Licence number L8234/2008/2

Licence holder Robe River Mining Co. Pty Ltd

ACN 008 694 246

Registered business address Level 18, Central Park

152-158 St Georges Terrace

PERTH WA 6000

DWER file number DER2014/000868-1

Duration 31/07/2013 to 30/07/2033

Date of amendment 21/11/2022

Premises details Mesa A Warramboo Iron Ore Mine

ML248SA, G08/82, G08/85, G08/90, L08/166,

L08/177 and L08/178

FORTESCUE WA 6716

As defined by the coordinates in Schedule 2

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	35,000,000 tonnes per annual period
Category 6: Mine dewatering	7,000,000 tonnes per annual period
Category 12: Screening, etc. of material	10,000,000 tonnes per annual period
Category 54: Sewage facility	337 cubic metres per day

This licence is granted to the licence holder, subject to the attached conditions, on 21 November 2022, by:

ALANA KIDD

A/SENIOR MANAGER, RESOURCE INDUSTRIES

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

Licence history

Reference number	Date	Summary of changes
L8234/2008/2	31/07/2013	Licence reissued.
L8234/2008/2	29/04/2016	Notice of Amendment of Licence Expiry Dates section 59B(9) and section 59(1)(k) <i>Environmental Protection Act</i> 1986.
L8234/2008/2	25/08/2016	Licence amendment to include a Sequencing Batch Reactor (SBR) wastewater treatment plant (WWTP) constructed under works approval W5872/2015/1.
L8234/2008/2	18/04/2019	Licence amendment for the construction and operation of an additional WWTP at the Premises. Increase in category 54 design capacity for sewage treatment.
L8234/2008/2	21/11/2022	 Licence amendment for the following: include the Ore Processing Facility (OPF) constructed under W6284/2019/1; include category 6 with a limit of 7 GL/a and the Warramboo dewatering discharge point constructed under W6284/2019/1; expansion of the premises boundary; and conversion to the current licence format.

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 ensure the limits specified in Table 1 are not exceeded.

Table 1: Production or design capacity limits

Category ¹	Category description ¹	Premises production or design capacity limit
5	Processing or beneficiation of metallic or non-metallic ore	35,000,000 tonnes per annual period
12	Screening etc. of material	10,000,000 tonnes per annual period

Note 1: Environmental Protection Regulations 1987, Schedule 1.

Infrastructure and equipment

- 2. The licence holder must ensure that the site infrastructure and equipment listed in Schedule 3: Infrastructure and equipment, Table 10 and located at the corresponding infrastructure location is maintained and operated in good working order.
- 3. The licence holder must ensure that the site infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Mobile Crushing and Screening Plant(s)	Operated in accordance with the Iron Ore (WA) Mobile Crushing and Screening Management Plan (RTIO-HSE-0235877).	Not shown

Site infrastructure and equipment	Operational requirement	Infrastructure location	
Dust control systems	Maintain and operate installed dust control systems including: (i) primary sizer deluge PW-101; (ii) dust collectors DC-101 and DC-102; (iii) moisture analysers MN-101 and MN-102; (iv) water-add systems on AF-101, CV-101, CV-2201; (v) water cannons at train load-out stockpile, and (vi) sprinkler systems SP-101, SP-102, SP-103 and SP-104 as described in drawing number MA-2000-G-0302 contained in the document "Compliance Statement – Works Approval W4489/2008/1 Mesa A – Warramboo Iron Ore Project 9 October 2009" (document reference RTIO-HSE-0073427), such that iron ore product conveyed on CV-101 is maintained in a moist condition.	Not shown	
Sludge hardstand area or drying bed	 must have a hydraulic conductivity of equal to or less than 1 x 10⁻⁹ metres per second must be bunded to enable the containment and evaporation or recovery of any liquid matter 	Not shown	

Emissions and discharges

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

Table 3: Authorised discharge points

Emission	Discharge point location
Mine dewatering discharge	As shown in Schedule 1, Figure 5 'Discharge Point'.
Treated sewage for irrigation purposes	As shown in Schedule 1, Figure 4 'Irrigation Sprayfield 1 and Irrigation Sprayfield 2'

5. The licence holder must ensure that emissions from the discharge point listed in Table 4 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 7.

Table 4: Emission and discharge limits

Discharge point	Parameter	Limit
Warramboo Creek discharge point	Surplus mine dewater	7,000,000 tonnes per annual period
	Total Recoverable Hydrocarbons	30 mg/L
WWTP1 and WWTP2	Total Phosphorus (mg/L)	120 kg/ha
	Total Nitrogen (mg/L)	480 kg/ha

6. The licence holder must ensure that the waste types specified in Table 5 are only subjected to the corresponding process(es), subject to the corresponding process limits and/or specifications.

Table 5: Waste processing

Waste type ¹	Process(es)	Process limits and/or specifications ^{2,3}	
Sewage	Biological, physical and chemical treatment	WWTP1 with a maximum capacity to treat 155 m³/day WWTP2 with a maximum capacity to treat 182 m³/day	
Sludge and biosolids	Storage and disposal	 immediately removed offsite or stored onsite within a hardstand area or drying bed. in accordance with the Western Australian guidelines for biosolids management or to a licensed or registered landfill facility. 	

Monitoring

7. The licence holder must monitor emissions in accordance with the requirements specified in Table 6 and record the results of all such monitoring.

Table 6: Emissions and discharge monitoring

Monitoring location	Parameter	Unit	Frequency	Averaging period	Method
	WWTP1 and WWTP2	m ³	Continuous	24 hours	Flow metering device
WWTP1 and	Total Phosphorus	mg/L	- Quarterly Annual	Annual	
WWTP2 As shown in Schedule 1, Figure 4	Total Nitrogen	mg/L		A O /NIZO 5007 4	
	Biochemical Oxygen Demand	mg/L	Quartarly	Snot comple	AS/NZS 5667.1 AS/NZS 5667.10
	Total Suspended Solids	mg/L	Quarterly	Spot sample	

Monitoring location	Parameter	Unit	Frequency	Averaging period	Method
	pH ¹	pH units			
	E.coli	cfu/100mL			
	Residual Chlorine	mg/L			
	Volume	kL	Continuous	24 hours	Flow metering device
	Electrical Conductivity ¹	μS/cm			
	pH ¹	pH units			
	Total Hardness as CaCO ₃	mg/L			
	Total Dissolved Solids	mg/L			
Warramboo Creek discharge point As depicted in Schedule 1, Figure 5	Ions: Calcium Chloride Fluoride Potassium Magnesium Sodium Sulfate Carbonate Nutrients: Total Phosphorus Total Nitrogen Nitrite Nitrate Ammonium Metals: Aluminium Arsenic Boron Cadmium Chromium Copper Iron	mg/L	Quarterly	Spot sample	AS/NZS 5667.1 AS/NZS 5667.6

Monitoring location	Parameter	Unit	Frequency	Averaging period	Method
	Mercury				
	Manganese				
	Nickel				
	Lead				
	Selenium				
	Zinc				

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

- **8.** All sample analysis must be undertaken by laboratories with current NATA accreditation for the relevant parameters, unless otherwise specified in condition 7.
- 9. The licence holder must undertake a dust monitoring programme at locations depicted in Schedule 1, Figure 6 for the purpose of determining impacts of dust generated from within the premises. The programme shall incorporate:
 - (i) three PM_{10} E-sampler dust monitors and six Depositional Dust Gauges installed in accordance with Australian Standard 3580 (1.1:2007 Guide to siting air monitoring equipment);
 - (ii) total deposition shall be monitored using the depositional dust gauges referred to in part (i) of this Condition as per Australian Standard 3580 (10.1:2003 Determination of particulate matter Deposited matter Gravimetric method); and
 - (iii) dust monitors and gauges required under parts (i) and (ii) of this Condition shall be sited in order to allow comparison of results to assess dust emissions from the premises at the sandsheet community and background levels of particulate matter.

Records and reporting

- **10.** The licence holder must maintain records of the moisture content as determined by moisture analysers MN-101 and MN-102 described in for the dust control systems in condition 3 (iii).
- 11. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- **12.** 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 30 April after the end of that annual period an Annual Audit Compliance Report in the approved form.
- 13. The licence holder must submit to the CEO by no later than 30 April each year, an Annual Environmental Report for the preceding annual period for the conditions listed in Table 7, and which provides information in accordance with the corresponding requirement set out in Table 7.

Table 7: Annual Environmental Report

Condition	Requirement
Condition 7	The results to be provided to the CEO must include, but need not be limited to the following:
monitoring	the dates at which monitoring was undertaken for each location;
	the raw monitoring data from each location, for each parameter in a tabulated form; and
	 include an assessment and comparison against the NWQMS 1997 and previous monitoring results.
Condition 7	The results to be provided to the CEO must include, but need not be limited to the following:
Warramboo Creek	the dates at which monitoring was undertaken;
discharge point	the raw monitoring data, for each parameter in a tabulated form; and
	include an assessment and comparison against the ANZECC 2000 and previous monitoring results.
Condition 9	provide the results of the dust monitoring programme; and
Dust monitoring	include a comparison of results to assess dust emissions from the Premises at the sandsheet community and background levels of particulate matter.

- **14.** 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) any maintenance of infrastructure that is performed in the course of complying with conditions 2 and 3 of this licence;
 - (c) monitoring programmes undertaken in accordance with conditions 7 and 9 of this licence; and
 - (d) complaints received under condition 11 of this licence.
- **15.** The books specified under condition 14 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.

Definitions

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

Table 8: 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 in the same year	
ANZECC 2000	means the most recent version and relevant parts of the Australia and New Zealand Environment Conservation Council guidelines for fresh and marine water quality Volume 1 – 3 (Australian and New Zealand Environment and Conservation Council, Agriculture and Resource Management Council of Australia and New Zealand)	
AS/NZS 5667.1	means the most recent version and the relevant parts of the Australian Standard AS/NZS 5667.1 Water Quality - Sampling - Guidance on the Design of sampling programs, sampling techniques and the preservation and handling of samples	
AS/NZS 5667.6	means the most recent version and the relevant parts of the Australian Standard AS/NZS 5667.6 Water Quality - Sampling - Guidance on sampling of rivers and streams	
AS/NZS 5667.10	means the most recent version and the relevant parts of the Australian Standard AS/NZS 5667.10 Water Quality - Sampling - Guidance on sampling of waste waters	
Australian Standard 3580	means the most recent version and the relevant parts of the Australian and New Zealand series of guidance standards on methods for sampling and analysis of ambient air	
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	
cfu/100ml	means colony-forming units per 100 millilitres	
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3	

Term	Definition	
discharge	has the same meaning given to that term under the EP Act	
emission	has the same meaning given to that term under the EP Act	
EP Act	Environmental Protection Act 1986 (WA)	
EP Regulations	Environmental Protection Regulations 1987 (WA)	
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within	
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted	
m/s	means metres per second	
mg/L	means milligrams per litre	
NATA	means 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	
NWQMS	means National Water Quality Management Strategy, Australian Guidelines for Sewerage Systems – Effluent Management (Agriculture and Resource Management Council of Australia and New Zealand and New Zealand Environment and Conservation Council) 1997	
OPF	means Ore Processing Facility	
PM ₁₀	means airborne particulate matter (dust) with an equivalent aerodynamic diameter of 10 micrometres (10µm) or less	
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence	
prescribed premises	has the same meaning given to that term under the EP Act	
sandsheet community	3 (),	
waste	has the same meaning given to that term under the EP Act	
Western Australian guidelines for biosolids management	means the document titled Western Australian guidelines for biosolids management, December 2012 published by the Department of Environment and Conservation as amended from time to time	
WWTP	means Wastewater Treatment Plant	

END OF CONDITIONS

Schedule 1: Maps

Premises map

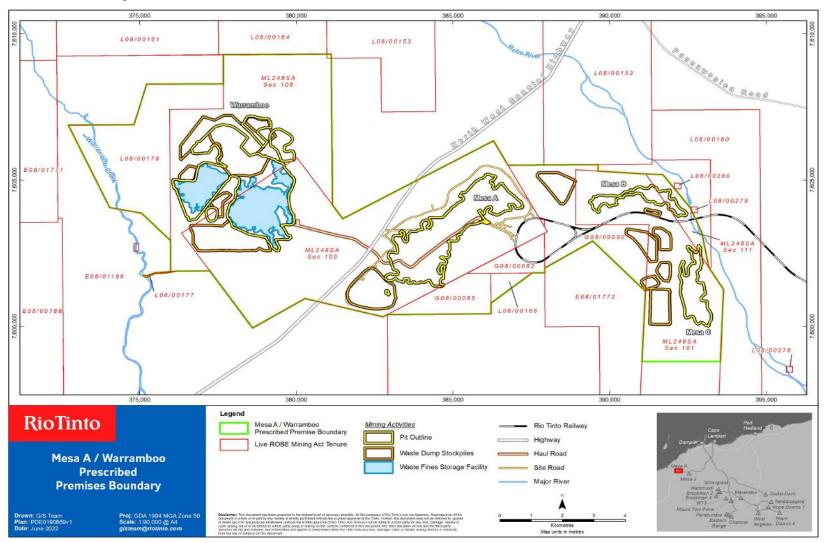


Figure 1: Map of the boundary of the prescribed premises

Infrastructure

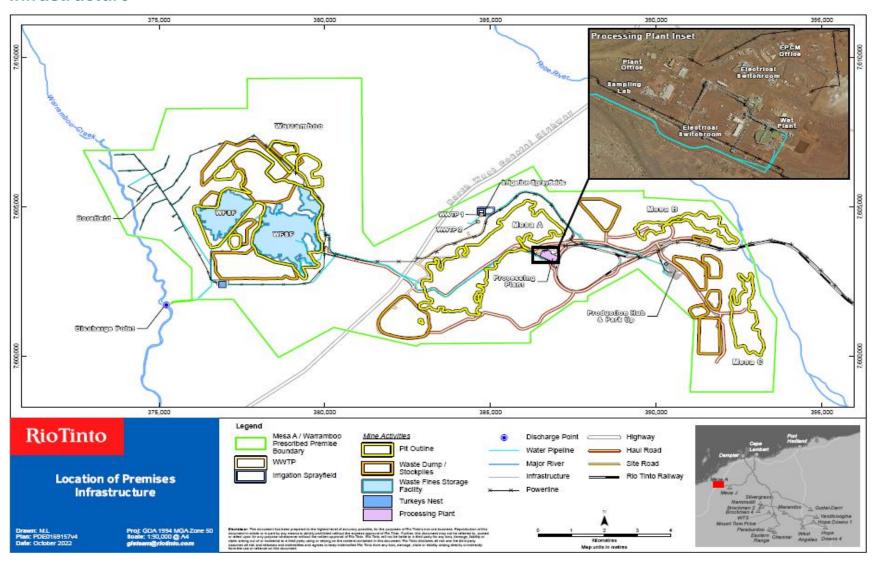


Figure 2: Location of Premises Infrastructure

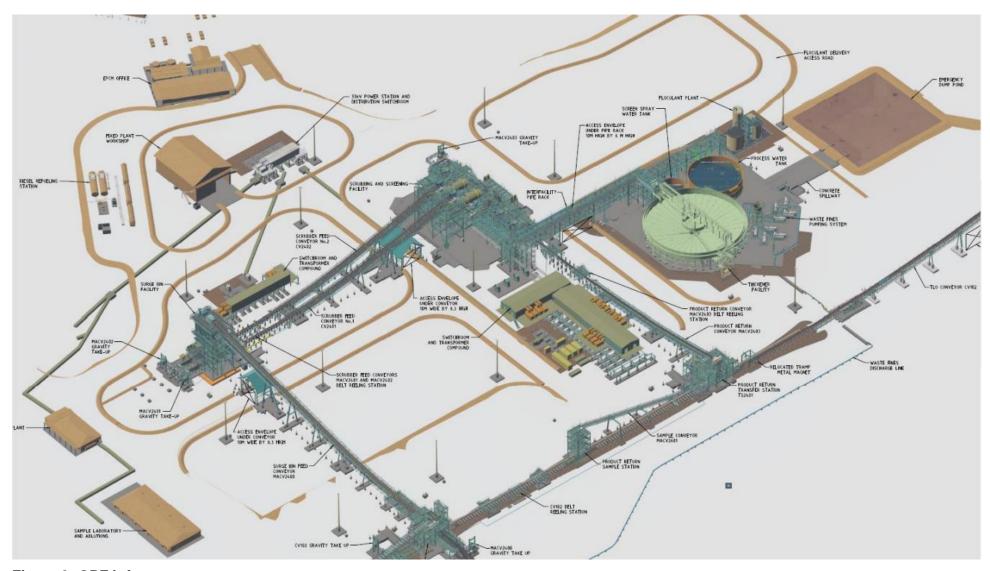


Figure 3: OPF infrastructure

Emission points and monitoring

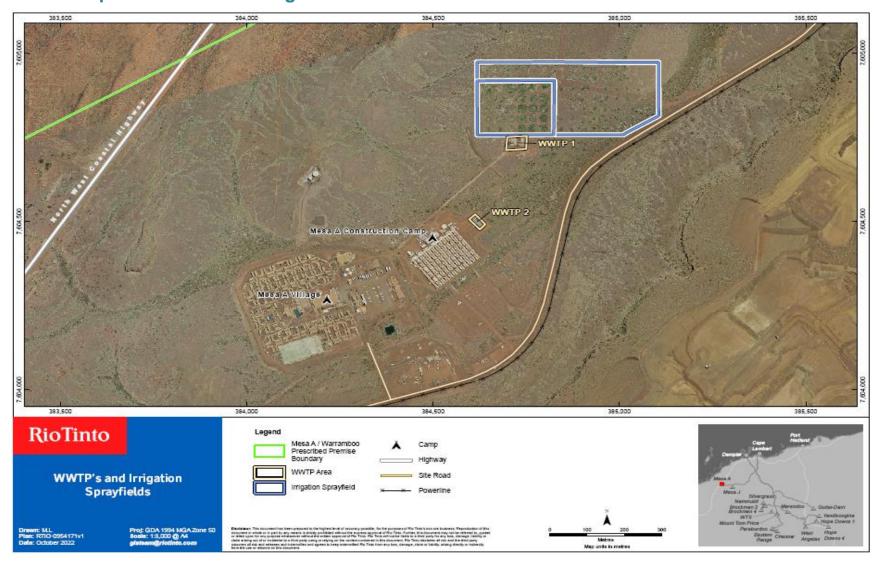


Figure 4: WWTP's and Irrigation Sprayfield

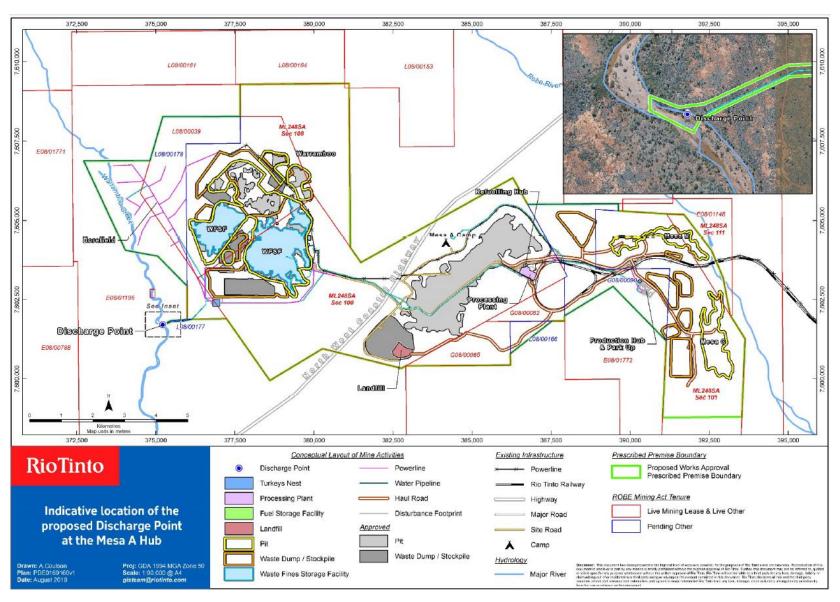


Figure 5: Warramboo Creek discharge point

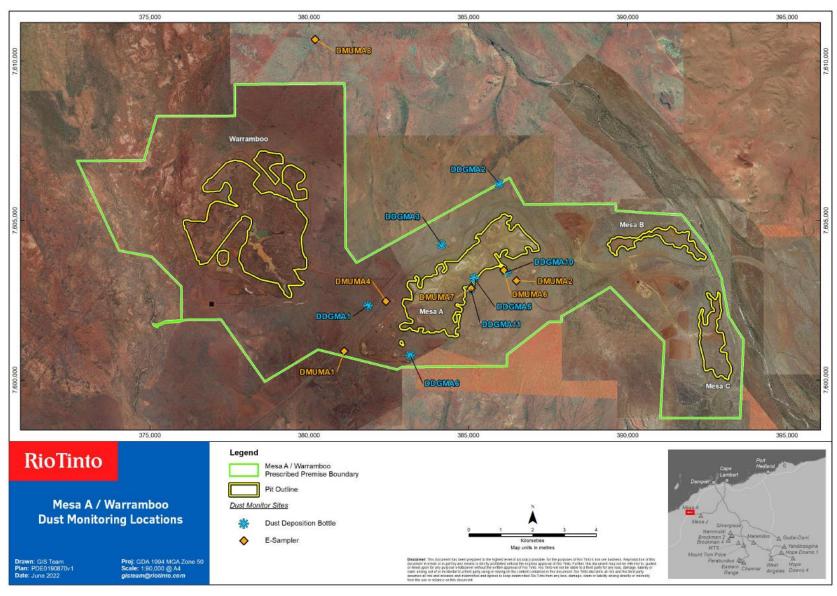


Figure 6: Dust monitoring locations

L8234/2008/2 (21/11/2022)

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 9.

Table 9: Premises boundary coordinates

	Easting	Northing
1.	387925.8937	7601997.895
2.	387927.0479	7601832.958
3.	387528.2055	7601830.168
4.	386209.8852	7600800.636
5.	386212.5158	7600438.91
6.	382902.6964	7600411.058
7.	382766.5572	7600335.563
8.	380273.904	7600958.228
9.	378603.3227	7599953.19
10.	377238.1727	7601900.073
11.	376161.1518	7601891.784
12.	376161.2007	7601891.794
13.	376161.1429	7601891.784
14.	376161.1518	7601891.784
15.	375871.3182	7601832.866
16.	375487.5902	7601813.289
17.	375250.6626	7601703.511
18.	375232.5217	7601667.828
19.	375117.9377	7601726.386
20.	375117.8718	7601762.039
21.	375193.3211	7601732.735
22.	375262.5696	7601742.133
23.	375480.2185	7601842.903
24.	375867.5665	7601862.619

	Easting	Northing
25.	375993.6948	7601890.494
26.	375985.5975	7602937.71
27.	375058.8708	7603876.735
28.	374038.3856	7604063.713
29.	372722.1401	7606883.891
30.	374815.1938	7606900.331
31.	375220.0518	7608282.538
32.	377669.5295	7608289.727
33.	377662.0776	7609284.014
34.	381112.3674	7609309.647
35.	381150.4559	7604156.347
36.	381483.0458	7603681.783
37.	386291.6399	7606348.608
38.	386753.9343	7605514.747
39.	389625.9796	7605534.724
40.	389627.5128	7605310.9
41.	391152.6719	7605212.82
42.	391701.292	7605192.505
43.	392570.3953	7604059.686
44.	392935.9768	7603208.639
45.	393164.4327	7602013.933
46.	393632.718	7601269.245
47.	393532.0855	7598802.354
48.	391027.2697	7598802.356
49.	391143.2253	7601202.859
50.	389457.8901	7602921.587
51.	387925.8937	7601997.895

Schedule 3: Infrastructure and equipment

The Primary Activity infrastructure and equipment situated on the Premises are detailed in Table 10.

Table 10: Infrastructure and equipment

Infrastructure and equipment		Infrastructure location			
Catego	Category 5: Processing or beneficiation of metallic ore				
1	OPF including transfer stations; surge bin facility; scrubber and screening facility and conveyors	At the location shown in Schedule 1, Figure 2 and as			
2	Thickener facility	depicted in Schedule 1, Figure 3.			
3	Flocculant plant				
4	Process water tank				
5	Emergency dump pond				
6	Train load out and stockpiles	Not shown			
Category 6: Mine dewatering					
7	Dewatering discharge point	As shown in Schedule 1, Figure 5 'Discharge Point'.			
8	Flow meters	Not shown			
9	Water conveyance pipelines	Not shown			
Category 12: Screening, etc. of material					
10	Mobile crushing and screening equipment	Not shown			
Catego	Category 54: Sewage facility				
11	WWTP1 and WWTP2	As shown in Schedule 1, Figure 4			
12	Irrigation Sprayfields				