## Licence

Licence number L6820/1993/12

**Licence holder** Robe River Mining Co. Pty Ltd

**ACN** 008 694 246

Registered business address Level 24, Central Park

152-158 St Georges Terrace

PERTH WA 6000

DWER file number INS-0001355

**Duration** 1/06/2013 to 31/05/2026

**Date of issue** 22/05/2013

Date of amendment 18/08/2025

**Premises details** Mesa J and K Iron Ore Mine

FORTESCUE WA 6716

Legal description

Being Mining Lease AML248SA – As defined in Figure 1, 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	20,000,000 tonnes per year
Category 6: Mine dewatering	30 Gigalitres per year
Category 12: Screening, etc. of material	10,000,000 tonnes per year
Category 57: Used tyre storage: general	5,000 tyres
Category 61A: Solid waste facility	16,000 tonnes per year
Category 64: Class II or III putrescible landfill site	2,000 tonnes per year
Category 54: Sewage facility: premises	186 m³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 18 August 2025, by:

#### SENIOR MANAGER, RESOURCE INDUSTRIES

Officer delegated under section 20 of the Environmental Protection Act 1986

# **Licence history**

Date	Reference number	Summary of changes	
22/05/2013	L6820/1993/12	Licence re-issue	
18/01/2018	L6820/1993/12	Amendment Notice 1	
		<ul> <li>authorisation of the Mesa J Secondary Sizer constructed under works approval W5634/2014/1;</li> </ul>	
		<ul> <li>addition of TSF5 Stage 2 monitoring bores constructed under W5535/2013/1;</li> </ul>	
		<ul> <li>re-categorisation and expansion of the current Category 63 Inert Landfill to a Category 64 Waste Dump Landfill;</li> </ul>	
		<ul> <li>addition of Category 12 to allow for the use of a Mobile Crushing and Screening Plant; and</li> </ul>	
		other administrative amendments.	
10/07/2019	L6820/1993/12	Amendment Notice 2	
		<ul> <li>addition of Category 54 for the installation and operation of a Wastewater Treatment Plant (WWTP) and associated sprayfield.</li> </ul>	
1/06/2023	L6820/1993/12	Amendment to include:	
		<ul> <li>amalgamation of Amendment Notices 1 and 2;</li> </ul>	
		<ul> <li>Category 5: Processing of ore (20,000,000 tonnes per annual period) – ongoing operation of the Ore Processing Facility (OPF) infrastructure for improved operation and to include Mesa H ore processing via the Mesa J plants;</li> </ul>	
		<ul> <li>Category 64: Landfill facilities (2,000 tonnes per annual period) – construction and operation of landfill facilities for the ongoing disposal of up to 2,000 tonnes of wastes per annual period at the operations;</li> </ul>	
		ongoing operation of fuel storage and refuelling facilities;	
		<ul> <li>update groundwater monitoring locations to reflect changes to the groundwater monitoring bores as constructed under Works Approval W6425/2020/1;</li> </ul>	
		<ul> <li>update condition 31 with the specifications, 186 m³/day throughput, Total Nitrogen 20 mg/L and Total Phosphorus 8 mg/L;</li> </ul>	
		<ul> <li>remove monitoring requirements for anionic polyacrylamide as no methods for analysis are available in Australian commercial laboratories; and</li> </ul>	
		other administrative amendments.	
18/08/2025	L6820/1993/12	<ul> <li>ongoing tailings deposition into TSF3 (expanded under W6495/2021/1)</li> </ul>	
		<ul> <li>ongoing tailings deposition into TSF8 East Cell (constructed under W6653/2022/1), and raise to 152m RL</li> </ul>	

<ul> <li>replace monitoring bore MB16MEJ0003 with WB15MEJ001</li> </ul>
<ul> <li>changes to data presentation requirements in annual reports</li> </ul>
<ul> <li>Authorisation for the storage of up to 5000 tyres within the prescribed premises with a view to future recycling.</li> </ul>
Clarification on authorisation for new landfills

## Interpretation

#### In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

### Licence conditions

The licence holder must ensure that the following conditions are complied with:

### Infrastructure and equipment

#### Mobile crushing and screening plant

- **1.** The licence holder shall ensure that the mobile crushing and screening plants are situated in a suitable location such that:
  - (a) they are located at least 50 m from any permanent water body;
  - (b) the mobile plant area is contained so no contaminated runoff (any waste listed in *Environmental Protection (Unauthorised Discharges) Regulations 2004*) leaves the Premises. If stormwater becomes contaminated with hydrocarbons, contaminated water is to be collected in sumps and removed via truck to a suitable licenced disposal / remediation facility; and
  - (c) uncontaminated stormwater from the surrounding areas shall be diverted around the mobile plant area.

#### **Construction authorisation**

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

as set out in Table 1.

Table 1: Design and construction requirements

Site infrastructure and equipment	Design and construction requirement	Infrastructure location
Landfill Facilities		
Proposed / subsequent waste dump and putrescible landfill facilities	<ul> <li>Landfill facilities will have the following location requirements:</li> <li>landfill facilities must be located within the prescribed premises boundary;</li> <li>landfill facilities must not be located within an Environmentally Sensitive Area;</li> <li>located more than 100 m from any permanent or perennial watercourse;</li> <li>landfill facilities will be located so that vertical distance between the waste and the highest seasonal and expected post mining ground water level is no less than 3 m.</li> <li>Landfill facilities will have the following requirements:</li> </ul>	Existing Mesa J waste dump landfill: Schedule 1: Maps, Figure 4  Subsequent landfill facilities located within the prescribed premises boundary as defined in Schedule 1: Figure 1.
	signage erected which clearly defines what waste is	

Site infrastructure and equipment	Design and construction requirement	Infrastructure location
	accepted;	
	<ul> <li>stormwater management structures (i.e., bunding) to divert surface water flows away from the landfill;</li> </ul>	
	a sump or bunding within the landfill to collect any surface water that has come into contact with waste;	
	<ul> <li>putrescible landfill facilities must be fenced to an appropriate height, gated, and locked to minimise unauthorised access and windblown waste;</li> </ul>	
	<ul> <li>landfill facilities must have a firebreak at least 3 m in width around the boundary.</li> </ul>	
TSF8 central embankment raise		
Raise of TSF8 Eastern cell to 152.0m RL	Downstream raise of the Central Dividing Embankment to 152.0 mRL, shown as stage 2 and stage 3 in Figure 6.  Between TS eastern and western cell Figure 3.	

#### Maintain and operate existing infrastructure

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
Tailings Storage Facilities (TSF) 3, 4, 5 and 8 (Eastern Cell)	<ul> <li>tailings deposition from the processing of up 20,000,000 tonnes of ore per year;</li> <li>all tailings generated at the Premises as a result of ore processing must be discharged into and contained by one of the approved TSFs;</li> <li>Tailings deposition at an average annual concentration of greater than 35%;</li> <li>TSF3 decant pond to be located at the southern side (furthest from iron deposit geology representing hydraulic connection to Robe River) to reduce seepage;</li> <li>TSF8 decant pond to be located near the centre of TSF8 and maintained at an operating depth at least 1.5m below the spillway invert level;</li> <li>decant ponds shall be managed to minimise the pond size;</li> <li>Recovered water (decant water and water collected through the seepage interception system) returned for reuse in processing or other uses consistent with the site water management strategy;</li> <li>ensure that at least 1 m of freeboard is maintained between the water level of the tailings pond and inner crest of the tailings embankment of TSF4</li> </ul>	Schedule 1: Maps, Figure 1

Site infrastructure and equipment	Operational requirement	Infrastructure location
	<ul> <li>ensure that at least 0.5m of freeboard is maintained between the water level of the tailings pond and crest of the tailings embankments for TSF3 and TSF8 at all times, with operational level allowing for a 1:100 AEP 72-hour event;</li> <li>deposition of tailings to TSF8 eastern cell is not authorised above 148 mRL;</li> <li>thickened tailings may be deposited into TSF4 and TSF5 as contingency storage</li> <li>tailings may not be deposited into TSF5;</li> <li>in the event of a pipe break or leak, spill is to be contained within a corridor or remediated;</li> <li>perform inspections:         <ul> <li>monthly of the decant pond location;</li> <li>daily to assess available freeboard on active TSFs;</li> <li>daily of pit walls, embankments, and discharge location for integrity / damage;</li> <li>daily of tailings delivery and decant return pipeline for integrity, damage, and potential leaks;</li> <li>daily of decant pumps;</li> <li>daily for seepage downstream of TSF3 main embankment including the embankment toe; and</li> </ul> </li> <li>Quarterly records kept of location and size of decant ponds</li> </ul>	
Evaporation ponds	ensure that evaporation ponds are maintained to prevent seepage and overflow	Not depicted
Secondary sizer	maintain and operate dust suppression sprays fitted at all material transfer points including: primary sizer discharge conveyor, secondary sizer, IPS stacker conveyor, TLO conveyor;	Schedule 1: Maps, Figure 2
IPS stacker	<ul> <li>weekly inspections and maintenance to collect / remove material if potential dust risk;</li> <li>surface water is to be contained by bunds and to be pumped</li> </ul>	Schedule 1: Maps, Figure 2
Rescreening facility including scavenger screens, rescreened product transfer conveyor, transfer station  Thickener plant including thickener feed tank, thickener feed lines, transfer pumps, flocculant dosing plant, process water tank, process water return pipeline	<ul> <li>to collection sumps or allowed to evaporate;</li> <li>process water release is to be collected by bunds and directed to collections sumps via concrete spillways;</li> <li>potentially contaminated surface water is to be directed to the oily water collection and treatment system;</li> <li>maintain collection sumps for sedimentation and to drive-in for sediment removal;</li> <li>daily inspections of return pipelines for integrity, damage, and potential leaks; and</li> <li>in the event of a pipe break or leak, spill is to be contained within a corridor or remediated.</li> </ul>	Schedule 1: Maps, Figure 2  Schedule 1: Maps, Figure 2

Site infrastructure and equipment	Operational requirement	Infrastructure location	
from PP2 to PP1			
WWTP and	record volumes of treated waste pro	Schedule 1:	
Irrigation Sprayfield	<ul> <li>uncontaminated stormwater must n the WWTP;</li> </ul>	ot runoff does not enter	Maps, Figure 5
	<ul> <li>daily inspections of WWTP pipeline integrity, damage, and potential lea</li> </ul>		I iguic o
	<ul> <li>irrigation sprayfield is to be manage pooling of effluent in the ground sur discharge area;</li> </ul>		
	<ul> <li>operation and maintenance underta manufacturer's requirements; and</li> </ul>	aken in accordance with	
	<ul> <li>treated effluent to the following star</li> </ul>	ndards:	
	Parameter	Treatment specifications	
	Biochemical oxygen demand (BOD)	<20mg/L	
	Total suspended solids	≤30mg/L	
	рН	6.5-8.5	
	Total Nitrogen	20 mg/L	
	Total Phosphorus	8 mg/L	
	E. coli	<10 <sup>3</sup> cfu/100mL	
Proposed / subsequent	<ul> <li>landfill facilities to have a combined 2,000 tonnes per year;</li> </ul>	maximum capacity of	Schedule 1: Maps, Figure 4
waste dump and putrescible	waste disposed to landfill facilities are to be recorded;		and other
landfill facilities	<ul> <li>waste dump landfill facilities will acc following types of waste:</li> </ul>	cept and bury only the	locations meeting the
	○ Inert waste type 1;		criteria in condition 2.
	<ul> <li>Inert waste type 2 (rubber and</li> </ul>	plastics only);	Condition 2.
	<ul><li>Special waste type 1;</li></ul>		
	Putrescible waste (wooden pa	* *	
	<ul> <li>as defined in the Landfill Definition</li> <li>restrict activities potentially generat</li> </ul>		
	during windy conditions;		
	<ul> <li>dust suppression to be implemente water trucks, control of vehicle mov vehicle speeds);</li> </ul>		
	<ul> <li>fencing surrounding the perimeter of facilities must be regularly inspecte cleared of windblown waste;</li> </ul>		
	<ul> <li>tipping area of putrescible landfill is not to be greater than 30m in length and 2 m above the ground level height;</li> <li>waste in inert landfill facilities is to be covered on an ad-hoc basis when required, to at least 200 mm at final landform design;</li> </ul>		
<ul> <li>special waste type 1 is to be disposed of within a dedicated trench, the location of disposed wastes is recorded, and the waste is immediately covered with a minimum depth of 300 m of inert and incombustible material; and</li> </ul>			
	putrescible waste is to be covered weekly, with at least 200		

Site infrastructure and equipment	Operational requirement	Infrastructure location
	mm so that no waste is left exposed (including at final landform design).	
Fuel storage and refuelling facilities	potentially contaminated surface water is to be directed to the oily water collection and treatment system	Schedule 1: Maps, Figure 1

#### Waste management from ancillary operations

- 4. The licence holder shall utilise and maintain protective bunding, skimmers, silt traps, drains and/or sealed collection sumps to collect and contain all wastewater generated from any maintenance workshops, vehicle washdown bays and laydown areas to ensure such wastes do not enter the environment.
- **5.** The licence holder shall ensure that wastewater collected and contained in accordance with condition 4 is directed to oil/water separators for treatment.
- **6.** The licence holder shall ensure that wastewater treated in accordance with condition 5 is directed to an evaporation pond or used for dust suppression on the premises.

#### Disposal and storage of tyres

7. The licence holder must ensure that the waste types specified in Table 3 are only subjected to the corresponding process(es), subject to the corresponding process limits and/or specifications.

**Table 3: Waste processing** 

Waste type	Process(es)	Process limits and/or specifications		
Used tyres (produced as a result	Storage	Storage	Storage	<ul> <li>Not located in Environmentally Sensitive Areas or within the Bungaroo Creek Water Reserve PDWA or within 500m of the Robe River.</li> </ul>
of mining activities on the		<ul> <li>Storage areas must be level, clear of vegetation, rubbish and other combustible material to mitigate the risk of fire.</li> </ul>		
premises)		<ul> <li>A firebreak at least 3 meters in width must be maintained around the boundary of tyre storage areas.</li> </ul>		
		<ul> <li>Firefighting resources and water supply must be available on the prescribed premises with capacity to extinguish an established fire in tyre storage areas.</li> </ul>		
		<ul> <li>The storage area must include bunding and sumps sufficient to contain water and other liquid waste that may result from the fighting of tyre fires. Following the extinguishing of a fire, this material must be contained to avoid discharges to the environment.</li> </ul>		
		<ul> <li>Used tyres must be stacked on their side walls or if stored on their treads, area baled with a securing device made from a non- combustible material.</li> </ul>		
		<ul> <li>Tyre storage (number of tyres in stacks, area and height of stacks, separation distances between stacks) will be designed to limit the extent of spread of an established fire. Guidance shall be sought from the DFES Guidance Note: GN02.</li> </ul>		
	Disposal	Buried within the mine pit or waste rock dumps		

**8.** The licence holder shall keep a written record of the location and number of tyres disposed to the mine pit or the waste rock dumps, and the cumulative number stored outside of landfills and report this in the Annual Environment Report.

### **Emissions and discharges**

#### **Dust Management**

- **9.** The licence holder shall take measures to prevent the generation of visible dust from materials handling operations, stockpiles, open areas, and transportation activities. Such measures may include, but are not limited to:
  - (a) maintaining stockpiles in a damp condition;
  - (b) sealing non-working faces to prevent dust lift off;
  - (c) spraying surfaces with water;
  - (d) sealing surfaces with chemical dust suppressants; and
  - (e) rehabilitation of disturbed areas.
- **10.** The licence holder shall maintain installed dust collection and dust control systems including:
  - (a) coverings on conveyors, transfer points and discharge points;
  - (b) skirtings; and
  - (c) dust filters

as measures to prevent the generation of visible dust from the premises.

#### **Stormwater Management**

- 11. The licence holder shall ensure that contaminated stormwater is retained on the premises to allow treatment for sediment and total hydrocarbon prior to discharge off the premises.
- 12. The licence holder shall ensure that sedimentation basins are maintained at each point of discharge from the premises such that there is sufficient retention time within the basin to reduce suspended solids prior to discharge of waters offsite.

#### **Liquid Chemical Storage**

- 13. The licence holder shall store environmentally hazardous chemicals including, but not limited to, fuel, oil or other hydrocarbons (where the total volume of each substance stored on the premises exceeds 250 L) within low permeability (10<sup>-9</sup> m/s or less) compound(s) designed to contain not less than 110% of the volume of the largest storage vessel or inter-connected system, and at least 25% of the total volume of substances stored in the compound.
- **14.** The compound(s) described in condition 13 shall:
  - (a) be graded or include a sump to allow recovery of liquid;
  - (b) be chemically resistant to the substances stored;
  - (c) include valves, pumps and meters associated with transfer operations wherever practical. Otherwise, the equipment shall be adequately protected (e.g., bollards) and contained in an area designed to permit recovery of chemicals released following accidents or vandalism;

- (d) be designed such that jetting from any storage vessel or fitting will be captured within the bunded area [see for example Australian Standard (AS) 1940-2004 Section 5.8.3 (h)];
- (e) be designed such that chemicals which may react dangerously if they come into contact, are in separate bunds in the same compound or in different compounds; and
- (f) be controlled such that the capacity of the bund is maintained at all times (e.g., regular inspection and pumping of trapped uncontaminated rainwater).
- 15. The licence holder shall as soon as practicable remove and dispose of any liquid resulting from spills or leaks of chemicals including fuel, oil, or other hydrocarbons, whether inside or outside the low permeability compound(s).

#### **Authorised Discharge Point**

**16.** During operations, the licence holder shall ensure that the emissions specified in Table 4, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 4: Authorised discharge point

	Emission	Discharge point	Discharge point location
1.	Mine dewatering water	Discharge Point 1 Discharge Point 3 Discharge Point 5 Discharge Point 6 Discharge Point B Discharge Point C	Schedule 1: Maps, Figure 2
2.	WWTP treated effluent	Irrigation sprayfield	Schedule 1: Maps, Figure 5

17. The licence holder shall ensure dewatering discharges from discharge points referred to in condition 16 are managed to ensure that erosion and scouring impacts are minimised.

#### **WWTP**

**18.** The licence holder shall ensure any sludge removed from the WWTP is disposed of in accordance with the *Western Australian guidelines for biosolids management*, Department of Environment and Conservation (February 2012).

### **Monitoring**

#### **Water monitoring**

- 19. The licence holder shall determine the monthly volumes of dewatering water discharged through Discharge point 1; Discharge point 3; Discharge point 5; Discharge point 6; Discharge point B; and Discharge point C (as depicted in Schedule 1, Figure 2)).
- 20. The licence holder shall compare the results from the quality monitoring of discharge water required by condition 19 for each parameter listed in column 1 of Table 5 with the target levels stated in column 3 of Table 5 and present this information in the

Annual Environmental Report and report any exceedance of these targets in the Annual Audit Compliance Report.

Table 5: Discharge parameters and target exceedances for dewatering sites

Column 1	Column 2	Column 3
Parameter	Unit	Target level
рН	pH unit	6 to 8.5
Total Dissolved Solids (TDS)	(mg/L)	1500 mg/L
Total Suspended Solids (TSS)		80 mg/L
Total Recoverable Hydrocarbons		30 mg/L
Major ions – Na, K, Ca, Mg		ANZG 2018 – Trigger values for freshwater (95% level of ecosystem protection) or ± 15 of background range (whichever is applicable).
Metals – Al, Pb, Cu, Fe, Mn, Zn, Cd, and Cr.		ANZG 2018 – Trigger values for freshwater (95% level of ecosystem protection) ± 15 of background range (whichever is applicable).

21. The licence holder shall take representative samples from the monitoring sites listed in column 1 of Table 6, at the frequencies stated in column 2 of Table 6 and have them analysed for the parameters listed in column 3 of Table 6, at locations listed in column 5 of Table 6. This information is to be presented in the Annual Environmental Report, including comparison against previous years' data.

Table 6: Water monitoring schedule

Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring Site	Sampling Frequency <sup>2,3,4</sup>	Parameter	Unit	Monitoring Location
<b>Groundwater Sites</b>				
Tailings Area		Standing water level	mbgl	Schedule
		pH <sup>1</sup>	pH unit	1: Maps, Figure 1, 3
TSF3 (and TSF5 South)		Electrical Conductivity <sup>1</sup> (EC)	μS/cm	rigule 1, 3
JMB09 MB14MEJ001		TDS	mg/L	
MB14MEJ004		Alkalinity (CaCO <sub>3</sub> )	mg/L	
MB15MEJ004 MB16MEJ0008 MB19MEJ0001 MB19MEJ0002 MB21MEJ0001 MB21MEJ0002 MB21MEJ0003(TSFMB 3a)	Quarterly	Major Ions - Calcium (Ca), Chloride (Cl), Fluoride (F <sup>-</sup> ) Magnesium (Mg), Sodium (Na) and Sulphate (SO <sub>4</sub> ) Metals – Aluminium (Al), Arsenic (As), Barium (Ba), Boron (B), Cadmium (Cd), Cobalt (Co), Chromium (Cr),		
MB21MEJ0004 MB21MEJ0005(TSFMB 3b) MB21MEJ0006 MB22MEJ0007 MB22MEJ0008		Copper (Cu), Iron (Fe), Mercury (Hg), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Antimony (Sb), Selenium (Se), Silicon (Si), Strontium (Sr), Thallium (Tl), Tin (Sn), and Zinc (Zn).		
TSF4		Nitrate (NO <sub>3</sub> -), Total Nitrogen		

Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring Site	Sampling Frequency <sup>2,3,4</sup>	Parameter	Unit	Monitoring Location
WB15MEJ001		(N)		
MB17MEJ0005		Acrylamide		
MB16MEJ0006				
TSF8 MBTSF8a MBTSF8b MBTSF8c MBTSF8d				
TSF3, 4, 5 and 8				
1373, 4, 3 anu 8	Quarterly (during TSFs receiving tailings)	pH <sup>1</sup>	pH unit	Schedule 1: Maps, Figure 1, 3
		EC <sup>1</sup>	μS/cm	
		TDS	mg/L	
		Alkalinity (CaCO <sub>3</sub> )	g, _	
Supernatant water		Major Ions – Na, K, Ca, Cl, Mg and SO <sub>4</sub>		
		Metals – Cu, Fe, Mn, As, Cd, Cr, Ni, Co, Mn, Se, B, Hg, Mo, Sb, Zn and Tl		
		Total Nitrogen (NO₃) Acrylamide		
Dewatering Discharge F	Points	,		
Discharge Point 1	Quarterly	pH <sup>1</sup>	pH units	Schedule
Discharge Point 3	(when	EC <sup>1</sup>	μS/cm	1: Maps, Figure 2
Discharge Point 5	discharging)	TDS	mg/L	r igure 2
Discharge Point 6		TSS	9/ =	
Discharge Point B Discharge Point C		Total Recoverable Hydrocarbons		
		Major ions – Na, K, Ca, Mg		
		Metals – Al, Pb, Cu, Fe, Mn, Zn, Cd, and Cr.		
WWTP and Irrigation Sp	rayfield			
Flow meter to irrigation spray	Daily or continuous line	Cumulative volumetric flow rate	kL/day	Schedule 1: Maps,
	Monthly (during	pH <sup>1</sup>	pH units	Figure 5
	commissioning period)	E. coli	cfu/100 ml	
WWTP outlet	Quarterly (during post-commissioning and operational	Biochemical oxygen demand TSS Residual free chlorine	mg/L	
	period)	Total Phosphorus Total Nitrogen		

Note 1: For pH and EC, in-field non-NATA accredited analysis is permitted.

Note 2: Monthly monitoring shall be undertaken at least 15 days apart.

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

Note 4: No sample required if monitoring bore is dry.

- **22.** The licence holder shall collect and preserve all water samples in accordance with the relevant parts of Australian Standard AS/NZS 5667.1 and AS/NZS 5667.11.
- 23. The licence holder shall ensure that all parameters requiring laboratory analyses pursuant to condition 22 are conducted by an organisation with NATA accreditation for the specified parameters in accordance with the current Standard Methods for Examination of Water and Wastewater APHA-AWWA-WEF.
- **24.** The licence holder must undertake monitoring of the water balance for TSF3, 4, 5 and 8 each monthly period (when depositing tailings), and (as a minimum) record the following information:
  - (a) site rainfall;
  - (b) evaporation rate (not assumed to be the same as the pan evaporation rate);
  - (c) decant water recovery volumes;
  - (d) volume of tailings deposited;
  - (e) tailings % solid content and
  - (f) estimate of seepage losses.

### **Records and reporting**

- **25.** A suitably qualified professional engineer or geotechnical specialist must audit and review each active TSF on an annual basis. An audit review report must:
  - (a) review of the past performance of the TSF;
  - (b) validate the current design of the TSF;
  - (c) examine water management at the TSF;
  - (d) review the results of piezometric data;
  - (e) outline deficiencies identified in the audit and include measures to address them; and
  - (f) be submitted to the CEO annually by 30 June, for the preceding calendar year.
- **26.** The licence holder shall provide to the CEO, by 30 April each year, a copy of an Annual Environmental Report containing monitoring results and data collected as a requirement of any condition and set out in Table 7 of this licence during the period 1 January and ending on 31 December in that year.

**Table 7: Annual Environmental Report requirements** 

Conditions	Requirement
Summary	Product produced Tailings deposited Tailings density (solid vs water content)
3	Record of the total tonnes of ore processed; Record of the total tonnes of waste disposed of in all landfill facilities; and Updated landfill facility figures provided in AER when proposed / subsequent landfill facilities have been constructed (including previous locations).
7	A review of the tyre storage design and execution, including

Conditions	Requirement		
	variations from DFES Guidance Note: GN02		
	assessment of fire risk and		
	recommendations for any improvements.		
8	Number and location of tyres disposed of or stored in accordance with condition 7.		
19	Monthly volumes (in m³ or kL) of dewatering water discharged at the authorised discharge points presented in tabulated format.		
20, 22, 23	All monitoring data (including sampling date) in tabulated form, and in graphical form where the results exceed the detection limit for that analysis; and		
	An assessment and interpretation of the data, including comparison to historical trends, loading limits, exceeded levels in parameters.		
21, 22, 23	Monthly cumulative volumes (in m³ or kL) of treated wastewater applied to the irrigation sprayfield presented in tabulated format;		
	All monitoring data (including sampling date) in tabulated form, and in graphical form where the results exceed the detection limit for that analysis.		
	An assessment and interpretation of the data, including comparison to historical trends, loading limits, exceeded levels in parameters.		
	TSF groundwater monitoring results compared to the ANZG (2018) default guideline values (DGVs) for 95% species protection.		
24	Provide the results of the monthly water balance monitoring tabulated form and as a cumulative time-series graphs in Microsoft Excel or similar format for each monitoring parameter.		
	Provide a summary of the water balance results.		
	Revise and calibrate the water balance where there is a concern of seepage losses and revise the decant operations for the management of water levels.		

#### **27.** The licence holder must:

- (a) undertake and audit of compliance with the conditions of this licence during the preceding annual period; and
- (b) prepare and submit to the CEO by 30 April each year an Annual Audit Compliance Report in the approved form.
- 28. 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.
- **29.** 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 conditions 2 of this licence;
  - (c) any maintenance of infrastructure that is performed in the course of complying with condition 3 of this licence;
  - (d) monitoring programmes undertaken in accordance with conditions 19 to 23 of this licence; and
  - (e) complaints received under condition 28 of this licence.
- **30.** The books specified under condition 29 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	means the inclusive period from 1 January until 31 December in the same year.	
ANZG 2018	Australian and New Zealand guidelines for fresh and marine water quality <a href="https://www.waterquality.gov.au/guidelines/anz-fresh-marine">https://www.waterquality.gov.au/guidelines/anz-fresh-marine</a>	
AS/NZS 5667.1	means the Australian Standard AS/NS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samplings.	
AS/NZS 5667.11	means the Australian Standard AS/NS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters.	
AS 1940-2004	means the Australian Standard AS 1940-2004 The storage and handling of flammable and combustible liquids.	
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 Environmental Protection Act 1986  Locked Bag 10  Joondalup DC WA 6919  or:  info@dwer.wa.gov.au	
cfu/100mL	means colony forming units per 100 millilitres.	
DFES Guidance Note: GN02	DFES Guidance Note: GN02: Bulk storage of rubber tyres including shredded and crumbed tyres (DFES July 2023)	
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.	
environmentally sensitive area	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)	
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.	

Term	Definition
Inert waste type 1	has the meaning defined in Landfill Definitions.
Inert waste type 2	has the meaning defined in Landfill Definitions.
IPS Stacker	means in-pit primary sizing circuit stacker.
kL	means kilolitre.
kL/day	means kilolitre per day.
Landfill Definitions	means the document titled 'Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer of the Department of Environment and Conservation as amended from time to time.
L	means litre.
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 <sup>3</sup>	means cubic metres.
m	means metres.
mbgl	means metres below ground level.
mg/L	means milligrams per litre.
mm	means millimetres.
m/S	means metres per second.
NATA	means National Association of Testing Authorities.
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.
PP1	means processing plant 1.
PP2	means processing plant 2.
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(s) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Putrescible	has the meaning defined in Landfill Definitions.
Special waste type 1	has the meaning defined in Landfill Definitions.
TDS	means Total Dissolved Solids.
TLO conveyor	means train load out conveyor.
TSF	means Tailings Storage Facility.
TSS	means Total Suspended Solids.

Term	Definition
μS/cm	means microsiemens per centimetre.
waste	has the same meaning given to that term under the EP Act.
WWTP	means wastewater treatment plant.

### **END OF CONDITIONS**

# **Schedule 1: Maps**

## **Premises map**

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

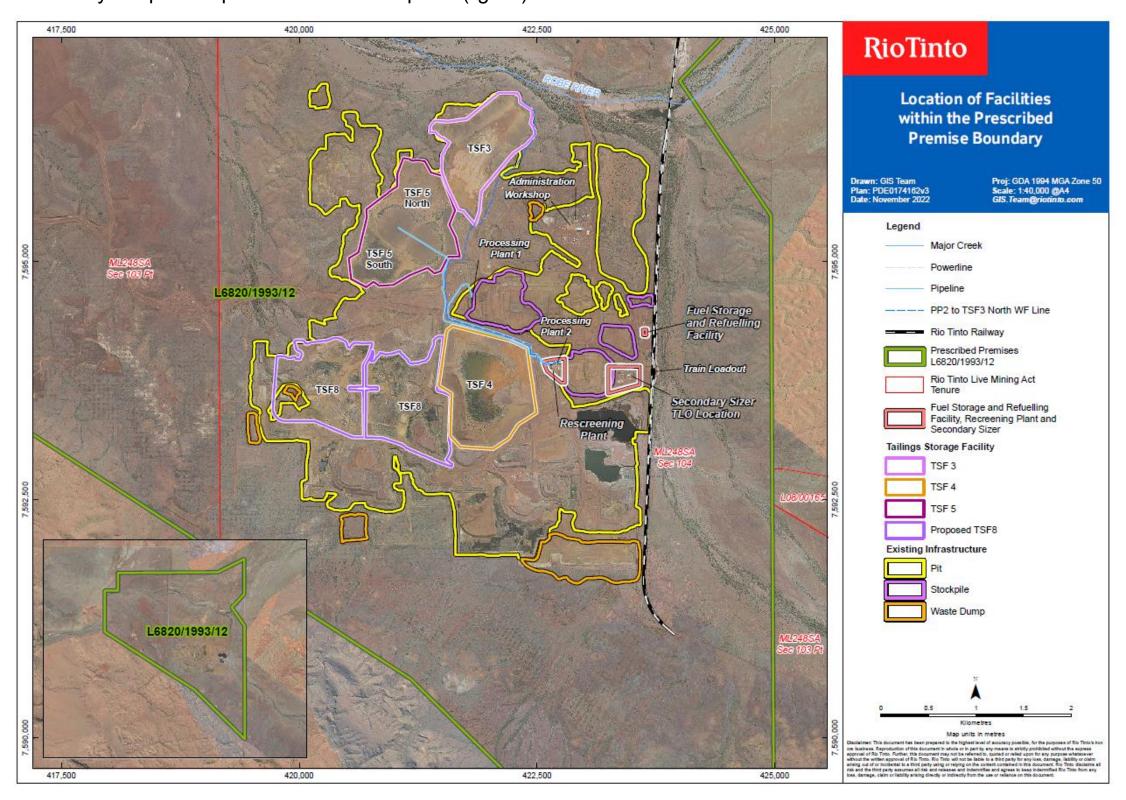


Figure 1: Map of the boundary of the prescribed premises, tailings storage facilities, and infrastructure

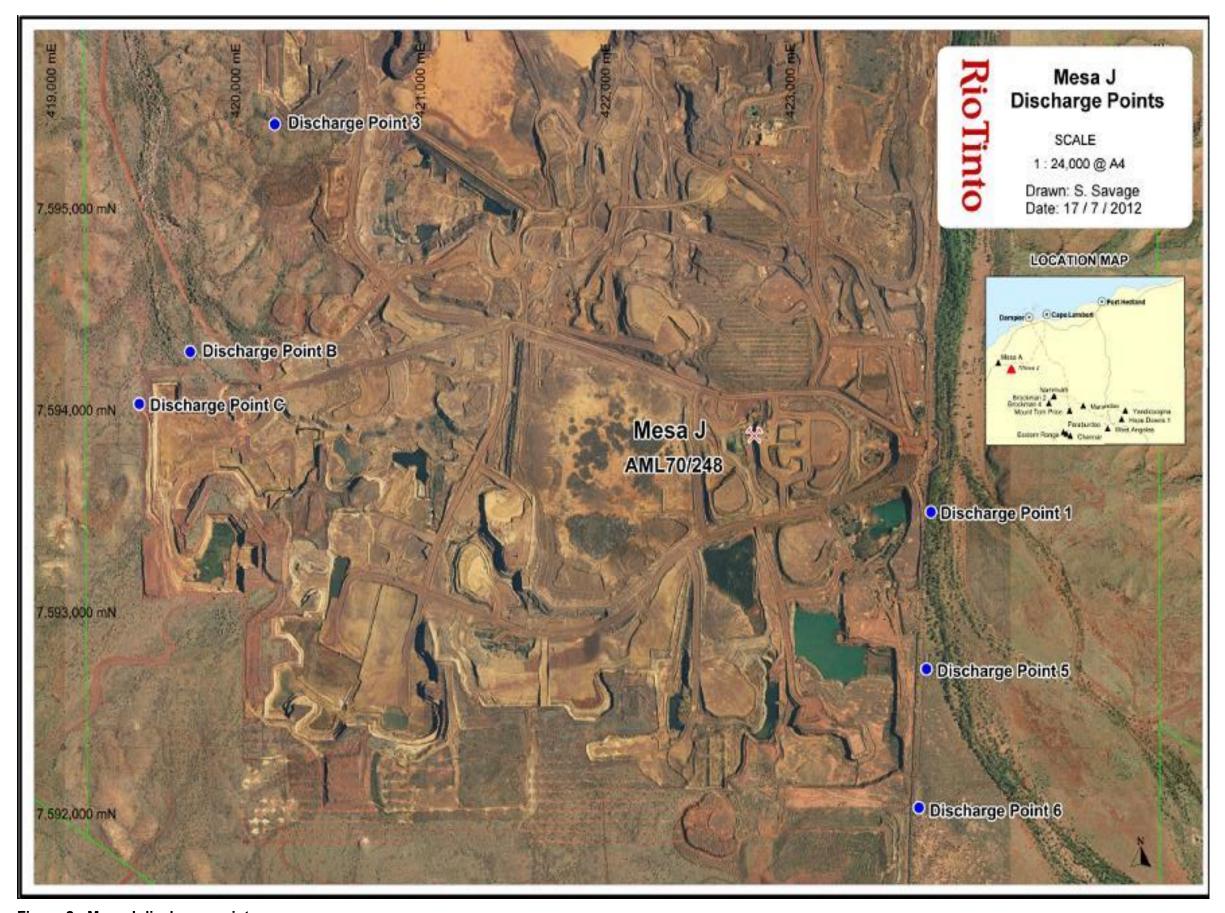


Figure 2: Mesa J discharge points

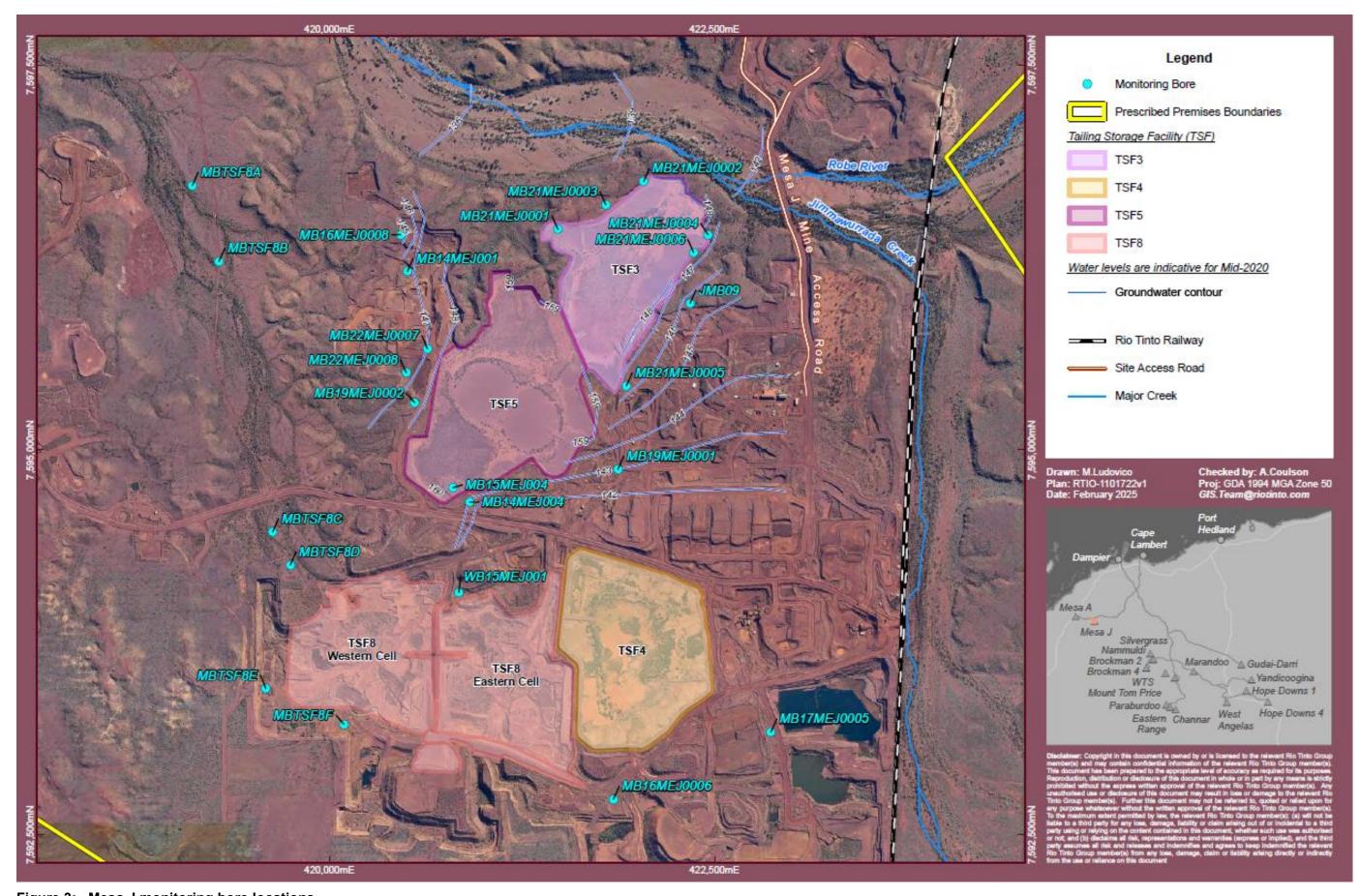


Figure 3: Mesa J monitoring bore locations

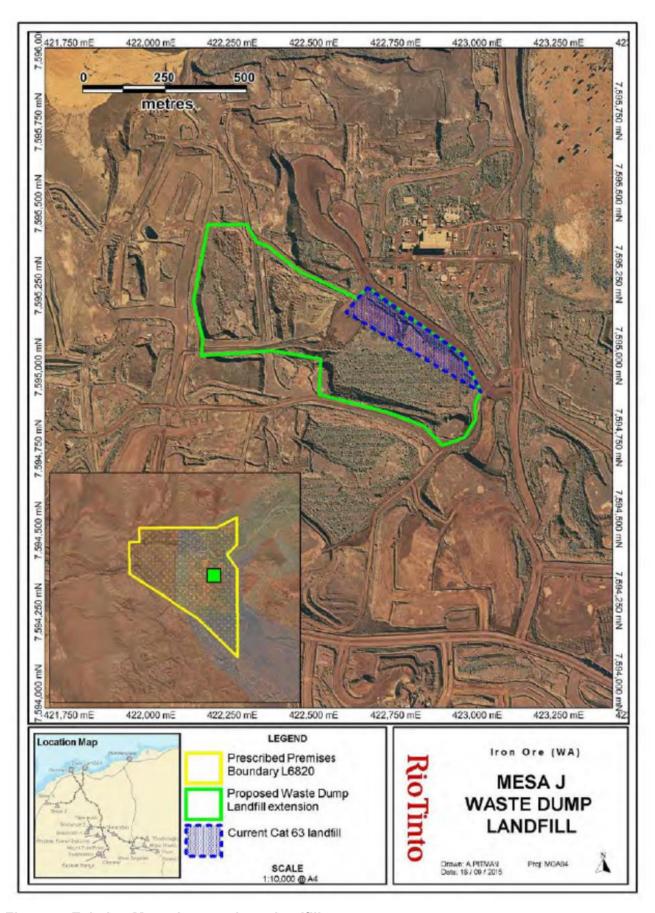


Figure 4: Existing Mesa J waste dump landfill

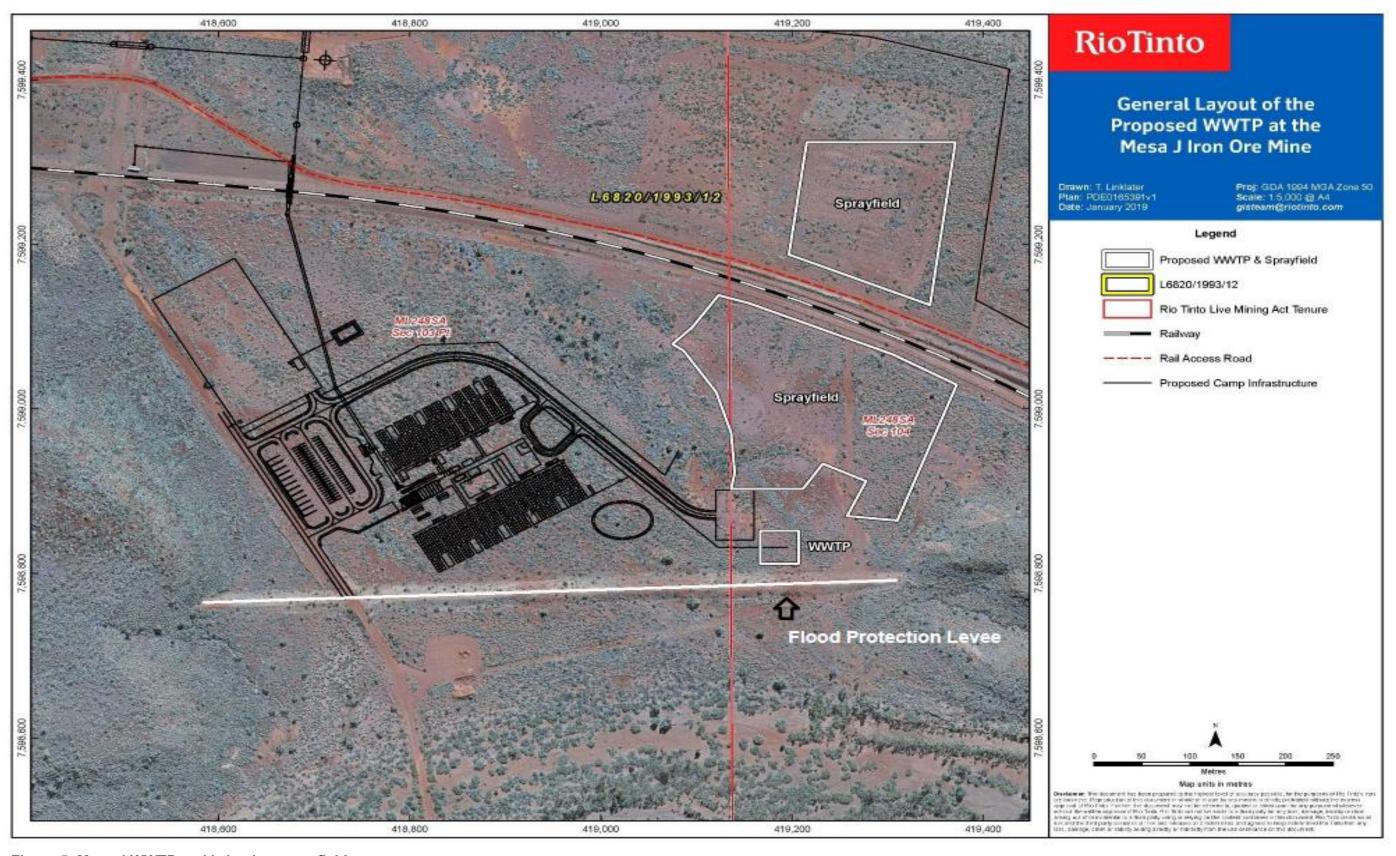


Figure 5: Mesa J WWTP and irrigation sprayfield

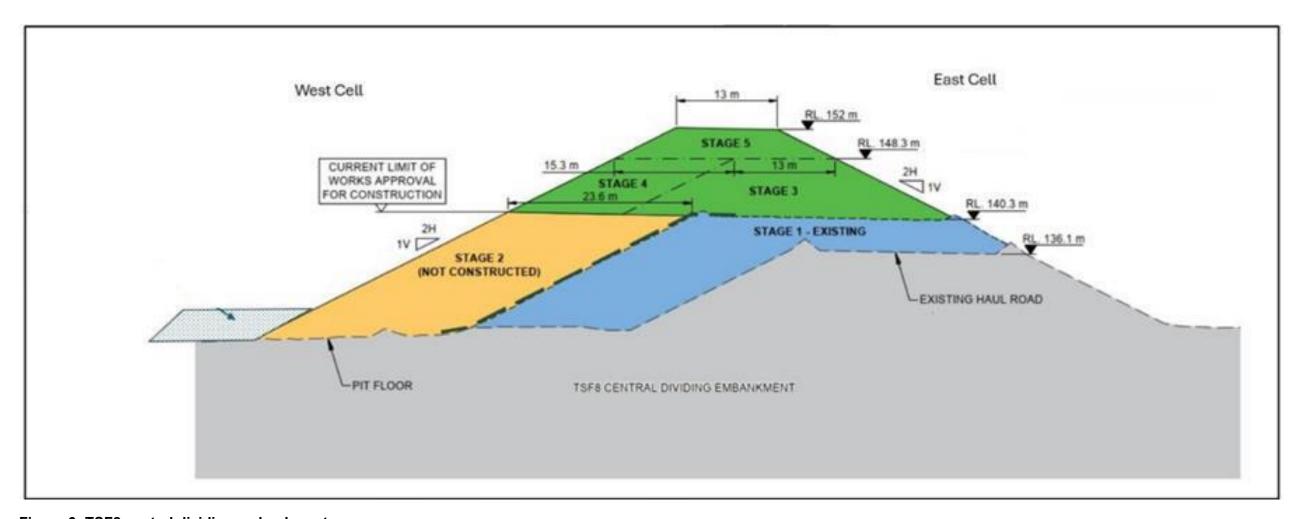


Figure 6: TSF8 central dividing embankment

# **Schedule 2: Monitoring bore coordinates**

The coordinates from the monitoring bores surrounding TSF3, TSF4, TSF5 and TSF8 within the premises boundary are listed in Table 9.

Table 9: Monitoring bore coordinates (GDA2020)

	Location	Monitoring Bore ID	Easting (m)	Northing (m)
1.	TSF3 / TSF5 south	JMB09	422340.98	7595951.6
2.	TSF3 / TSF5 south	MB14MEJ001	420506.87	7596158.5
3.	TSF3 / TSF5 south	MB14MEJ004	420911.07	7594660.8
4.	TSF3 / TSF5 south	MB15MEJ004	420803.14	7594754.8
5.	TSF3 / TSF5 south	MB16MEJ0008	420463.19	7596396.5
6.	TSF3 / TSF5 south	MB19MEJ0001	421872.81	7594873.1
7.	TSF3 / TSF5 south	MB19MEJ0002	420554.04	7595306.7
8.	TSF3 / TSF5 south	MB21MEJ0001	421483.61	7596432.4
9.	TSF3 / TSF5 south	MB21MEJ0002	422040.11	7596742.7
10.	TSF3 / TSF5 south	MB21MEJ0003	421794	7596591
11.	TSF3 / TSF5 south	MB21MEJ0004	422457.56	7596396.1
12.	TSF3 / TSF5 south	MB21MEJ0005	421927.56	7595415.4
13.	TSF3 / TSF5 south	MB21MEJ0006	422363.33	7596281.4
14.	TSF3 / TSF5 south	MB22MEJ0007	420635.77	7595656.4
15.	TSF3 / TSF5 south	MB22MEJ0008	420499.36	7595500.1
16.	TSF4	WB15MEJ001	420840.21	7594074.22
17.	TSF4	MB16MEJ0006	421843.41	7592731.3
18.	TSF4	MB17MEJ0005	422865.05	7593167
19.	TSF8	MBTSF8a	419116.77	7596710.01
20.	TSF8	MBTSF8b	419275.72	7596222.53
21.	TSF8	MBTSF8c	419631.91	7594467.54
22.	TSF8	MBTSF8d	419746.93	7594252.56