Pb)				

Department of Water and Environmental Regulation

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
	Magnesium (Mg)			
	Mercury (Hg)			
	Nickel (Ni)			
	Potassium (K)			
	Sodium (Na)			
	Sulfate (SO ₄)			
	Zinc (Zn)			

Ambient environmental quality monitoring

34. The licence holder must undertake the monitoring in Table 14 according to the specifications in that table and record and investigate results that do not meet any target specified.

Table 14: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Target	Limit	Units	Averaging period	Frequency
Three Mile Hill in-pit tailings storage facilities	SWL ¹	6	4	mbgl	Spot sample	Quarterly
	pH ²	-	-	pH units		
	TDS ²	-	-	mg/L		
	Total cyanide	-	-	mg/L		
	WAD cyanide	-	-	mg/L		
Groundwater monitoring bores: TMHMB04, TMHMB05, TMHMB06, TMHMB07, TMHMB08, and TMHMB09	Cadmium (Cd), copper (Cu), lead (Pb), mercury (Hg), zinc (Zn), arsenic (As), chromium (Cr), iron (Fe), magnesium (Mg), nickel (Ni), sodium (Na), gold (Au), potassium (K), calcium (Ca) chloride (Cl) ₂ , bicarbonate (HCO ₃) and sulfate (SO ₄)	-	-	mg/L		
Decommissioned flotation and CIL tailings storage facilities	Standing water level (SWL) ¹	-	-	mbgl	Spot Sample	Quarterly
	pH ²	-	-	pH units	Spot Sample	Six monthly
	TDS ²	-	-	mg/L		

Department of Water and Environmental Regulation

Monitoring point reference and location	Parameter	Target	Limit	Units	Averaging period	Frequency
Groundwater monitoring bores: TB4, TB5, SEEP6, SEEP9, SEEP13, SEEP14, GAM6A, GAM7, GAM12, GAM14, GAM16, GAM17, CIL TAIL, FLOT TAIL	Total cyanide	-	-	mg/L		
	WAD cyanide	-	-	mg/L		
Greenfields In-Pit TSF	SWL ¹	6	4	mbgl		
	pH ²	-	-	pH units		
	TDS ²	-	-	mg/L		
	Total cyanide	-	-	mg/L		
	WAD cyanide	-	-	mg/L		
Groundwater monitoring bores: IPTSFMB1, IPTSFMB2, IPTSFMB3	Cadmium (Cd), copper (Cu), Cobalt (Co), lead (Pb), mercury (Hg), zinc (Zn), arsenic (As), chromium (Cr), iron (Fe), magnesium (Mg), nickel (Ni), sodium (Na), gold (Au), potassium (K), calcium (Ca) chloride (Cl), bicarbonate (HCO ₃) and sulfate (SO ₄)	-	-	mg/L	Spot sample	Baseline, prior to tailings deposition then Quarterly thereafter

Note 1: SWL shall be determined prior to the collection of other water samples

Note 2: In-field non-NATA accredited analysis permitted.

- 35.** The licence holder must ensure within six months of becoming aware of standing water levels outside the target range in monitoring bores as per condition 34, design and implement a Groundwater Recovery Plan as per condition 36.
- 36.** The licence holder must ensure that the Groundwater Recovery Plan includes but is not limited to:
- Notification to the CEO of when and in how many bores the target could not be met.
 - Any significant environmental impacts observed;
 - Strategies to achieve the groundwater level target, including predicted increases in groundwater recovery and any additional recovery bores or trenches required;
 - Predicted timeframes to achieve the groundwater level or groundwater quality target; and
 - Strategies to ensure the target will be met in the future.

Records and reporting

Records

- 37.** 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 of 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.
- 38.** The licence holder must:
- (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - (b) prepare and submit to the CEO, by no later than 60 calendar days after the end of that annual period, an Annual Audit Compliance Report in the approved form.
- 39.** 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 of this licence;
 - (c) any maintenance of infrastructure that is performed in the course of complying with condition the Premises Operation section of this licence;
 - (d) monitoring programmes undertaken in accordance with condition 29 Table 11, condition 30 Table 12 and condition 34
 - (e) of the licence; and
 - (f) complaints received under condition 37.
- 40.** The books specified under condition 39 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.

Reporting

- 41.** The licence holder must submit to the CEO an Annual Environmental Report by 31 August after the end of the annual period. The report shall contain the information listed in Table 15 in the format or form specified in that table.

Table 15: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form
-	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
37	Complaints summary	None specified
38	Compliance	Annual Audit Compliance Report (AACR) ¹
29, Table 11	Monitoring of emissions to land	None specified
30, Table 12	Process Monitoring	
34, Table 14	Ambient groundwater monitoring	
-	Measures taken to suppress dust	

Note 1: AACR Form is available on the Department's website

- 42.** The licence holder must ensure that the Annual Environmental Report also contains:
- any relevant process, production or operational data recorded; and
 - an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets.
- 43.** The licence holder must submit the information in Table 16 to the CEO according to the specifications in that table.

Table 16: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties
34, Table 14	Target exceedances	Quarterly	28 calendar days	None specified

Notifications

- 44.** The licence holder must ensure that the parameters listed in Table 17 are notified to the CEO in accordance with the notification requirements of the table.

Table 17: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
23	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	N1
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution		
-	Intention for the site to recommence normal operations from care and maintenance status	At least 30 calendar days prior to site recommencing operations	None specified

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

Note 2: Forms are in Schedule 4

Definitions

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

Table 18: Definitions

Term	Definition
Act	means the <i>Environmental Protection Act 1986</i> .
annual period	means the inclusive period from 1 July until 30 June in the following year.
ASC NEPM	means document titled " <i>National Environment Protection (Assessment of Site Contamination) Measure</i> " published by the National Environmental Protection Council.
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> .
CEO	means Chief Executive Officer of the Department of Water and Environmental Regulation.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General <i>Department administering the Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
code of practice for the storage and handling of dangerous goods	means document titled " <i>Storage and handling of dangerous goods: Code of Practice</i> " published by the Department of Mines, Industry Regulation and Safety, as amended from time to time.
controlled waste	has the definition in <i>Environmental Protection (Controlled Waste) Regulations 2004</i> .
dangerous goods	has the meaning defined in the <i>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007</i> .
Dreadnought waste rock dump	means the tyre disposal area depicted in Schedule 1.
Dreadnought	means the landfill area depicted in Schedule 1.

Department of Water and Environmental Regulation

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. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines, Industry Regulation and Safety.
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
fugitive emissions	means all emissions not arising from point sources.
Licence	means this Licence numbered L8249/2008/3 and issued under the Act.
Licence holder	means the person or organisation named as Licensee on page 1 of the Licence.
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
Premises	means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence.
quarterly	means the 4 inclusive periods from 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March and 1 April to 30 June.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
Schedule 3	means Schedule 3 of this Licence unless otherwise stated.
Schedule 4	means Schedule 4 of this Licence unless otherwise stated.
six monthly	means the 2 inclusive periods from 1 July to 31 December and 1 January to 30 June in the following year.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
TDS	Total Dissolved Solids
SWL	Standing Water Levels
WAD cyanide	Weak Acid Dissociable Cyanide

Schedule 1: Maps

Premises map

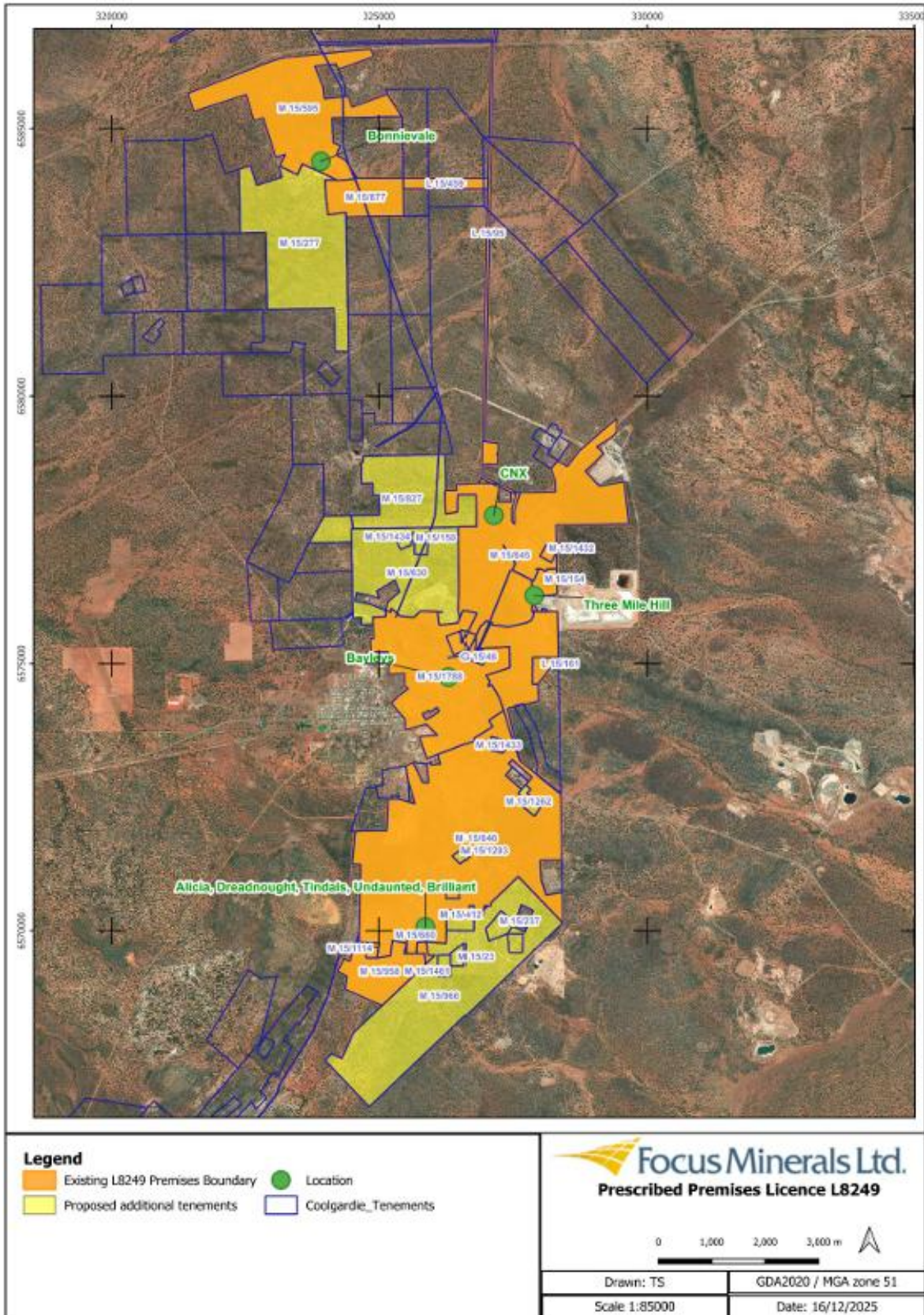


Figure 1: Prescribed premises map

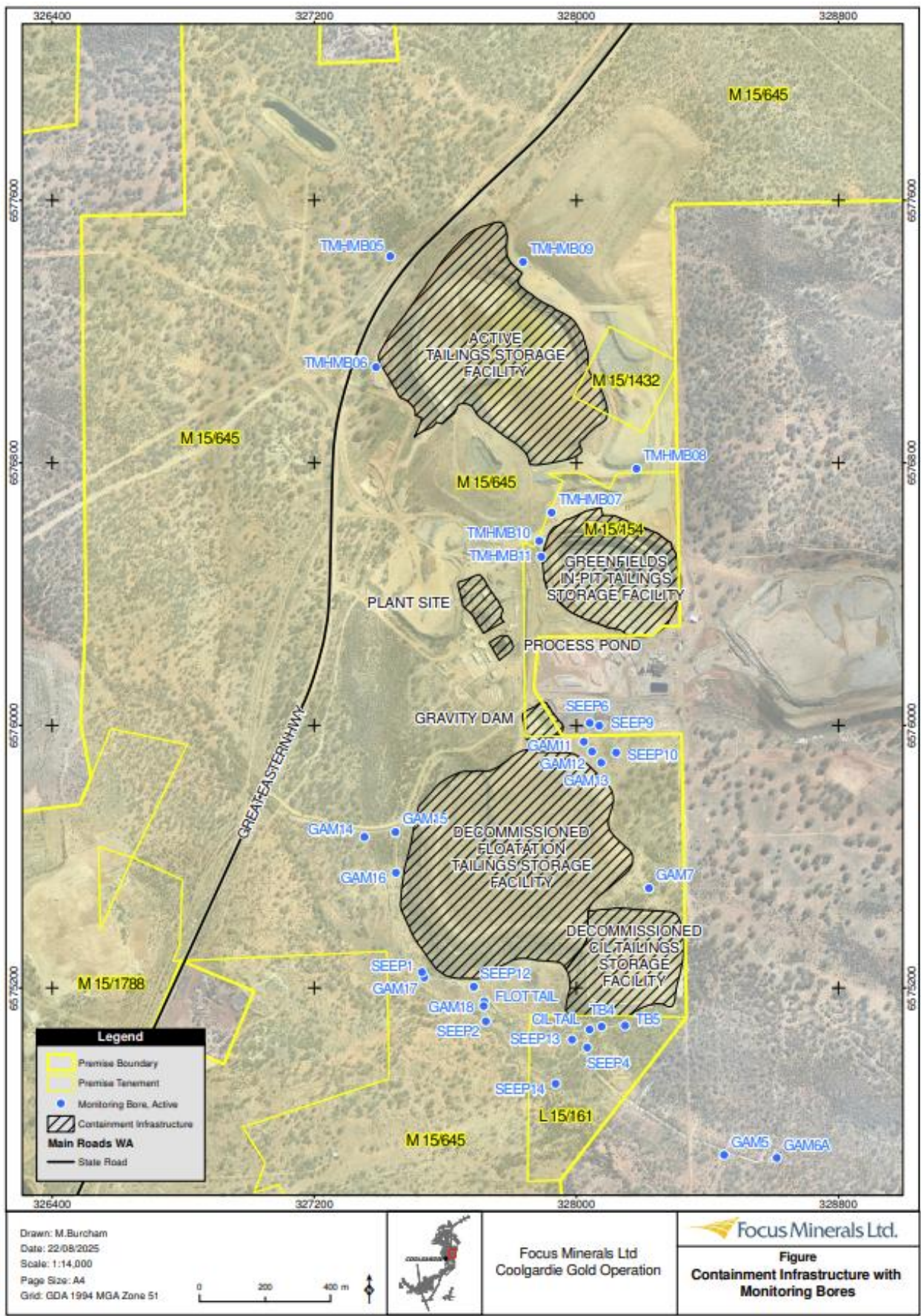


Figure 2: Map of containment infrastructure (TMH, TSF, CIL and FLOAT)



Figure 3: Map of monitoring bore locations

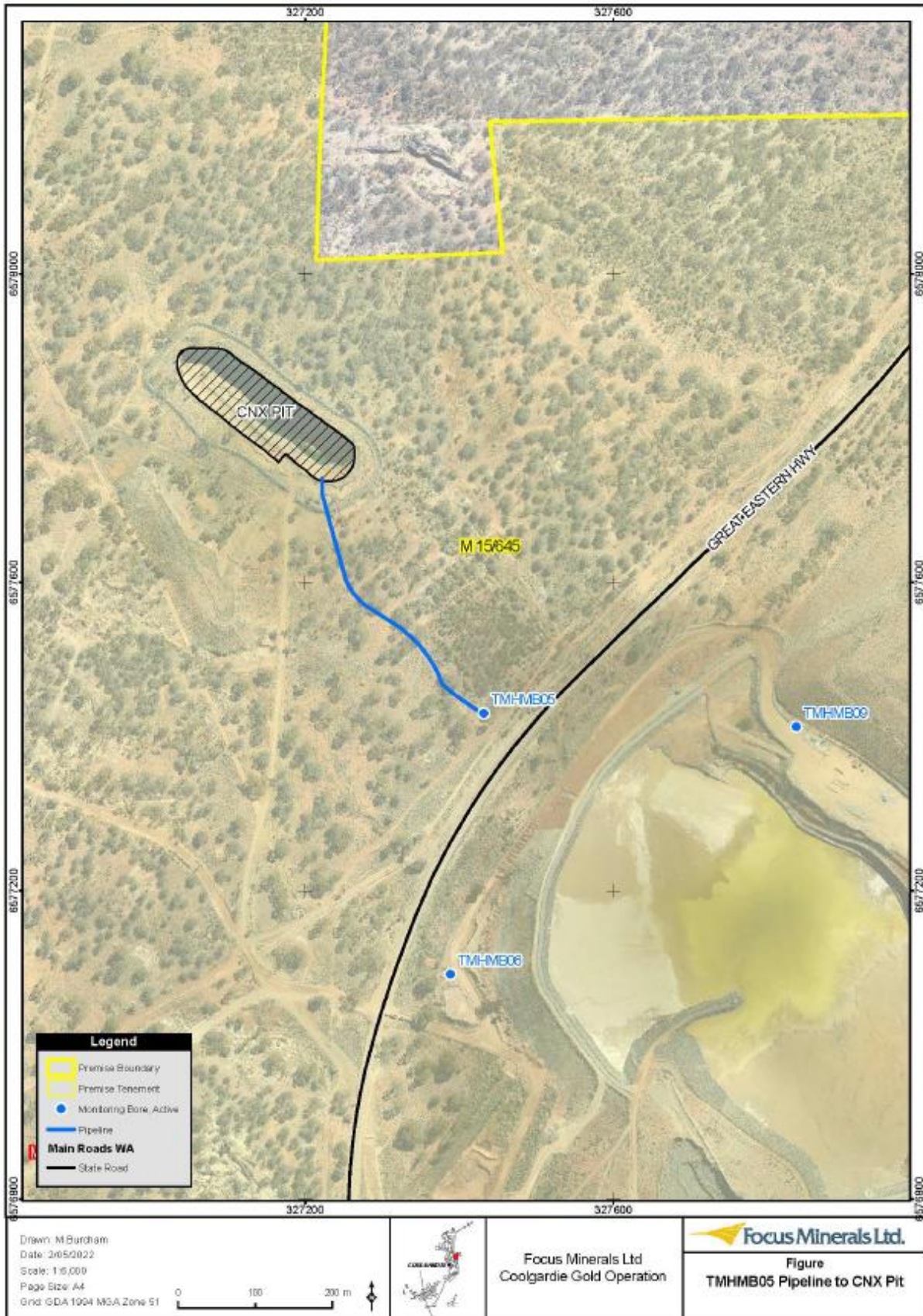


Figure 4: Map of monitoring bore TMHB05 and CNX Pit

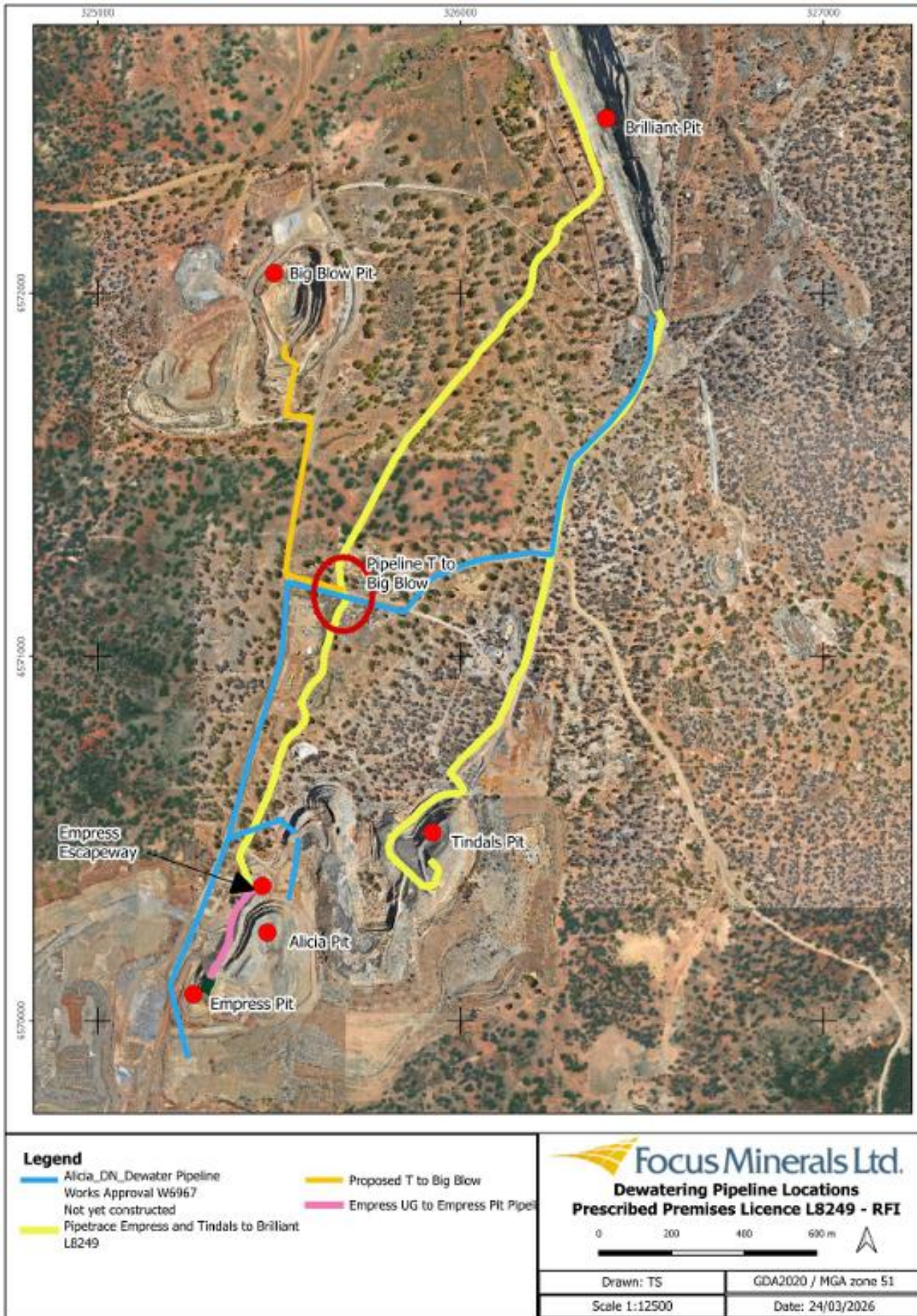


Figure 5: Proposed and existing pipelines

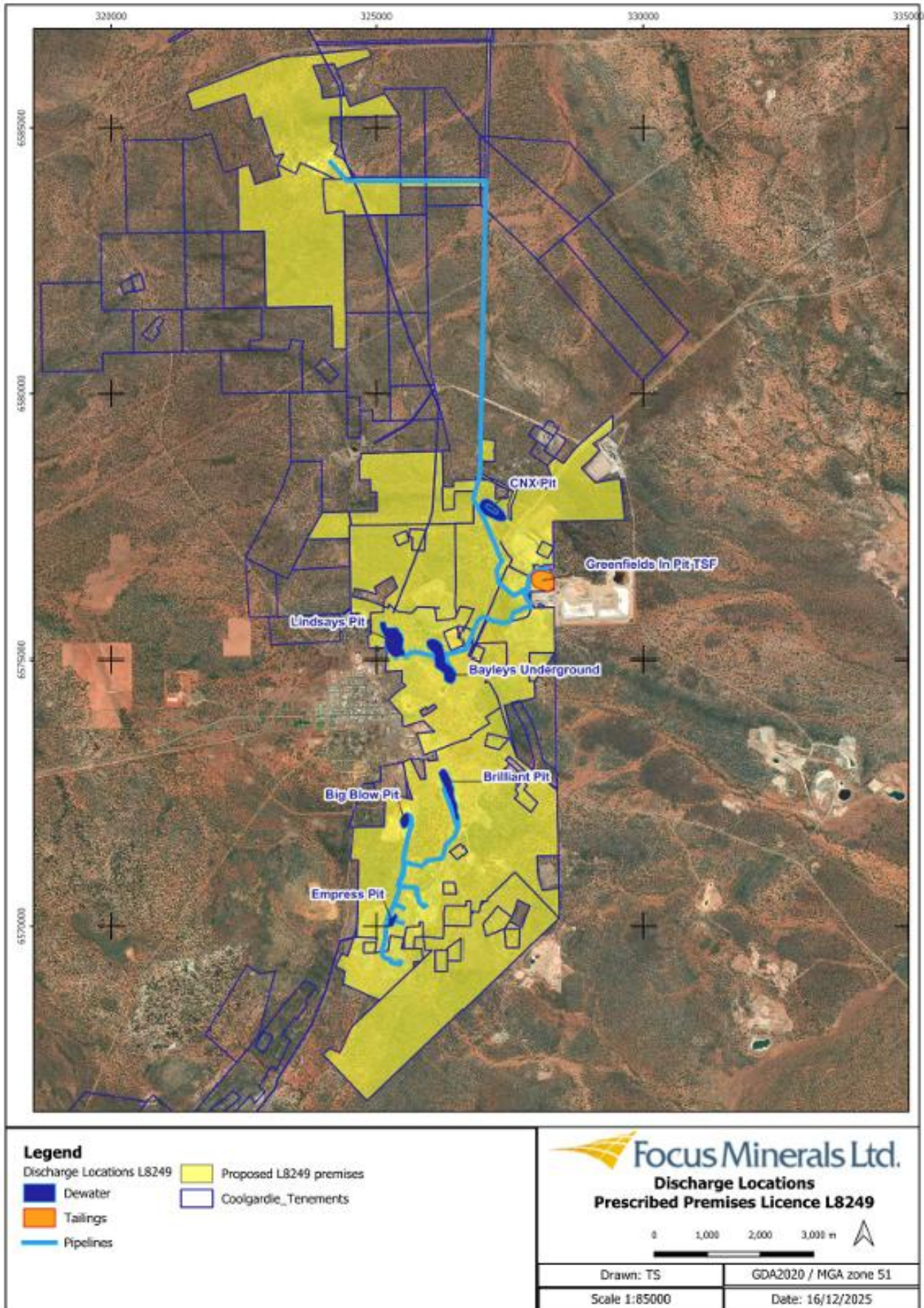


Figure 6: Discharge points

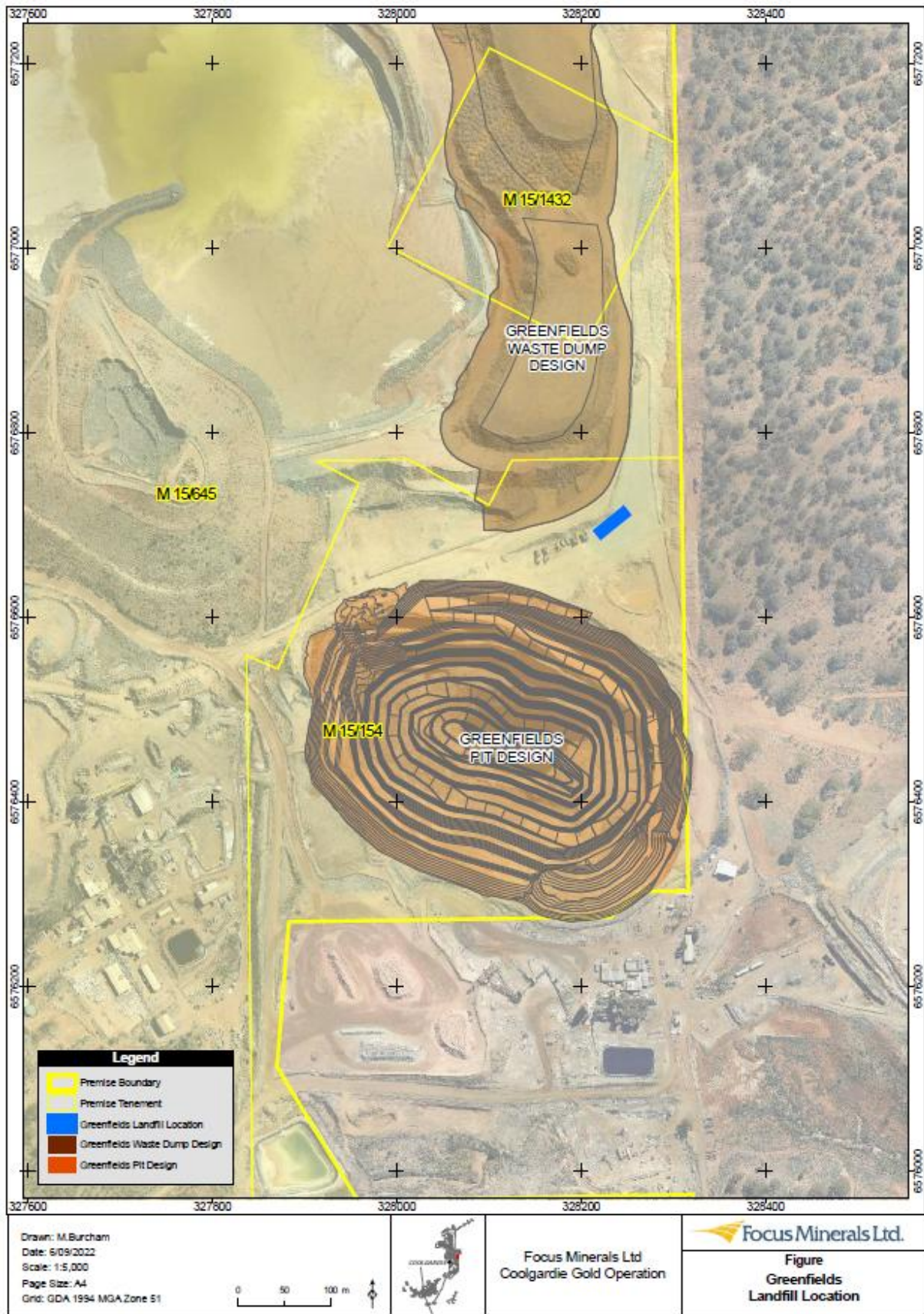


Figure 7: Greenfields landfill

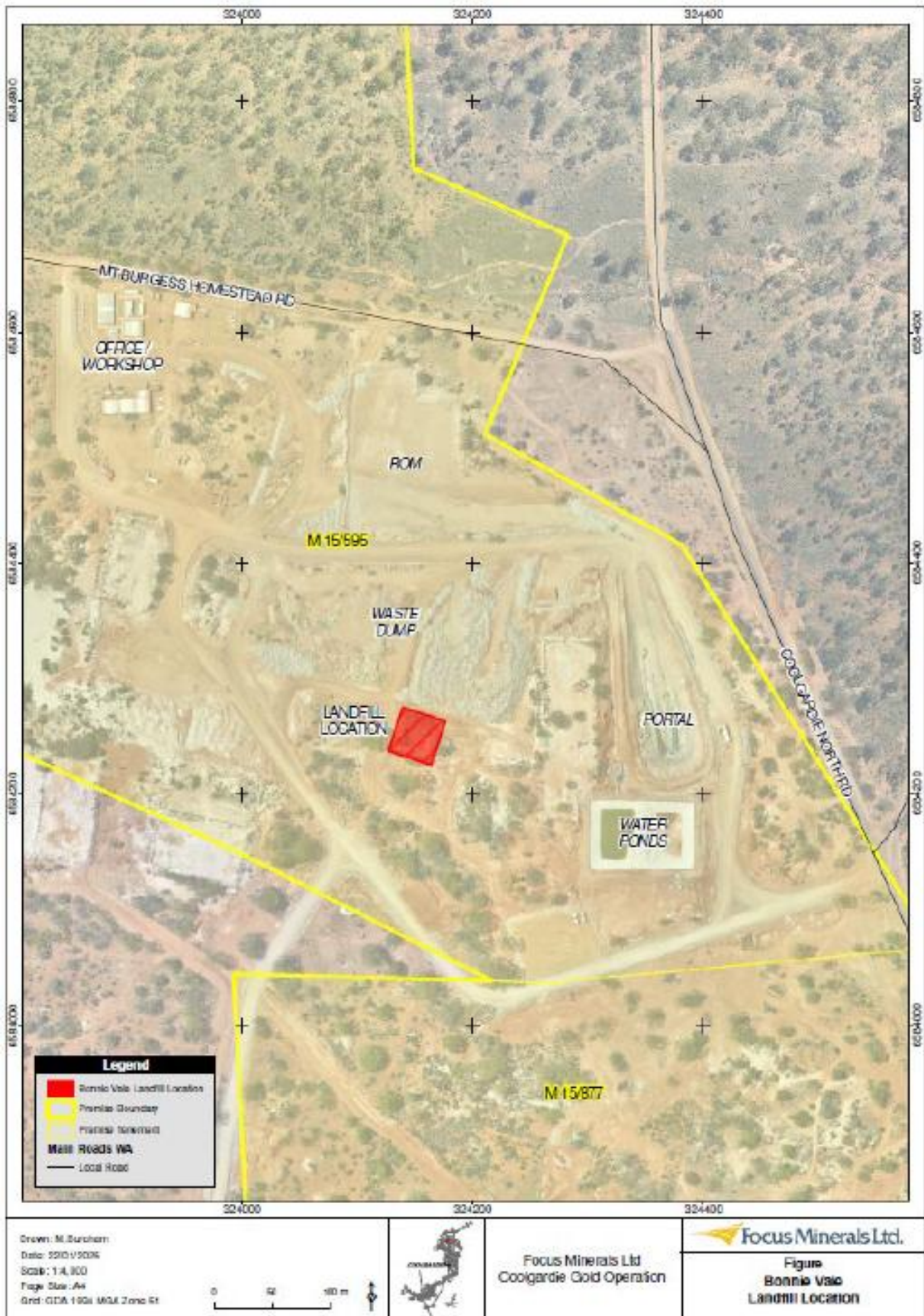


Figure 8: Bonnievale South Landfill

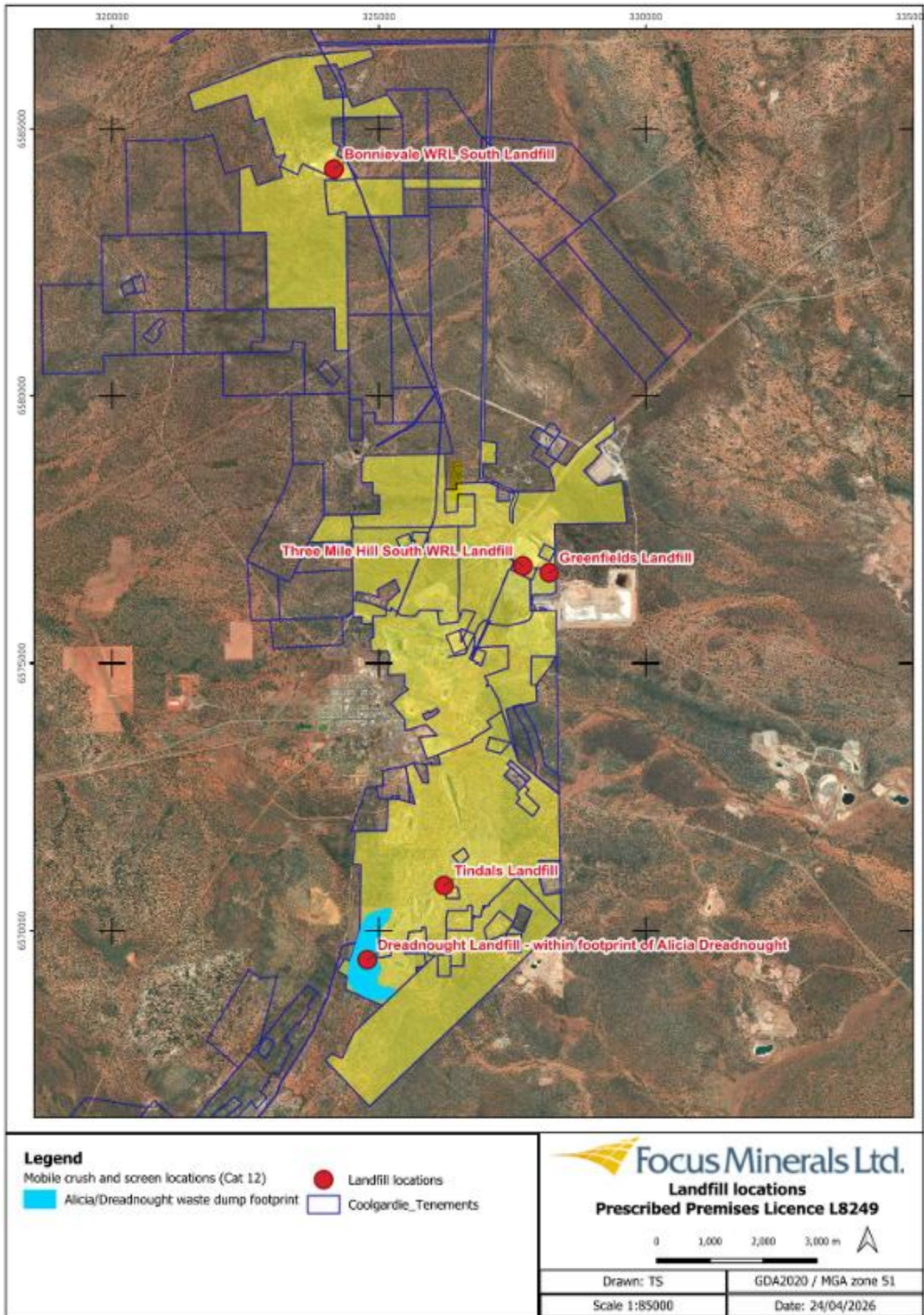


Figure 9: Dreadnought Landfill

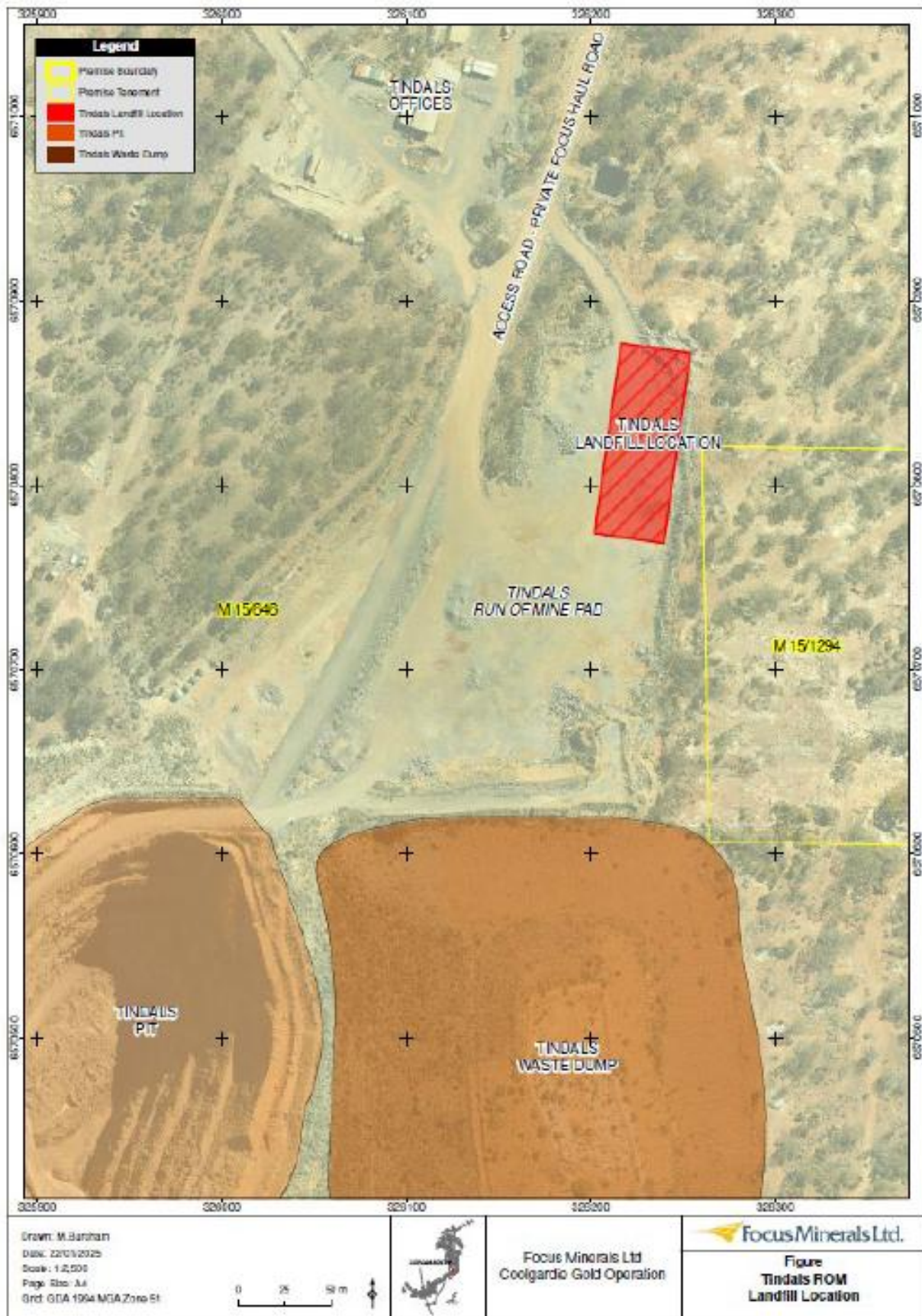


Figure 10: Tindal's Landfill

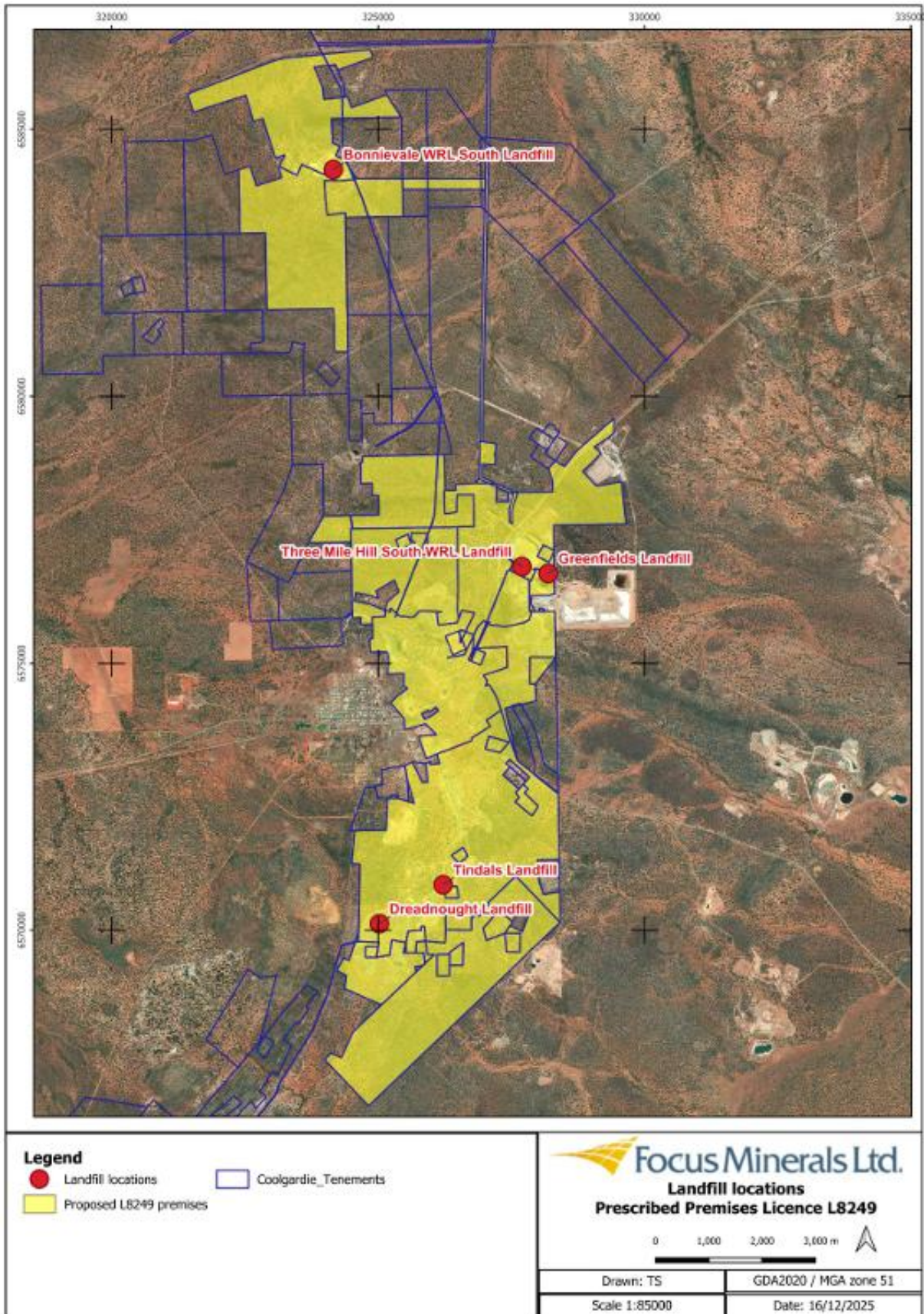


Figure 11: Overview of all landfill locations

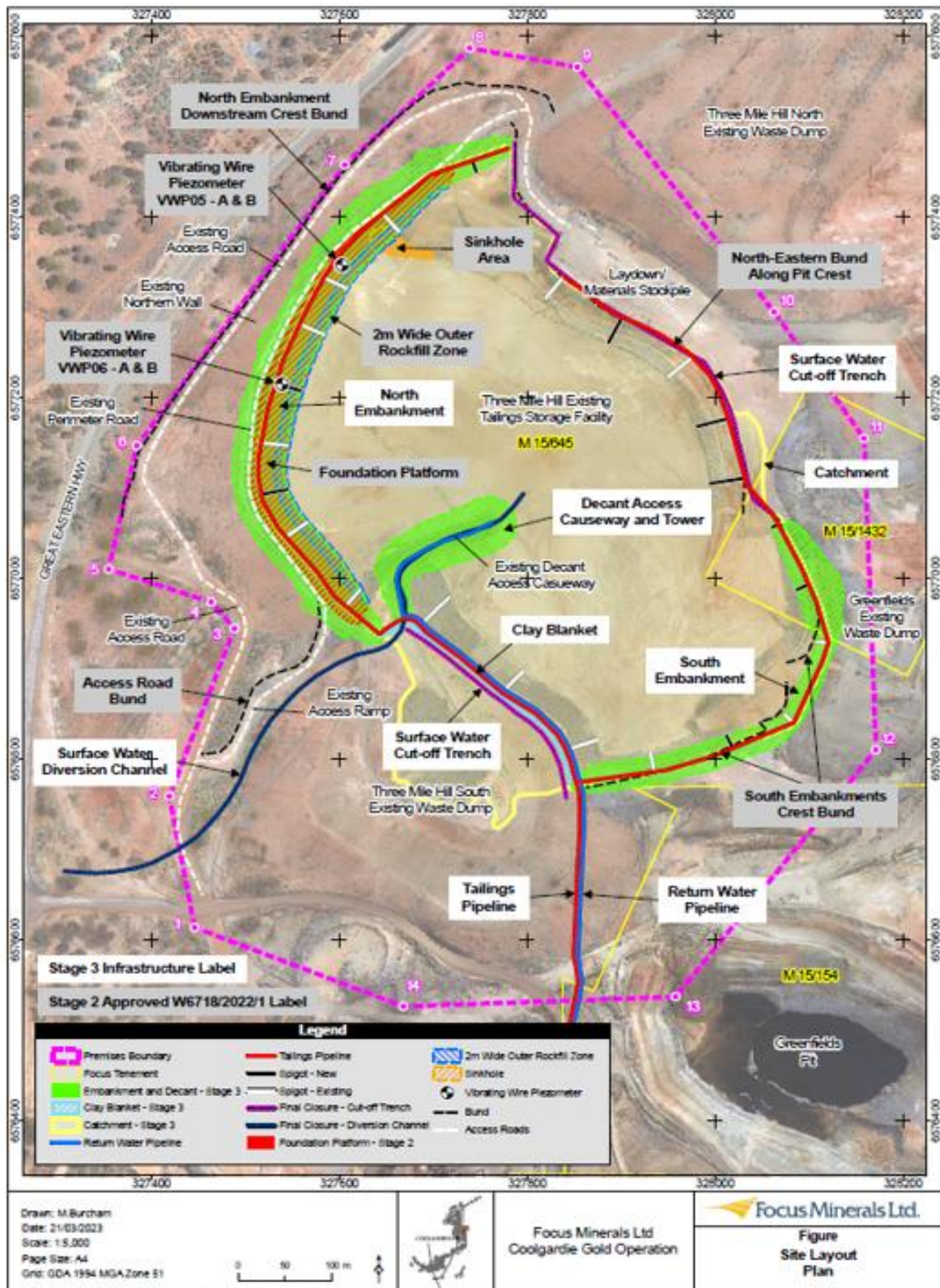


Figure 12: Infrastructure Layout – Three Mile Hill TSF

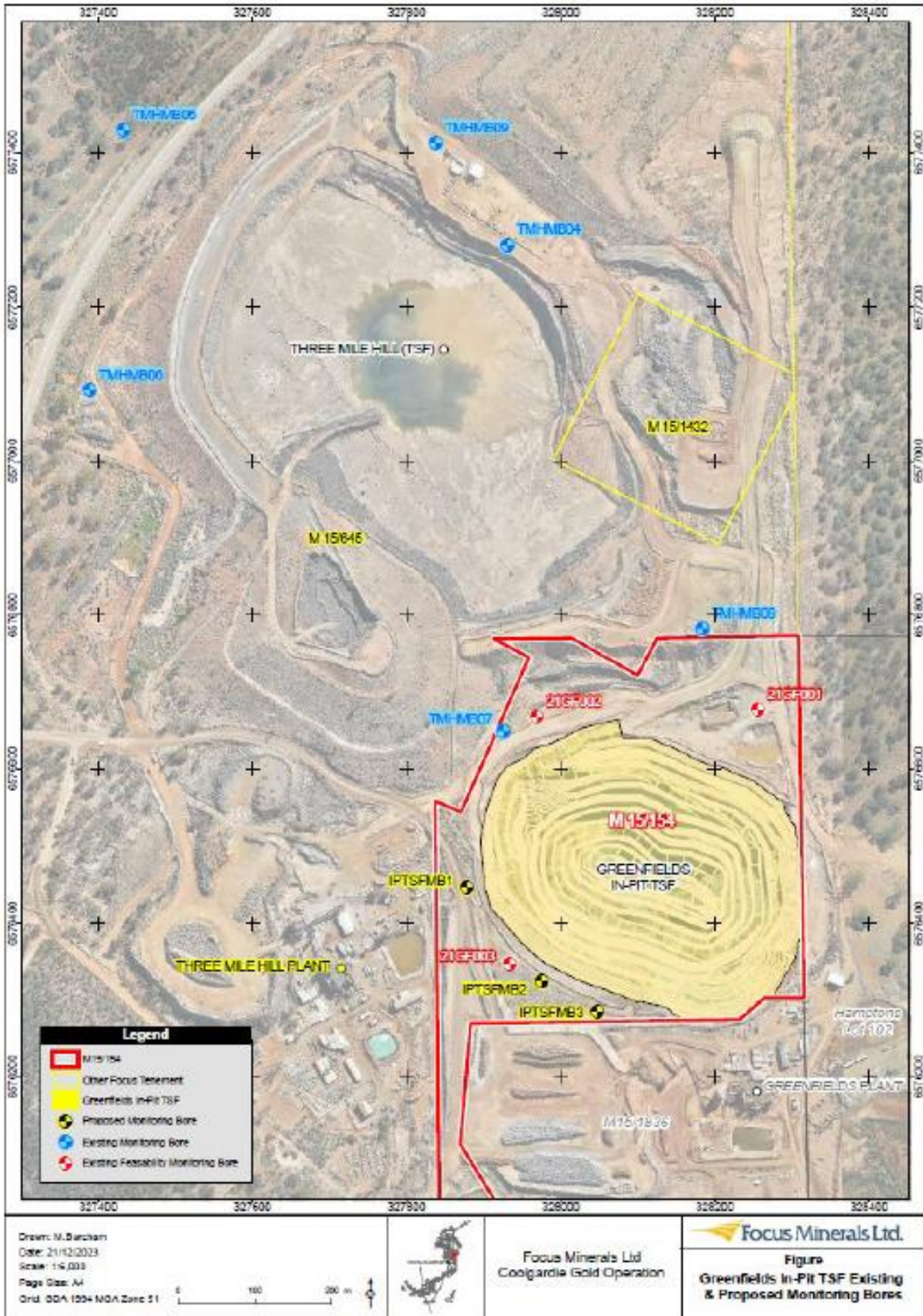


Figure 13: TMH Groundwater Monitoring Network

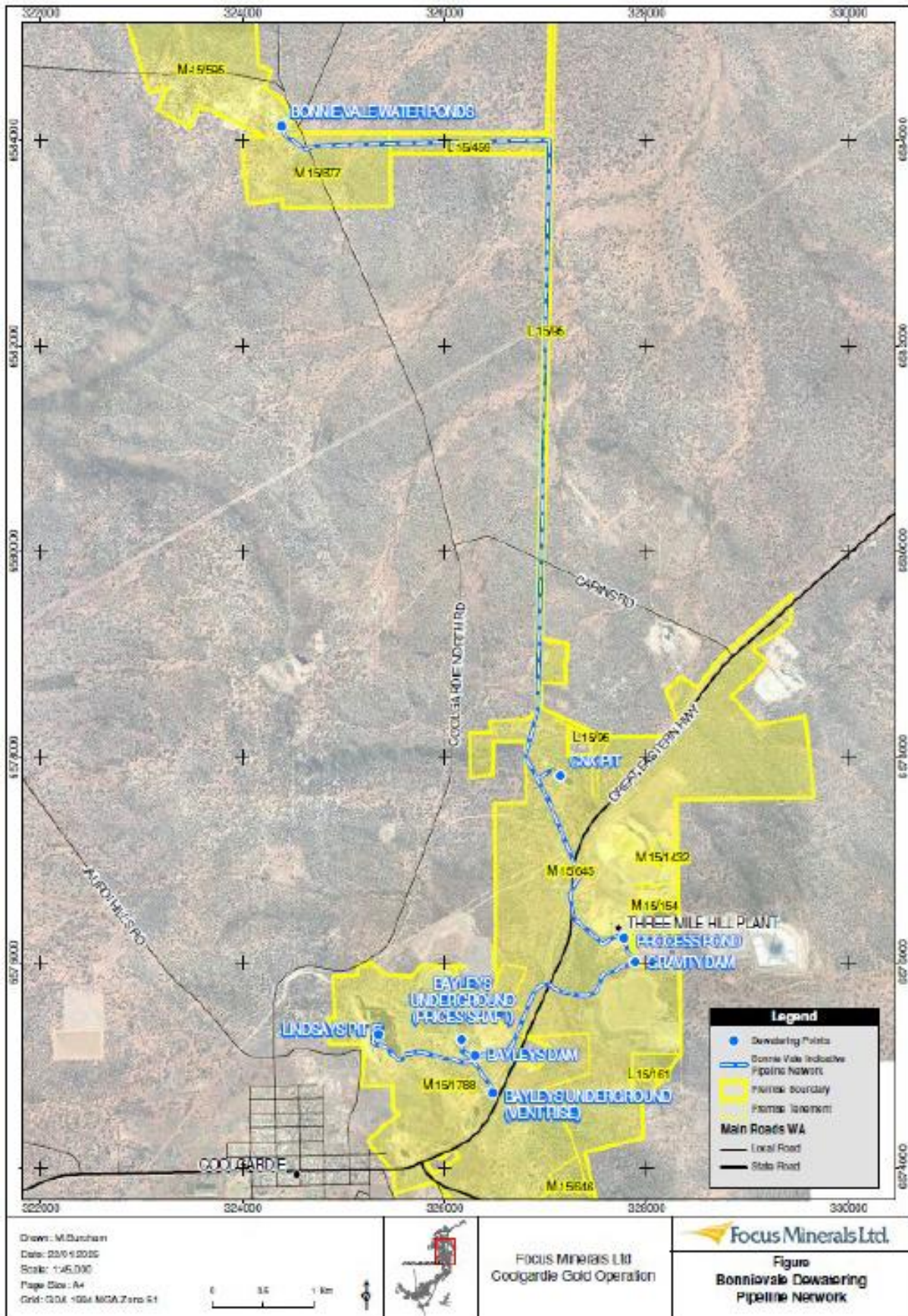


Figure 14: Bonnievale Dewatering Pipeline Network

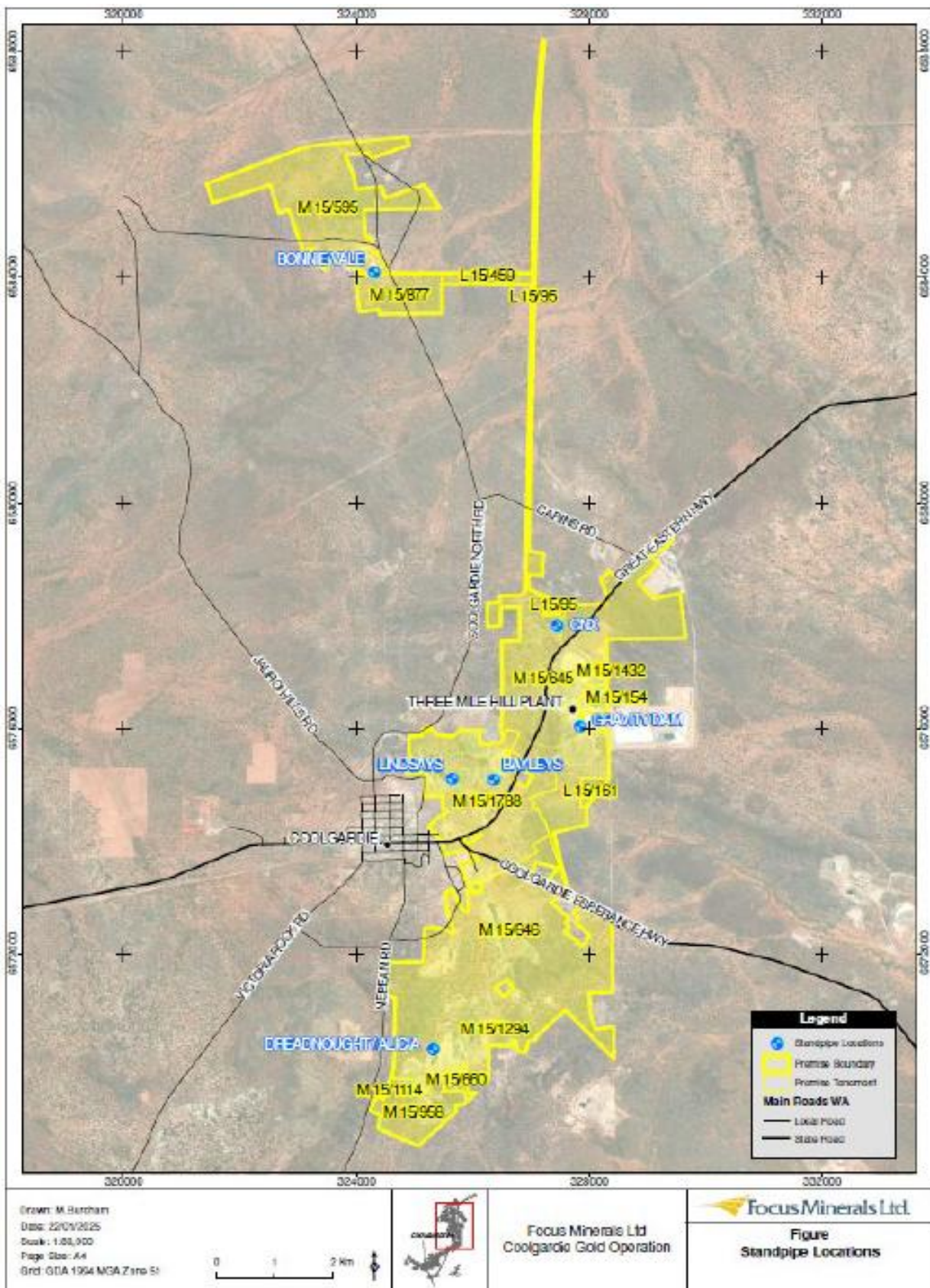


Figure 15: Proposed Standpipe Locations (approximate)

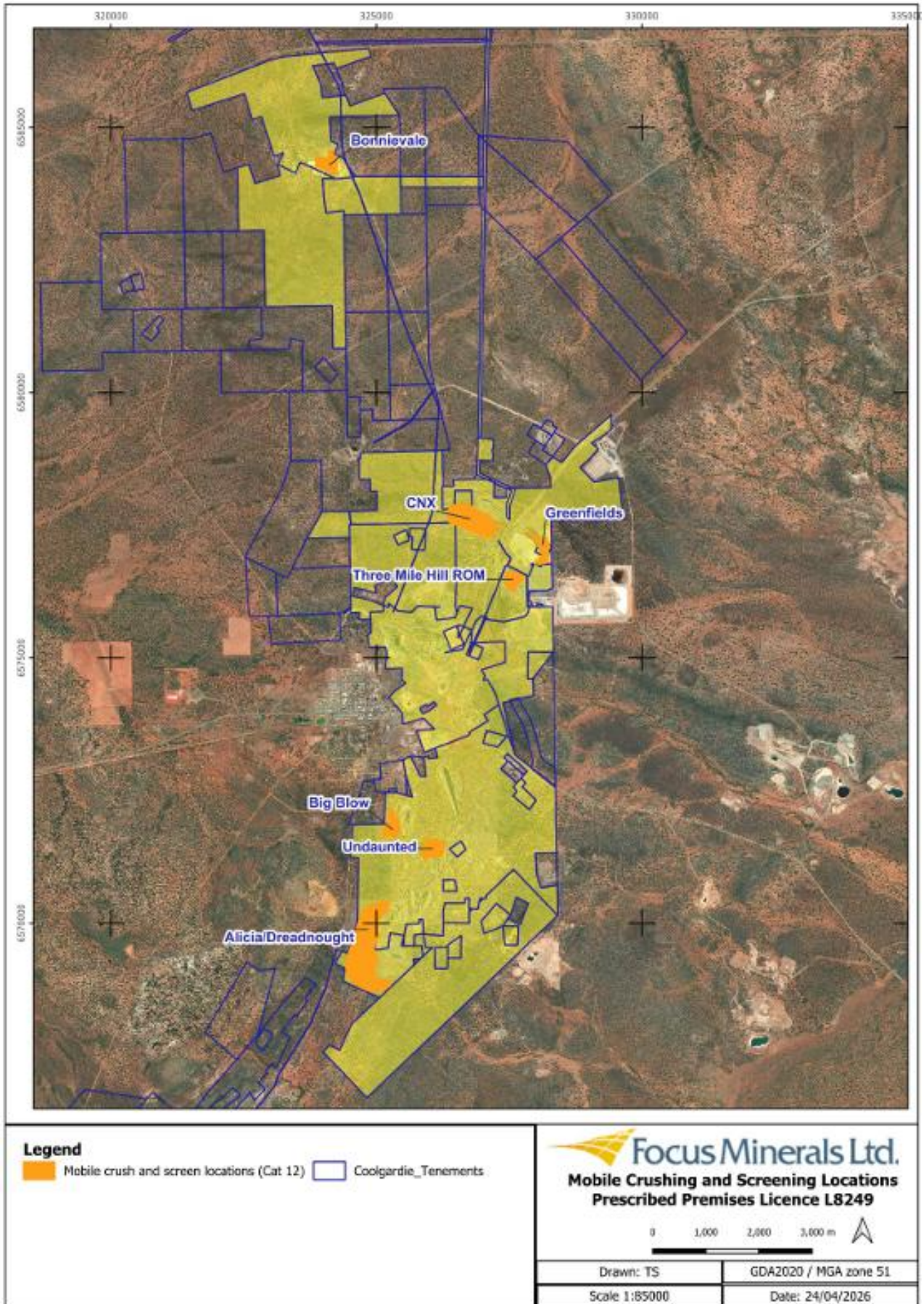


Figure 16: Crushing and screening plant locations

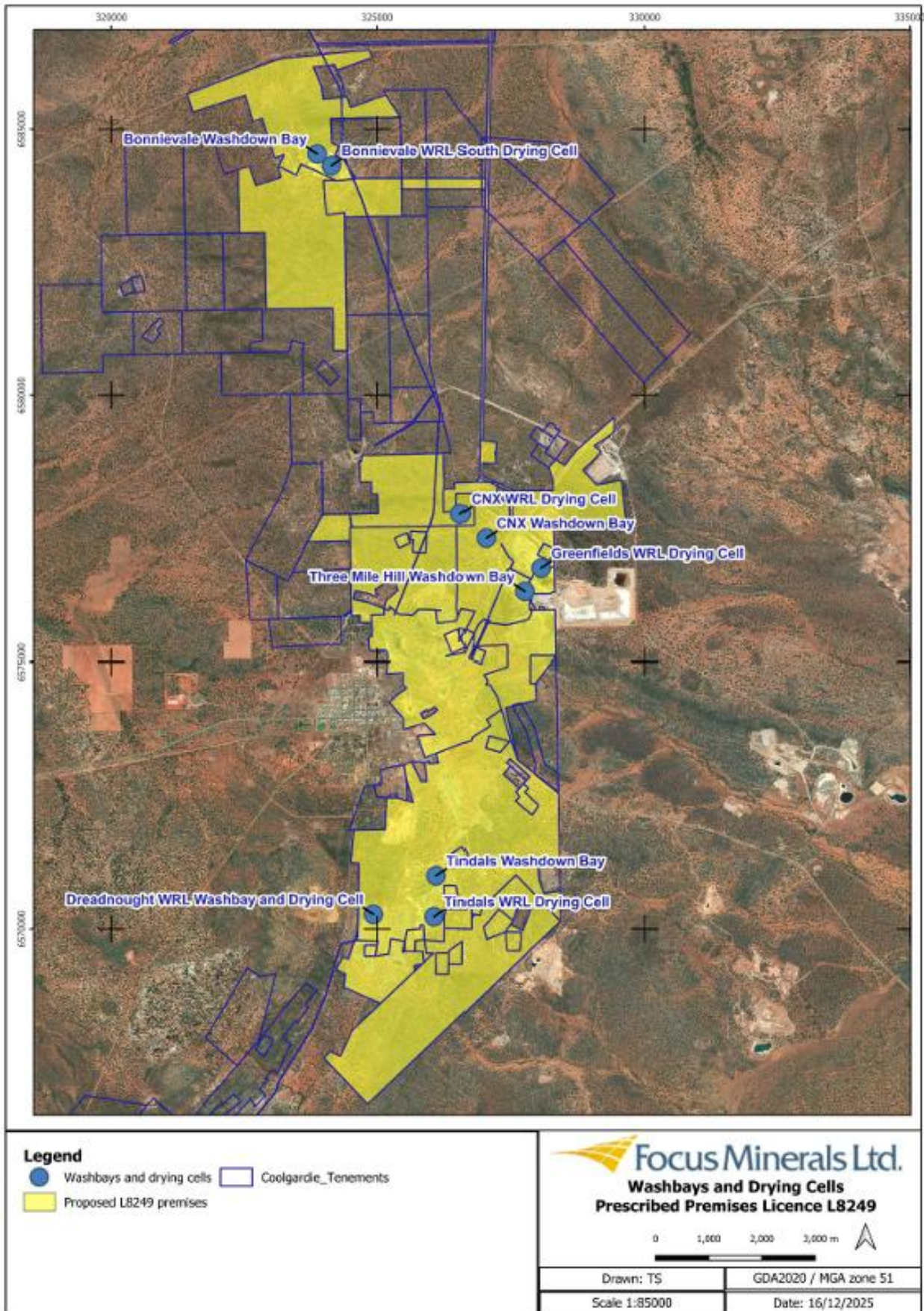


Figure 17: Location of washdown bays with oily water separators and WRLs containing drying pads

Department of Water and Environmental Regulation

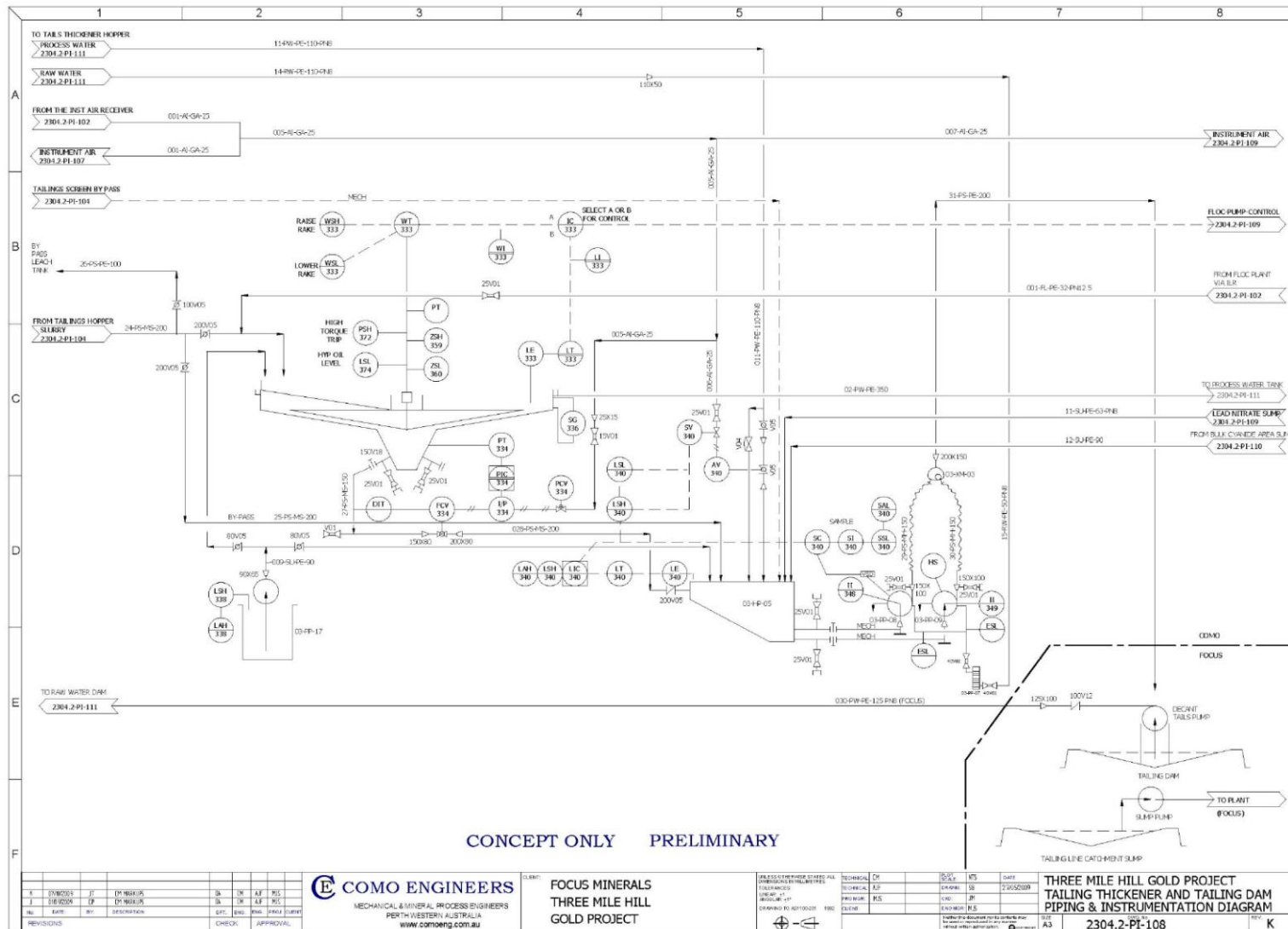


Figure 19: Three Mile Hill plant infrastructure layout - Tailings thickener and tailings dam piping and instrumentation

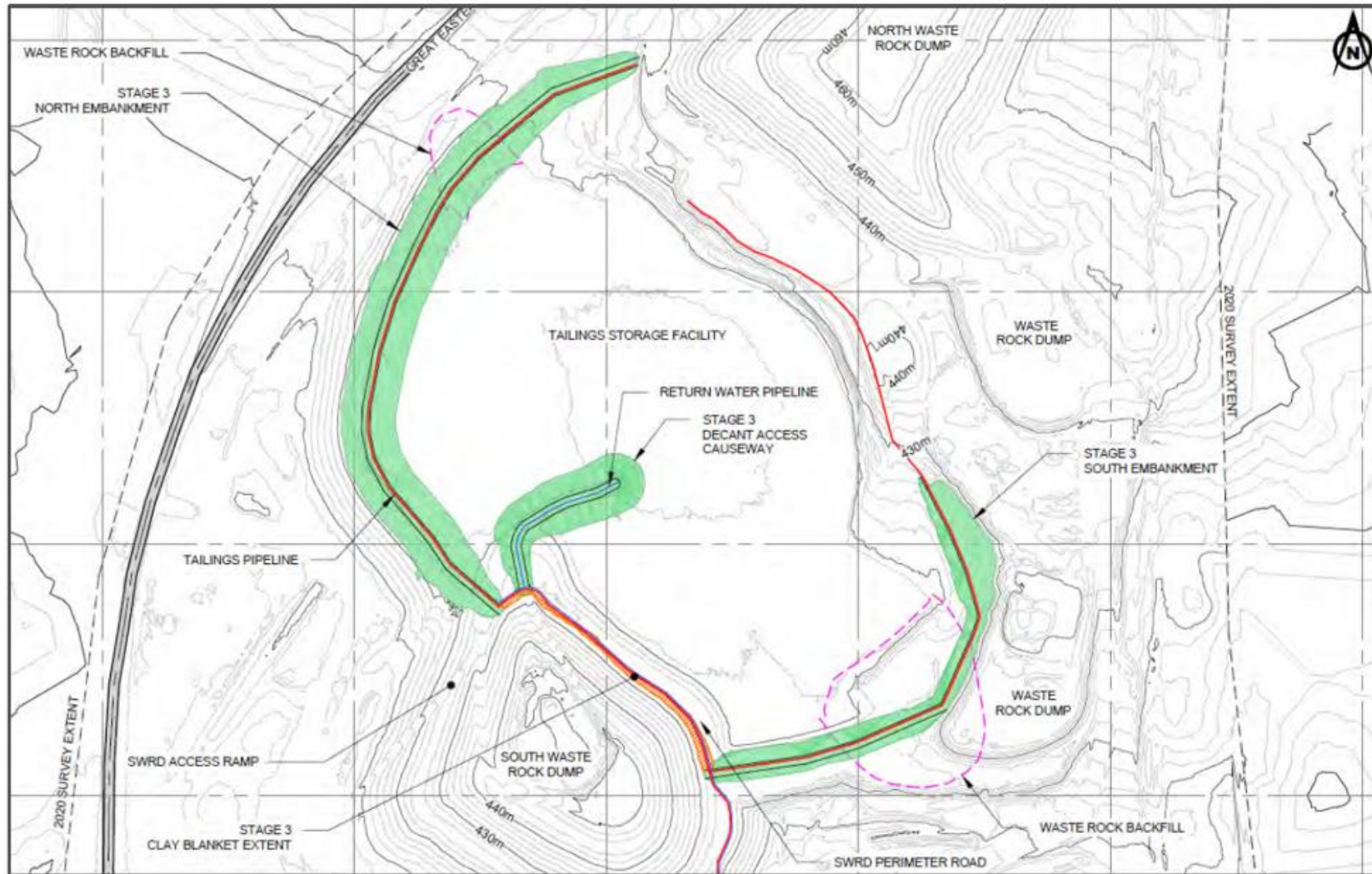


Figure 20: TMH TSF Stage 3 Raise Design

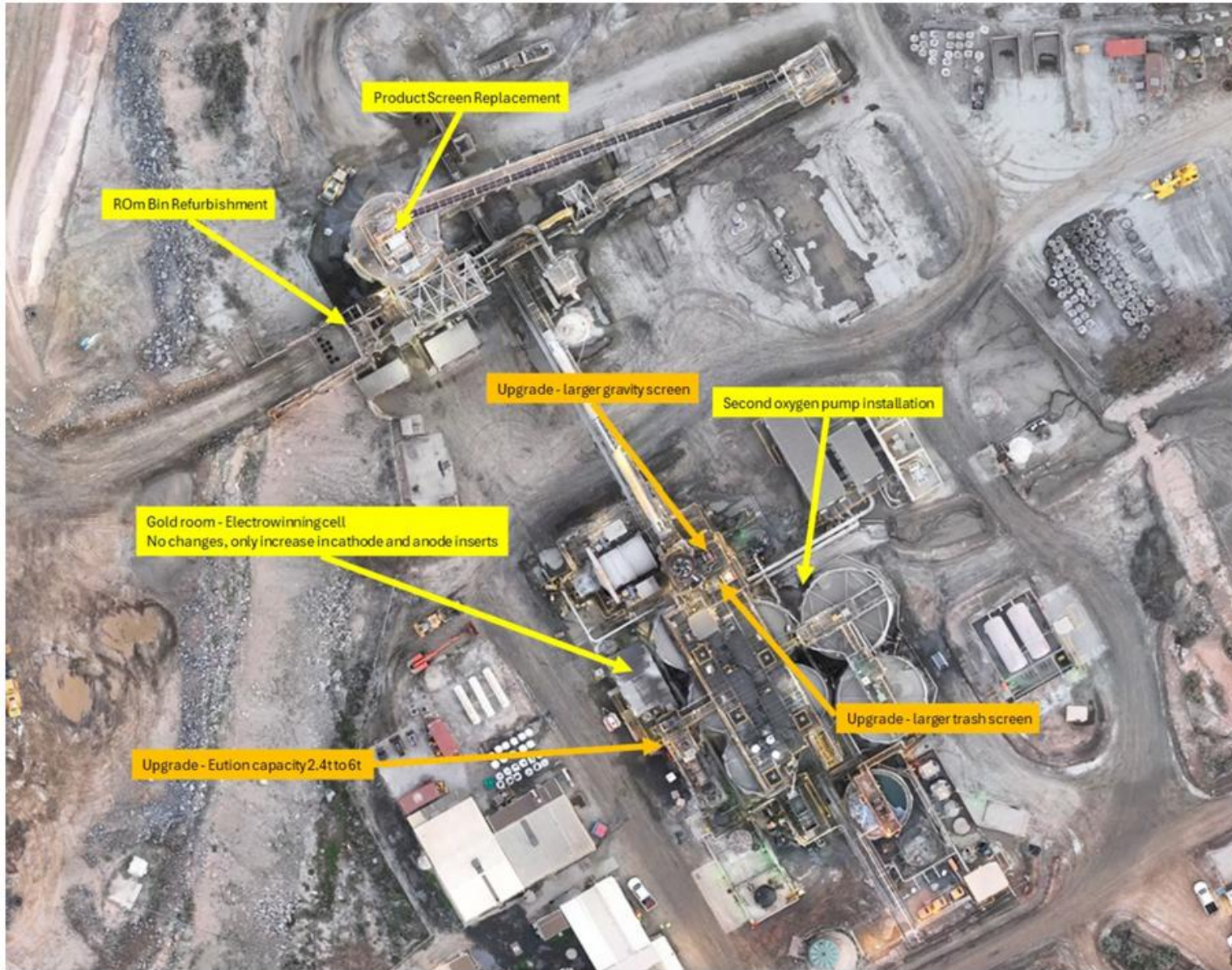


Figure 21: Proposed modifications to the Three Mile Hill Processing Plant

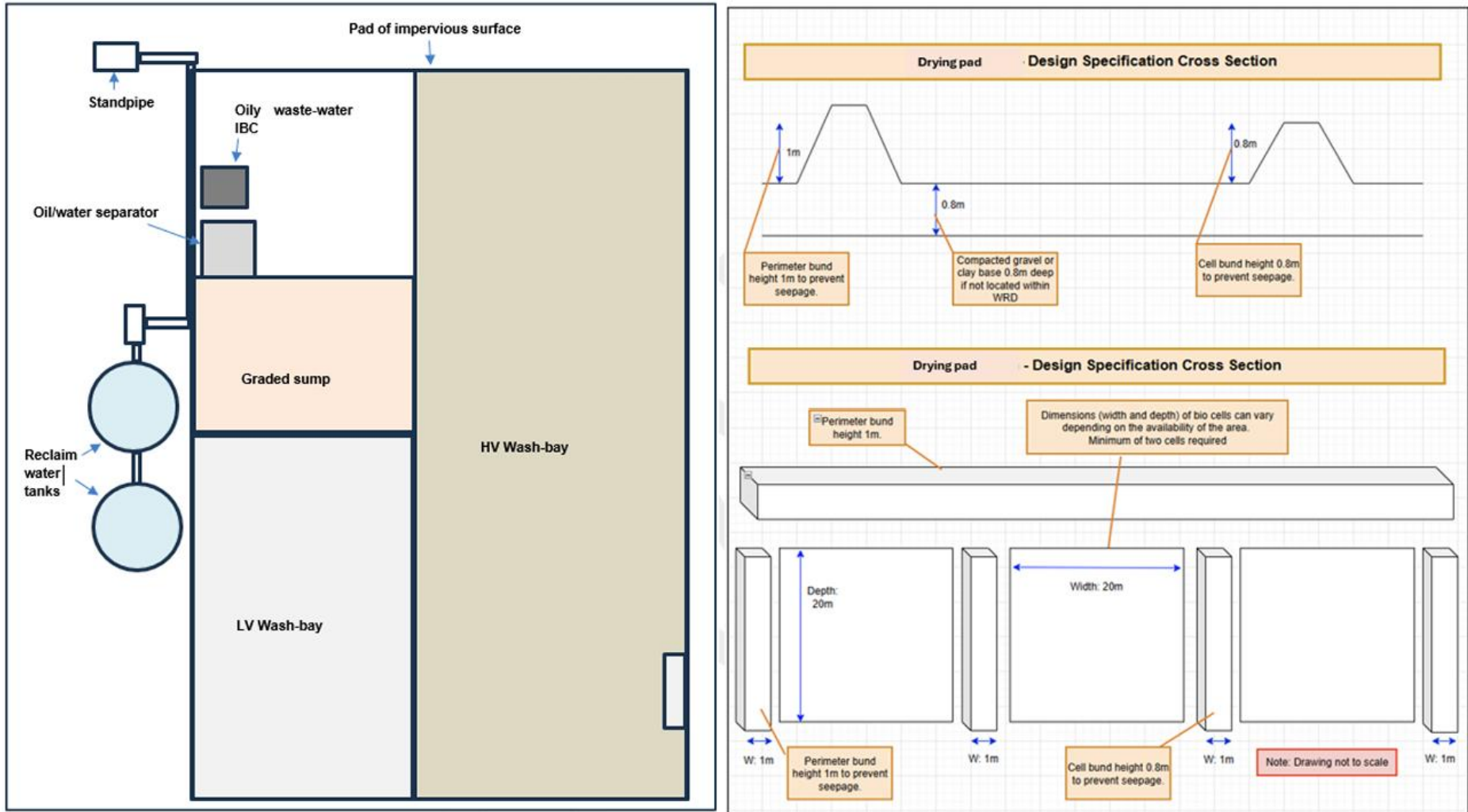


Figure 22: General arrangement for wash-bay layout and drying cell design

Schedule 3: Infrastructure requirements – groundwater monitoring wells

The monitoring bores specified in condition 18 must be designed, constructed, and installed in accordance with the requirements specified in Table 18.

Table 18: Infrastructure requirements – groundwater monitoring wells

Infrastructure	Design, construction, and installation requirements	Monitoring well location(s)
Monitoring wells specified in Condition 18 (item 3)	<p>Well design and construction:</p> <ul style="list-style-type: none"> Designed and constructed in accordance with relevant standards: ASTM D5092/D5092M-16: <i>Standard practice for design and installation of groundwater monitoring bores</i>¹. Well screens must target the part, or parts, of the aquifer most likely to be affected by contamination². 	As depicted in Figure 12
	<p>Logging of borehole:</p> <ul style="list-style-type: none"> Soil samples must be collected and logged during the installation of the monitoring wells. 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. 	
	<p>Well construction log:</p> <ul style="list-style-type: none"> Well construction details must be documented within a well construction log to demonstrate compliance with ASTM D5092/D5092M-16. 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. 	
	<p><u>Well development:</u></p> <ul style="list-style-type: none"> All installed monitoring wells must be developed after drilling to remove fine sand, silt, clay and any drilling mud residues from around the well screen to ensure the hydraulic functioning of the well. A detailed record should be kept of well development activities and included in the well construction log. 	
	<p><u>Installation survey:</u></p> <ul style="list-style-type: none"> The vertical (top of casing) and horizontal position of each monitoring well must be surveyed and subsequently mapped by a suitably qualified surveyor. 	

Note 1: Suitable alternative standard: *Minimum construction requirements for water bores in Australia* 4th Ed. (National Uniform Drillers Licensing Committee (NUDLC), 2020).

Note 2: refer to Section 8 of Schedule B2 of the Assessment of Site Contamination NEPM for guidance on well screen depth and length.

Schedule 4: Reporting & notification forms

Licence:

Licence holder:

Form: N1

Date of breach:

Notification of detection of the breach of a limit.

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	
Name of operator	
Location of premises	
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	

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 licence holder	
Date	