



Licence number	L8558/2011/1
Licence holder	Sandfire Resources NL
ACN	105 154 185
Registered business address	Level 2, 10 Kings Park Road WEST PERTH WA 6005
DWER file number	INS-0001727
Duration	23/06/2011 to 23/12/2026
Date of issue	23/06/2011
Date of amendment	15/04/2025
Premises details	DeGrussa Copper-Gold Project Mining Tenement M52/1046 MEEKATHARRA WA 6642

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	250,000 tonnes per annual period
Category 54: Sewage facility: premises on which sewage is treated (excluding septic tanks), or from which treated sewage is discharged onto land or into waters	240 cubic metres per day
Category 64: Class II putrescible landfill	5,000 tonnes per annual period

This amended licence is granted to the Licence holder, subject to the attached conditions, on 15 April 2025, by:

**A/MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATE-WIDE DELIVERY)**

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

Licence history

Date	Reference number	Summary of changes
23/06/2011	L8558/2011/1	New Application - Category 54
07/07/2011	W4960/2011/1	New Application for Works Approval – Categories 5, 52 and 73
9/02/2012	L8558/2011/1	Amended to include category 5, 6, and 64
22/11/2012	L8558/2011/1	Licence amendment – Administration error
9/05/2013	L8558/2011/1	Licence amendment – Increase category 6 throughput
20/06/2013	L8558/2011/1	Licence amendment – Change to monitoring targets
1/08/2013	L8558/2011/1	Licence amendment – Increase category 6 throughput
18/08/2014	W5697/2014/1	New application for works approval – Category 6 and 64
9/10/2014	L8558/2011/1	Licence amendment – REFIRE format conversion and incorporate changes from completed works under W5697/2014/1
27/11/2014	L8558/2011/1	Licence amendment – construction of additional dewater pipelines to provide for discharge up to 200 L/s
19/10/2015	W5866/2015/1	New works approval – increase cat 6 throughput and additional dewater discharge points to Central Drainage and John's Creek, and expansion of the landfill
3/12/2015	L8558/2011/1	Licence amendment – to increase category 5 throughput and installation of synthetic liner to the TSF
26/04/2016	L8558/2011/1	Notice of Amendment to extend licence duration to 23/12/2026
18/09/2017	L8558/2011/1	Amendment Notice to increase Category 52 design/production to 23 MW by additional of 2 x 2 MW power units.
9/05/2018	L8558/2011/1	Amendment Notice 2 for: installation of a larger thickener and filter to increase grade and volume of concentrate produced (assessment included processing ore from the Monty Mine deposit); installation of deeper replacement TSF monitoring bores; operation of dewatering discharge to Central Creek; and removal of Cat 52 commissioning conditions
30/01/2019	L8558/2011/1	Amendment Notice 3 for Stage 4 and 5 lifts of the TSF
7/10/2020	L8558/2011/1	Licence amendment to increase the throughput at the Class II landfill. The department has also consolidated the licence by incorporating changes made under Amendment Notices 1 to 3
01/11/2023	L8558/2011/1	Licence amendment in preparation for mine site closure: <ul style="list-style-type: none"> Category 5 reduction in the throughput from 2,050,000

Date	Reference number	Summary of changes
		<p>tonnes per annum to 50,000 tonnes per annum;</p> <ul style="list-style-type: none"> • Category 6 reduction in the throughput from 2,000,000 tonnes per annum to 50,000 tonnes per annum; • Removal of category 52; and • Relocation of existing dewatering pipelines to transport TSF underdrainage water to the DeGrussa Open Pit at closure
15/04/2025	L8558/2011/1	<p>Licence amendment in preparation for mine site closure:</p> <ul style="list-style-type: none"> • Removal of category 6; • Remove reference to DeGrussa TSF Lift 5; • Amend inspection schedule for the DeGrussa TSF; and • Administrative updates

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

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

Table 1: Production or design capacity limits

Category	Category description	Premises production or design capacity limit
5	Processing or beneficiation of metallic or non-metallic ore	250,000 tonnes of ore per annual period
54	Sewage facility	240 cubic metres per day
64	Class II putrescible landfill	5,000 tonnes per annual period

Note 1: *Environmental Protection Regulations 1987*, Schedule 1.

Infrastructure and equipment

- 2 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
 - (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between inspections.
- 3 The licence holder must ensure that tailings underdrainage is only discharged into containment point with the relevant infrastructure requirements and at the location specified in Table 2 and identified in Schedule 1.

Table 2: Containment infrastructure

Containment point reference	Material	Infrastructure requirements
DeGrussa Open Pit	Tailings underdrainage (only to be discharged to the DeGrussa Open Pit at the completion of mining and processing when the Processing Plant is not operational)	No potential for outflow of the pit lake water to the dolomite aquifer post-closure as the pit lake will remain a groundwater sink Pit lake will feature steep sided walls and minimal shallow embankments which will limit access by terrestrial fauna

- 4 The licence holder must manage dams in Table 2 such that:
 - (a) a minimum top of embankment freeboard of 500 mm is maintained; and
 - (b) methods of operation minimise the likelihood of erosion of the embankments by wave action.

Department of Water and Environmental Regulation

5 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 as soon as practicable; and
- (c) maintain a record of all inspections undertaken.

Table 3: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
TSF embankment freeboard	Visual to confirm required freeboard capacity is available	Monthly
DeGrussa Open Pit tailings underdrainage discharge pipelines	Visual integrity	Weekly
DeGrussa tailings underdrainage discharge points	Visual integrity	Monthly

6 The licence holder must only accept waste on to the landfill if:

- (a) it is of a type listed in Table 4;
- (b) the quantity accepted is below any quantity limit listed in Table 4;
- (c) it meets any specification listed in Table 4; and
- (d) it conforms to the description in the documentation supplied by the producer and holder.

Table 4: Waste acceptance

Waste	Quantity Limit	Specification
Clean Fill	Non specified	None specified
Inert Waste type 1 and 2	Combined total of 5,000 tonnes per annual period 100 used tyres are stored before burial	None specified
Putrescible Waste		
Special Waste Type 2		

7 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	Timescale
Putrescible Wastes	Inert and incombustible material	A minimum of 200 mm. No waste is to be left exposed after covering	Cover shall be applied fortnightly

Emissions and discharges

Point source emissions to land

- 8** The licence holder must ensure that where waste is emitted to land from the emission point in Table 6, and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

Table 6: Emission points to land

Emission point reference	Description	Source including abatement
Irrigation area - WWTP1	Discharge of treated wastewater by irrigation to land	Accommodation camp wastewater treatment plant
Irrigation area - WWTP2	Discharge of treated wastewater by irrigation to land	Mine administration wastewater treatment plant

Monitoring

General monitoring

- 9** The licence holder must ensure that:
- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1 unless stated in Condition 9(b);
 - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - (c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
 - (d) all microbiological samples are collected and preserved in accordance with AS/NZS 2031; and
 - (e) all samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in relevant table.
- 10** The licence holder must ensure that monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters.
- 11** The licence holder must ensure that all monitoring equipment used to comply with Condition 12 Table 7, Condition 13 Table 8 and Condition 14 Table 9 is operated and calibrated in accordance with the manufacturer's specifications.

Monitoring of point source emissions to land

- 12** The licence holder must undertake the monitoring in Table 7 according to the specifications in that table.

Table 7: Monitoring of point source emissions to land

Monitoring point reference	Parameter	Units	Frequency
Discharge to irrigation area - WWTP1	pH ¹	-	Quarterly
	<i>E.coli</i>	cfu/100mL	
Discharge to irrigation area - WWTP2	Biochemical Oxygen Demand	mg/L	
	Residual chlorine ²		
	Total Phosphorus		
	Total Nitrogen		
	Total Suspended Solids		
Volumes of wastewater discharged to the environment	m ³	Continuous	

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

Note 2: In-field non-NATA accredited analysis permitted for residual chlorine measurement.

Process monitoring

13 The licence holder must undertake the monitoring specified in Table 8.

Table 8: Monitoring of the Tailings Underdrainage

Monitoring reference	point	Parameter	Units	Averaging period	Frequency
Tailings underdrainage		Volume	kL	Spot sample	Quarterly
		pH ¹	pH units		
		Total Dissolved Solids	mg/L		
		Total Acidity			
		Arsenic			
		Cadmium			
		Chromium			
		Copper			
		Lead			
		Manganese			
		Molybdenum			
		Nickel			

Monitoring reference	point	Parameter	Units	Averaging period	Frequency
		Selenium			
		Sulphate			
		Vanadium			
		Uranium			
		Zinc			

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

Ambient environmental quality monitoring

14 The licence holder must undertake the monitoring specified in Table 9.

Table 9: Monitoring of ambient groundwater quality

Monitoring reference	point	Parameter	Units	Averaging period	Frequency
TMB01B		SWL	mbgl	Spot sample	Quarterly
TMB04B		pH ¹	pH units		
TMB05B		Total Dissolved Solids	mg/L		
TMB006		Total Acidity			
TMB07B		Arsenic			
TMB08B		Cadmium			
		Chromium			
		Copper			
		Lead			
		Manganese			
		Molybdenum			
		Nickel			
		Selenium			
		Sulphate			
		Vanadium			
		Uranium			
		Zinc			

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

Information

Records

- 15** The licence holder must maintain accurate and auditable books that include the following records, information, reports, and data required by this licence:
- (a) the calculation of fees payable in respect of this licence;
 - (b) any maintenance of infrastructure that is performed in the course of complying with the conditions of this licence;
 - (c) monitoring programmes undertaken in accordance with Condition 12 Table 7, Condition 13 Table 8 and Condition 14 Table 9 of this licence; and
 - (d) complaints received under Condition 18 of this licence.
- 16** The books specified under Condition 15 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.
- 17** The licence holder must:
- (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - (b) prepare and submit to the CEO an Annual Audit Compliance Report for that period in the approved form by 31 March each year.
- 18** 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.

Reporting

- 19** The licence holder must:
- (a) prepare an Environmental Report that provides information in accordance with Table 10 for the preceding annual period; and
 - (b) submit that Environmental Report to the CEO by 31 March each year.

Table 10: Environmental reporting requirements

Condition or table (if relevant)	Requirement
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken
Condition 12, Table 7	Specified monitoring of point source emissions to land
Condition 13, Table 8	Process monitoring
Condition 14, Table 9	Monitoring of ambient groundwater quality
Condition 18	Complaints summary

20 The licence holder must ensure that the environmental report also contains:

- (a) any relevant process, production or operational data recorded under Condition 11;
- (b) an assessment of the information contained within the report against previous monitoring results and Licence limits; and
- (c) a list of any original monitoring reports submitted to the Licence holder from third parties in the reporting period and make these reports available on request.

Definitions

In this licence, the terms in Table 11 have the meanings defined.

Table 11: Definitions

Term	Definition
ACN	Australian Company Number.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the department's website).
annual period	a 12-month period commencing from 1 January until 31 December each year.
books	has the same meaning given to that term under the EP Act.
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 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i> .
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i> .
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained.
CEO	means Chief Executive Officer of the department. “submit to / notify the CEO” (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
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

Term	Definition
	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 metres 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.
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 in Schedule 1 to this licence.
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.
RL	means Reduced Level which refers to equating elevations of survey points with reference to a common assumed datum.
Schedule 1	means Schedule 1 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.
TDS	means Total Dissolved Solids.
TSF	means Tailings Storage Facility.
waste	has the same meaning given to that term under the EP Act.

Schedule 1: Maps

The Premises is shown in the map below. The yellow line depicts the Premises boundary.

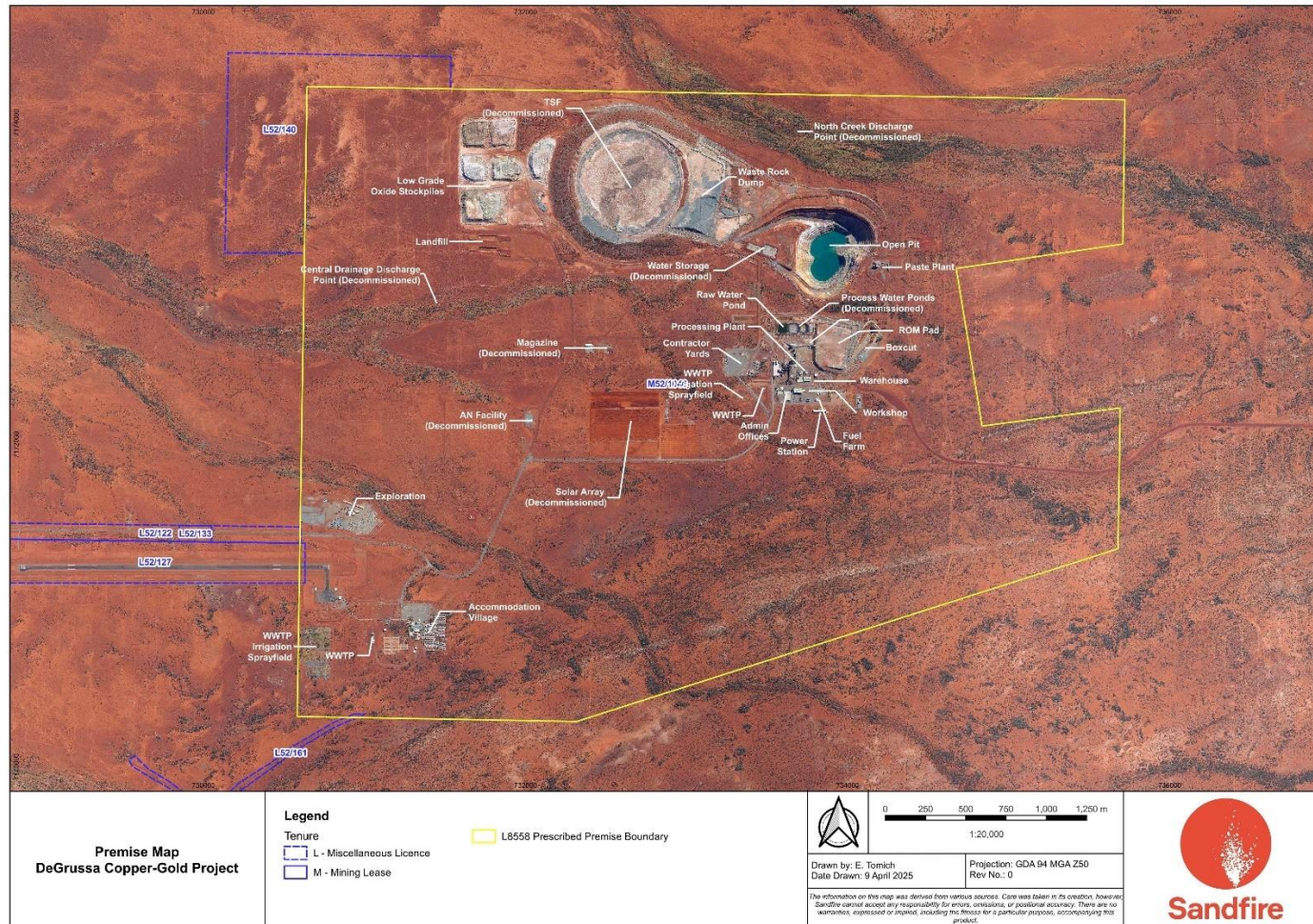


Figure 1: Prescribed Premises Boundary Map

L8558/2011/1 (latest update: 15/04/2025)

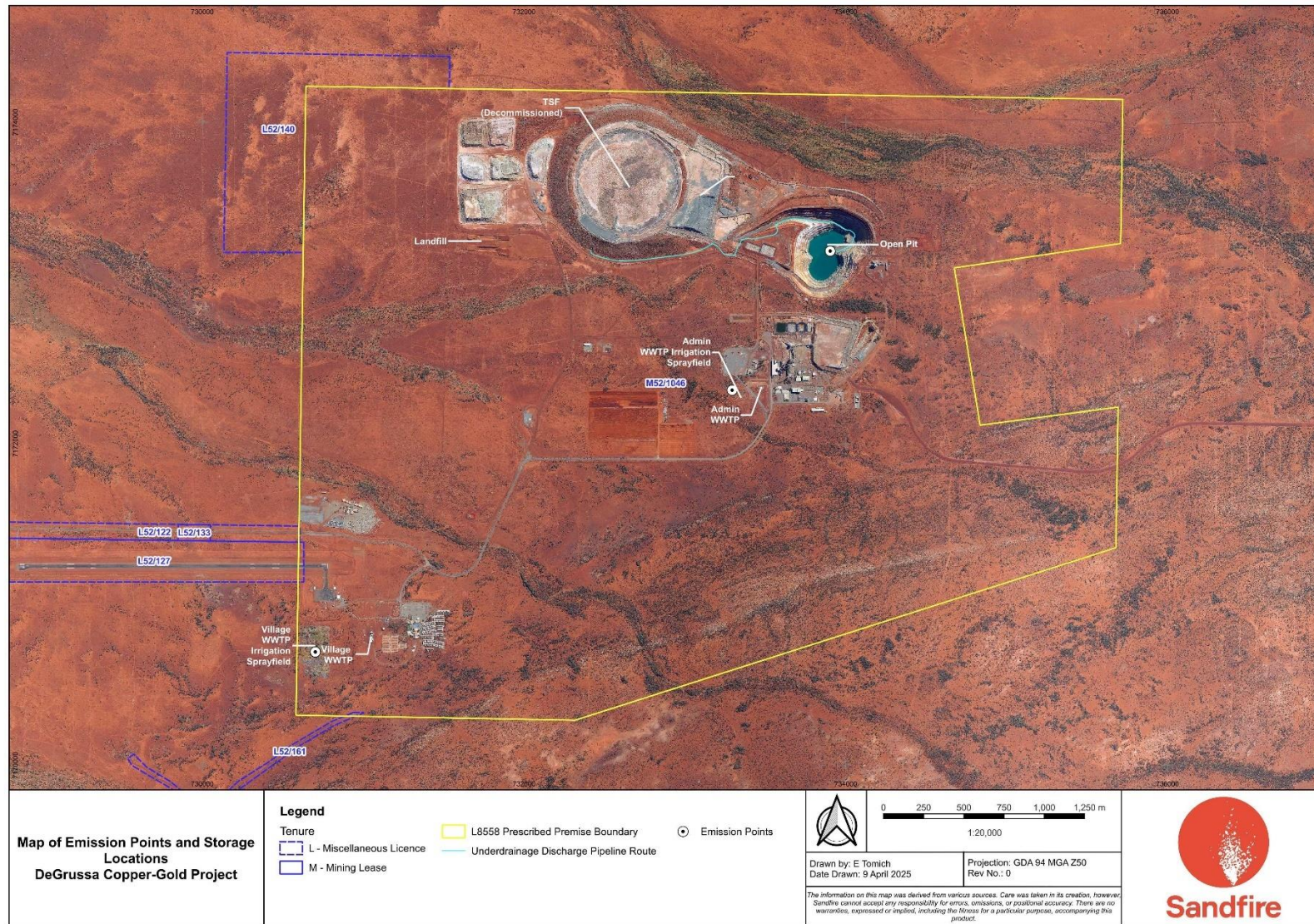


Figure 2: Map of emission points and storage locations

L8558/2011/1 (latest update: 15/04/2025)

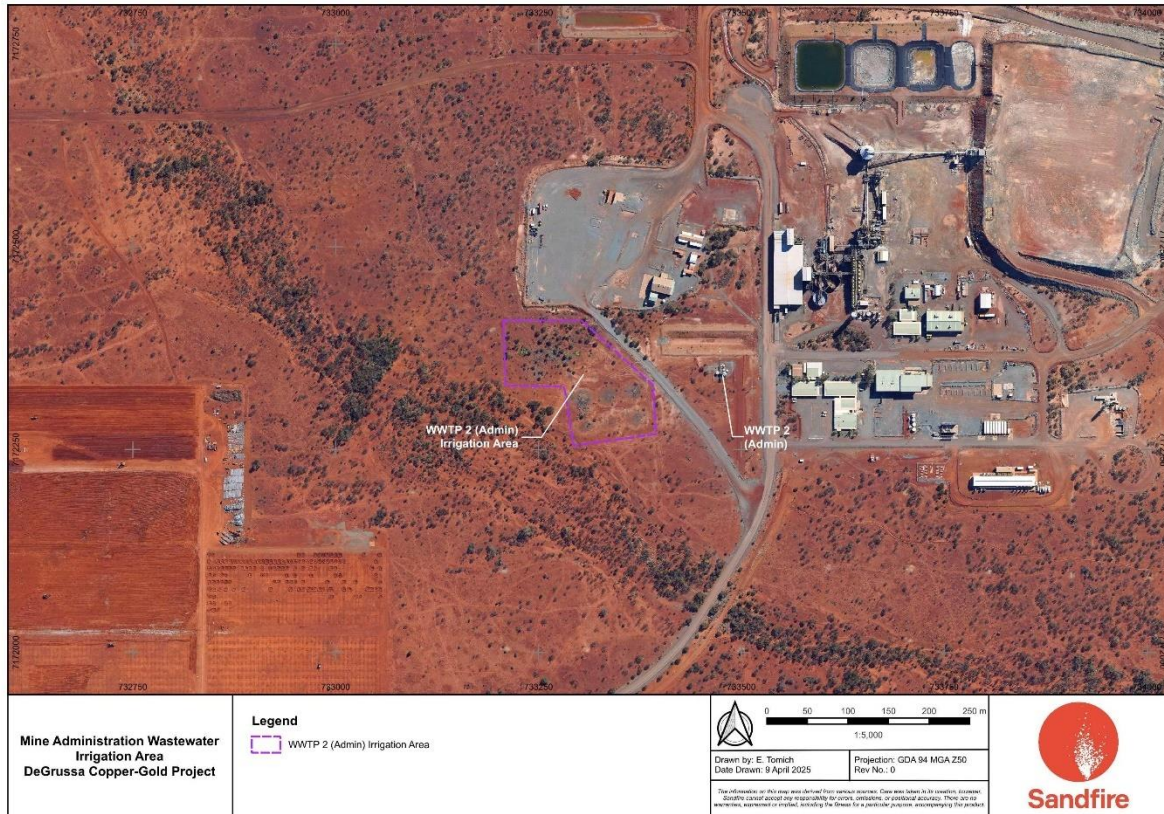


Figure 3: Mine administration wastewater irrigation area. Location of the emission points defined in Condition 8, Table 6

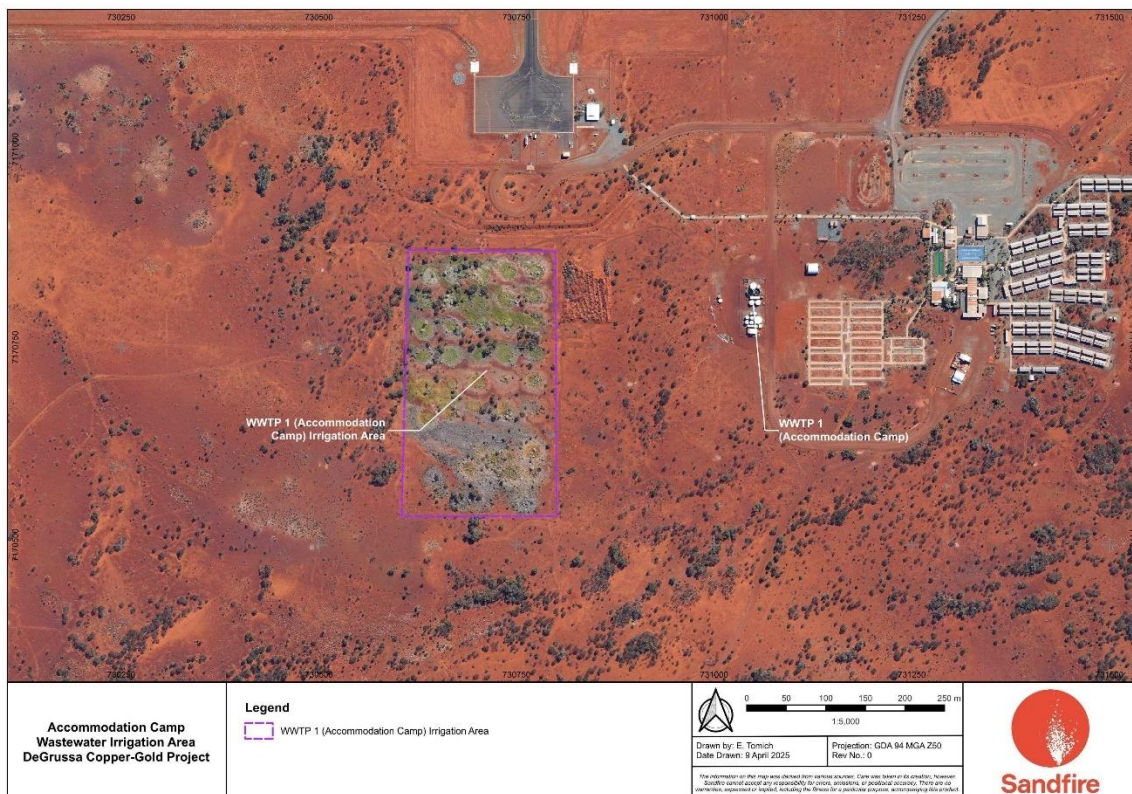


Figure 4: Accommodation camp wastewater irrigation area. Location of the emission points defined in Condition 8, Table 6

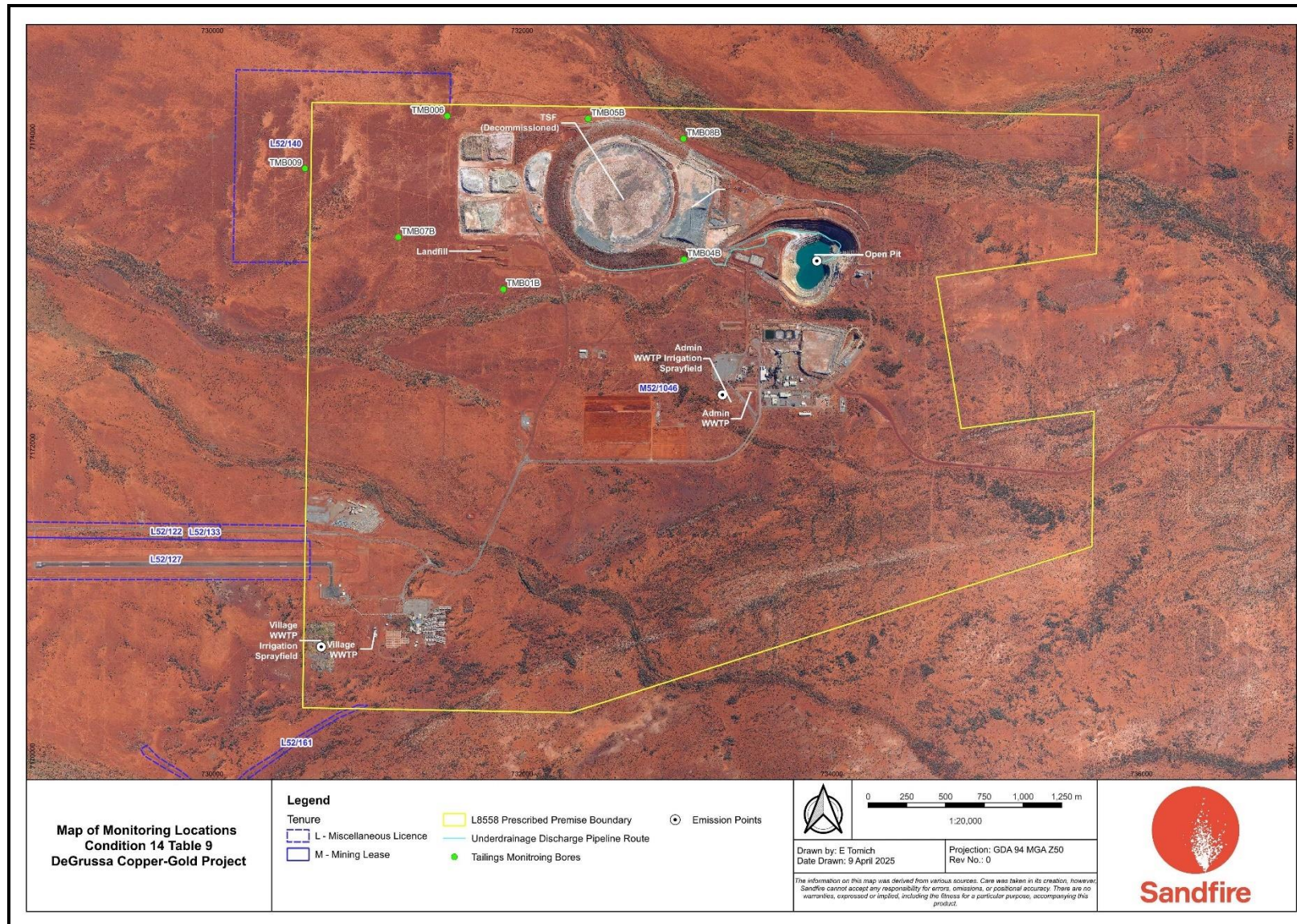


Figure 5: Map of monitoring locations. Locations of monitoring points defined in Condition 14, Table 9

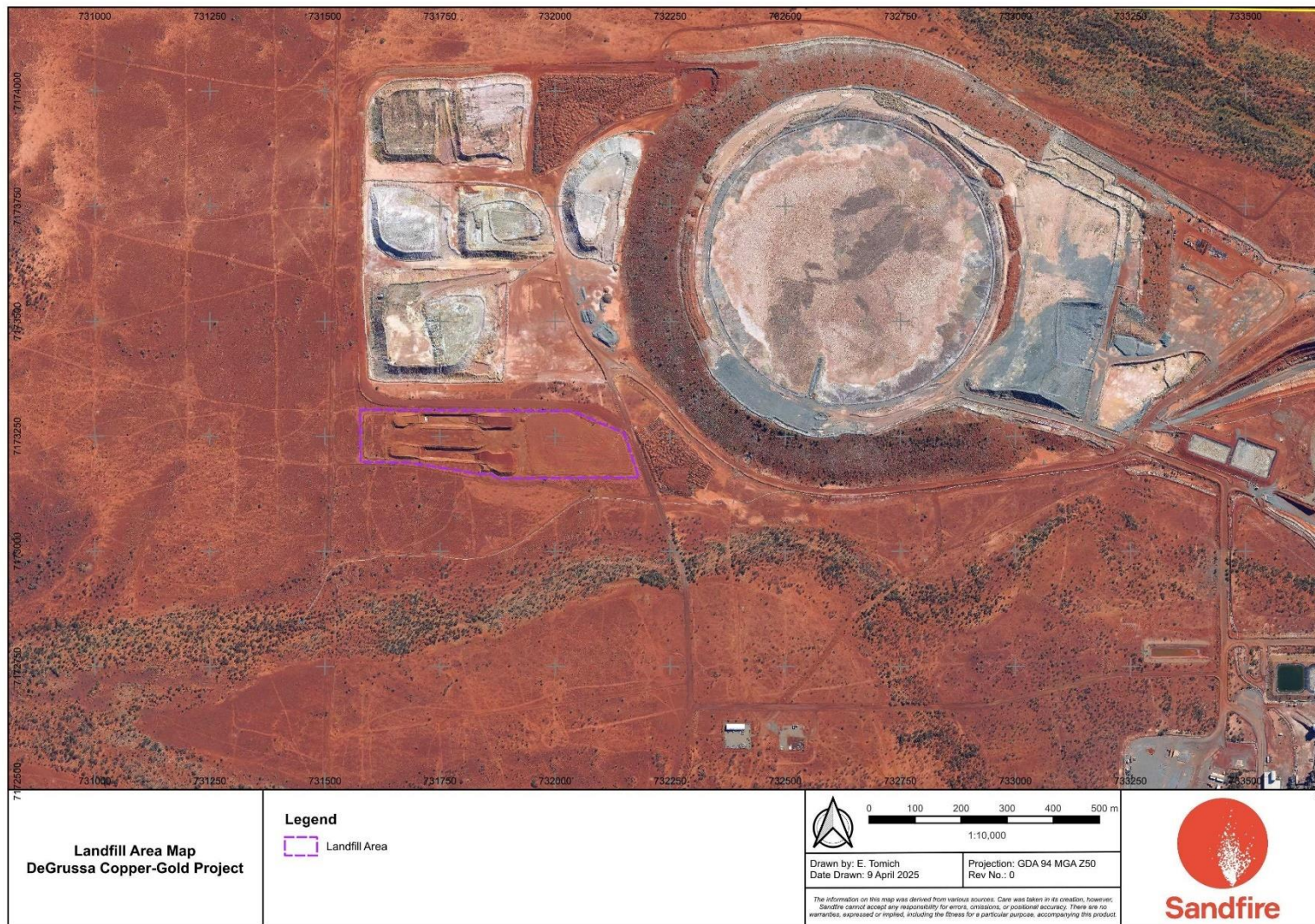


Figure 6: Landfill Area Map. Areas in which the disposal of waste by landfilling defined in Condition 6, Table 4

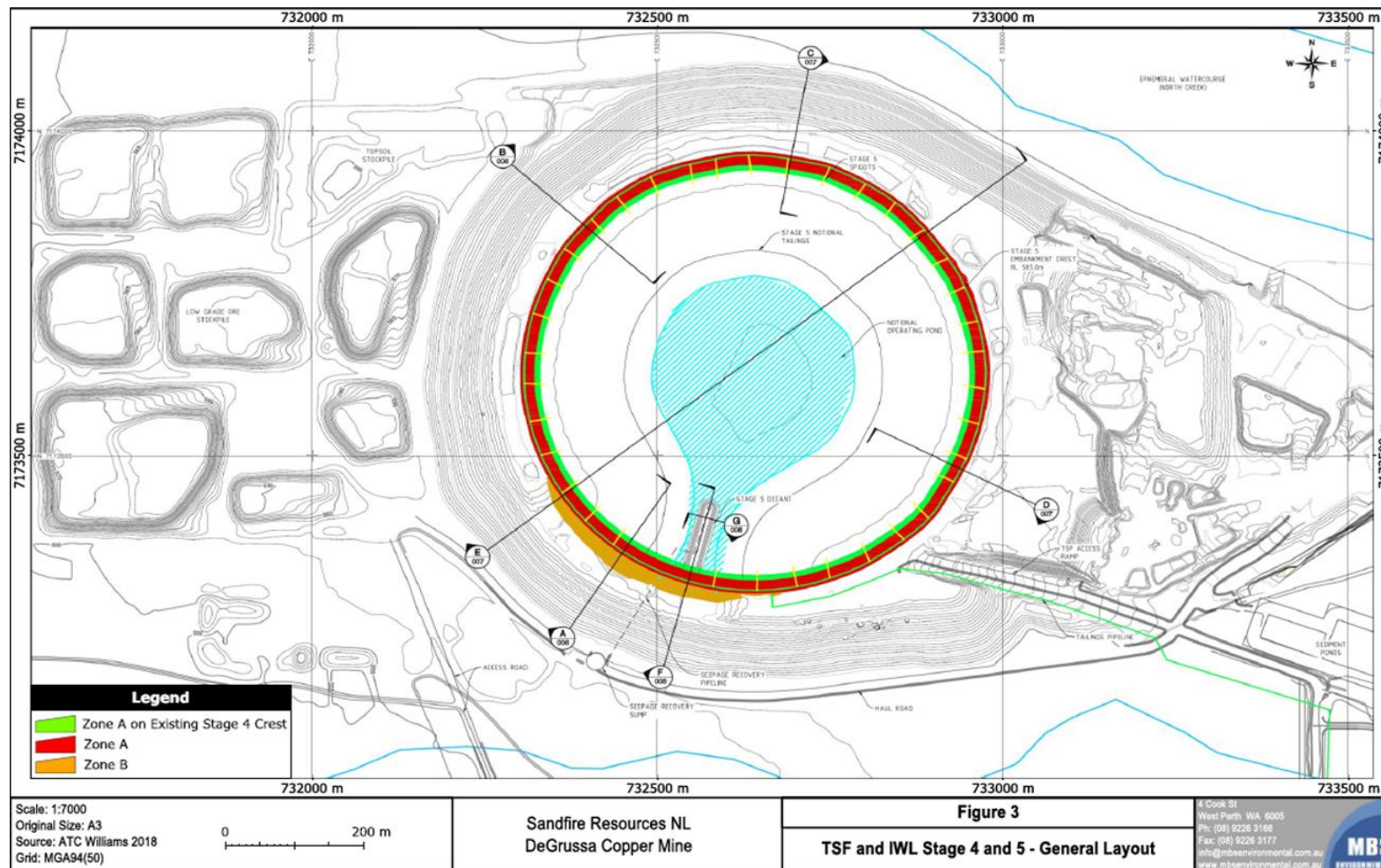


Figure 7: Map of TSF Stage 4 and 5

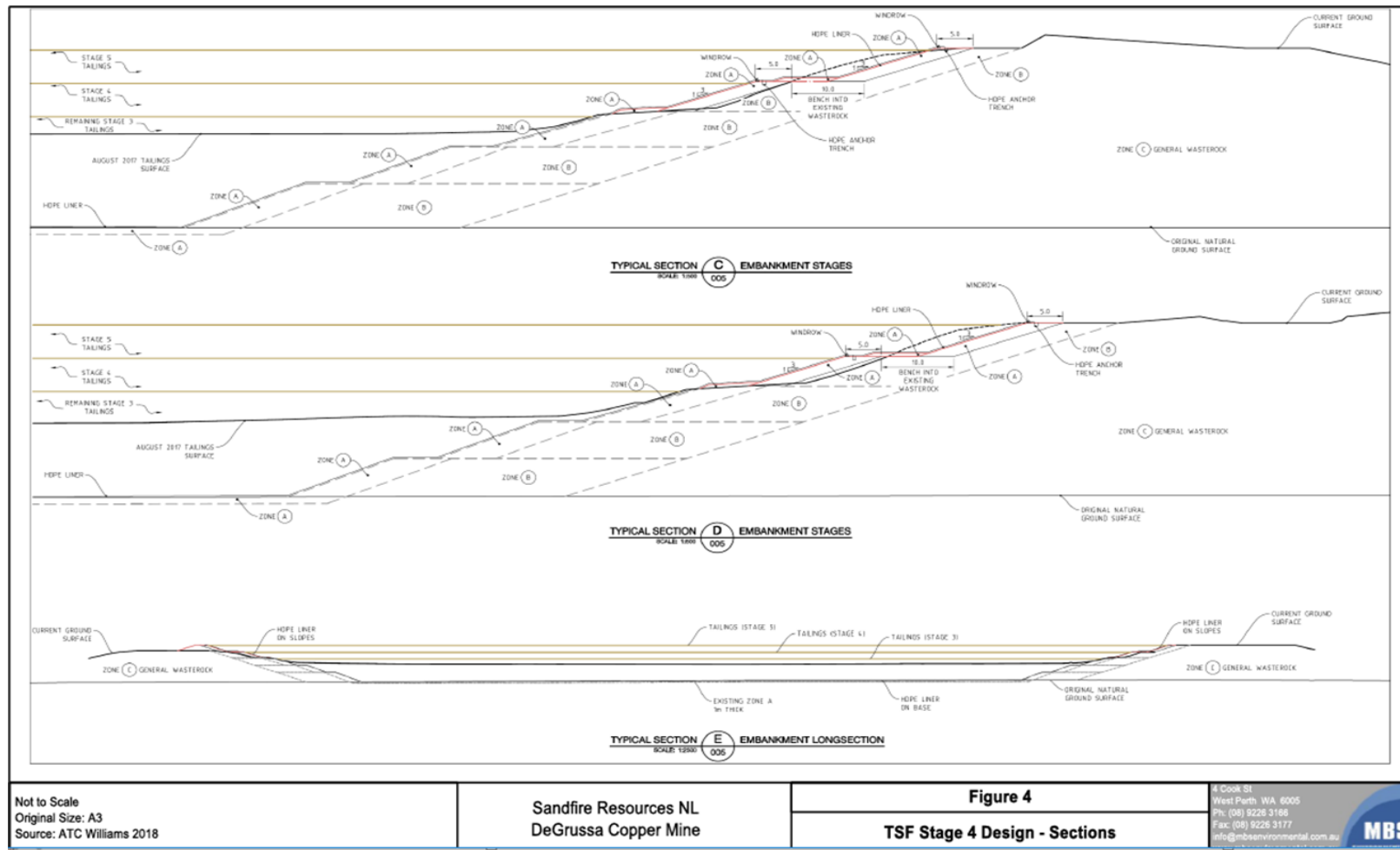


Figure 8: TSF Design