

# Licence

Licence number	L7750/2001/10
Licence holder ACN	Evolution Mining (Mungari) Pty Ltd 002 124 745
Registered business address	Level 30 175 Liverpool Street SYDNEY NSW 2000
DWER file number	2011/009482-1
Duration	15/03/2021 to 14/03/2041
Date of amendment	22 June 2021
Premises details	Mungari Gold Project COOLGARDIE WA 6429
	Legal description -
	Mining tenements M15/829, M15/830, M15/1741, M15/1408, M15/1287, M15/688, L15/228, L15/246, L15/227 and M15/1407
	As depicted in Schedule 1

As depicted in Schedule	1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production / design capacity
Category 5: Processing and beneficiation of metallic or non- metallic ore	3,000,000 tonnes per annual period
Category 6: Mine dewatering	5,000,000 tonnes per annual period
Category 12: Screening etc. of material	500,000 tonnes per annual period
Category 89: Putrescible landfill	2000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 22 June 2021, by:

# Terrel MacGregor A/MANAGER RESOURCE INDUSTRIES REGULATORY SERVICES

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

# Licence history

Date	Reference number	Summary of changes	
21 February 2013	W5353/2013/1	New application	
1 April 2011	L7750/2001/9	Licence re-issue	
2 September 2013	W5464/2013/1	Works approval for new TSF	
17 July 2014	L7750/2001/9	Licence amended to include category 5 and conditions relevant to the operation of the Frog's Legs project (concurrent revocation of L7877/2003/6)	
16 April 2015	L7750/2001/9	DER initiated amendment to include improvement requirements for oily/water separator waste water.	
N/A	L7750/2001/9	Applicant initiated amendment to extend due date for improvement requirement to 31 March 2016. Not issued – see row below.	
28 January 2016	L7750/2001/9	Further applicant initiated amendment to include the reclaiming and storing tailings from the Mungari TSF for use in the Frog's Leg paste plant and construction of associated infrastructure.	
4 September 2018	L7750/2001/9	Amendment Notice 1 was a DWER initiated amendment to condition the Licence Holder to construct a TSF seepage trench following ongoing seepage issues with the facility.	
22 January 2019	L7750/2001/9	Amendment Notice 2 was an amendment initiated by the Licence Holder for TSF raise to 363.15m AHD and to relocate the landfill within the prescribed premises boundary.	
18 December 2019	L7750/2001/9	Amendment to extend the expiry date from 14 March 2020 to 14 March 2021.	
		Includes amalgamation of previously separated issued Amendment Notices 1 and 2.	
05 March 2021	L7750/2001/10	Administrative Licence renewal. Expiry date extended to 14 March 2041.	
22 June 2021	L7750/2001/10	Amendment to change the premises boundary, increase Category 5 throughput, include Category 12 activities, alter landfilling operations, remove total recoverable hydrocarbons limit for oil-water separators, and update references for operational procedures.	

#### L7750/2001/10

# 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**

## **Mining operations**

- **1.** The Licence Holder must ensure that all pipelines containing tailings, decant recovery, process water or mine dewater are either:
  - (a) equipped with telemetry with leak detect alarms; and/or
  - (b) equipped with automatic cut-outs in the event of a pipe failure; and/or
  - (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.
- **2.** The Licence Holder must ensure that any saline dewatering effluent shall only be disposed of in the following manner:
  - (a) used for dust suppression; or
  - (b) used within on-site processing activities; or
  - (c) discharged to;
    - i. Frog's Leg Pit Sump;
    - ii. Frog's Leg Turkeys nest;
    - iii. Mungari Raw Water Dam; or
    - iv. Northern Transfer Pond

as defined in Figure 2 of Schedule 1, in a manner that avoids damage to surrounding vegetation.

**3.** The Licence Holder must ensure that tailings are only discharged into containment cells with the relevant infrastructure requirements and at the locations specified in Table 1.

Containment point reference	Containment cell or dam number(s)	Material	Infrastructure requirements
TSF (Figure 3 of Schedule 1)	TSF cell 1 and 2	Tailings	Lined to achieve a permeability of at least <10 <sup>-8</sup> m/s or equivalent

#### **Table 1: Containment infrastructure**

- 4. The Licence Holder must manage containment cells in Table 1 such that:
  - (a) a minimum total freeboard of 500mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained; and
  - (b) methods of operation minimise the likelihood of erosion of the embankments by wave action.
- 5. The Licence Holder must manage TSFs such that:
  - (a) the supernatant pond on the TSF is minimised as far as practicable; and
  - (b) a seepage collection and recovery system will be implemented should seepage occur.
- **6.** The Licence Holder must:
  - (a) undertake inspections as detailed in Table 2;
  - (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.

Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	Daily
Return water lines	Visual integrity	Daily
Embankment freeboard	Visual to confirm required freeboard capacity is available	Daily
Dewatering pipelines	Visual integrity	Daily

#### Table 2: Inspection of infrastructure

- 7. The Licence Holder must undertake an annual water balance for the TSF. The water balance shall as a minimum consider the following:
  - (a) regional rainfall;
  - (b) evaporation;
  - (c) decant water recovery volumes;
  - (d) seepage recovery volumes; and
  - (e) volumes of tailings (tonnages) deposited.

# Landfill operations

- 8. The Licence Holder must only accept waste on to the landfill if:
  - (a) it is of a type listed in Table 3;
  - (b) the quantity accepted is below any quantity limit listed in Table 3; and
  - (c) it meets any specification listed in Table 3.

#### Table 3: Waste acceptance

Waste type	Quantity limit	Specification	
Clean fill		None specified.	
Inert Waste Type 1		None specified.	
Inert Waste Type 2	2000 tonnes per annual period	Plastic only.	
Putrescible Waste		Limited to paper, cardboard and treated timber.	

- **9.** The Licence Holder must ensure that where waste does not comply with condition 8 it is removed from the premises by the delivery vehicle or, where that is not possible, the Licensee shall contact the CEO to agree a course of action in relation to the waste.
- **10.** The Licence Holder must ensure that wastes accepted onto the landfill are only subjected to the process set out in Table 4 and in accordance with any process limits described in that table.

#### Table 4: Waste processing

Waste type	Process(es)	Process limits
Clean fill	Receipt,	All waste types

Inert Waste Type 1	handling and disposal of waste by	<ul> <li>Disposal of waste by landfilling shall only take place within the landfill areas shown on the Maps in Schedule 1 (Figure 4).</li> </ul>
Inert Waste Type 2	landfilling	<ul> <li>Waste must only be deposited within a designated landfill trench.</li> </ul>
		<ul> <li>Landfill trenches must be constructed so as to have a maximum volume for waste deposition of 1,350m<sup>3</sup>.</li> </ul>
Putrescible Waste		<ul> <li>The Licence Holder must keep a record the location of all landfill trenches constructed.</li> </ul>
		<ul> <li>The separation distance between the base of the landfill trenches and the highest groundwater level shall not be less than 2m.</li> </ul>

**11.** The Licence Holder must manage the landfilling activities to ensure:

- (a) waste is levelled and compacted once a week;
- (b) waste is placed and compacted to ensure all faces are stable and capable of retaining restoration material; and
- (c) restoration of a cell or phase takes place in conjunction with rehabilitation of the waste rock dump.
- **12.** 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 requirements

Waste type	Material	Depth	Timescales
Putrescible wastes	Inert and	Sufficient to ensure the waste is completely covered and that no waste is exposed	Cover shall be applied monthly
Inert Waste Type 2	incombustible material		
Inert waste Type 1	No cover required		
Clean Fill			

- **13.** The Licence Holder must:
  - (a) implement security measures at the site to prevent as far as is practical unauthorised access to the site; and
  - (b) undertake regular inspections of all security measures and repair damage as soon as practicable.
- **14.** The Licence Holder must ensure that wind-blown waste is contained within the boundary of the premises and that wind-blown waste is returned to the tipping area on at least a weekly basis.

# **Crushing and screening operations**

**15.** The Licence Holder must:

- (a) install the infrastructure;
- (b) in accordance with the corresponding design and installation requirements; and

(c) at the corresponding infrastructure location; as set out in Table 6.

#### Table 6: Design and installation requirements

Infrastructure	Design and installation requirements	Infrastructure location
Crushing and screening plant	<ul> <li>Crushing and screening plant to consist of:</li> <li>Terex Finlay J1175 Jaw crusher</li> <li>Terex Finlay C1545 Cone crusher</li> <li>Terex Finlay C1540 Cone crusher</li> <li>Terex Finlay 693 screen</li> <li>Or similar.</li> </ul>	Located within the 'Permissable crushing and screening locations' area as indicated in Figure 5 of Schedule 1.

- **16.** The Licence Holder must within 30 calendar days of an item of infrastructure or equipment required by condition 15 being installed:
  - (a) undertake an audit of their compliance with the requirements of condition 15; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- **17.** The Licence Holder may only commence operations for an item of infrastructure identified in condition 15, where the Environmental Compliance Report as required by condition 16 has been submitted by the licence holder for that item of infrastructure.

## Monitoring

- **18.** The Licence Holder must ensure that:
  - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - (b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
  - (c) 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).
- **19.** The Licence Holder shall ensure that:
  - (a) monthly monitoring is undertaken at least 15 days apart; and
  - (b) quarterly monitoring is undertaken at least 45 days apart.
- **20.** The Licence Holder must undertake the monitoring of dewatering effluent according to the specifications in Table 7.

#### Table 7: Monitoring of dewatering effluent

Emission point reference	Parameter	Units	Frequency
Northern	рН	pH units	Monthly

Transfer Pond	TDS	mg/L	Monthly
	Carbonate (CO <sub>3</sub> ), arsenic (As), aluminium (Al), calcium (Ca), cadmium (Cd), chloride (Cl), cobalt (Co), chromium (Cr), copper (Cu), iron (Fe), potassium (K), magnesium (Mg), manganese (Mn), sodium (Na), nickel (Ni), lead (Pb), selenium (Se), sulphate (SO <sub>4</sub> ) and zinc (Zn)		Quarterly

**21.** The Licence Holder must undertake the process monitoring in Table 8 according to the specifications in that table.

Table	8:	Process	monitoring
-------	----	---------	------------

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Northern Transfer Pond and Mungari Raw Water Dam Figure 2 of Schedule 1	Cumulative monthly volumes of dewatering water from: • Frog's Leg Pit to Northern Transfer Pond; • White Foil Pit to Mungari Raw Water Dam; • White Foil Pit to Northern Transfer Pond; and • Northern Transfer Pond to Pope John Pit	Volume of dewatering water	kL	Monthly	None specified
TSF Figure 3 of Schedule 1	-	Volumes of tailings deposited into the TSF	m <sup>3</sup>	Continuous	None specified
TSF Figure 3 of Schedule 1	-	Volumes of water recovered from the TSF	m <sup>3</sup>	Continuous	None specified
Oily/water separator	Water from oily/water separator to be used for site wide dust suppression. Water from oily/water	TRH	mg/L	Quarterly	Spot sample

#### L7750/2001/10

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
	separator to be diluted at a minimum rate of 1 part water from oily/water separator to 15 parts groundwater prior to use for dust suppression.				
Landfilling areas Figure 4 of Schedule 1	Landfilling of wastes	Waste accepted to landfill	tonnes	Bi-annually	None specified

**22.** The Licence Holder must undertake the ambient groundwater monitoring in Table 9 according to the specifications in that table and record and investigate results that do not meet any limit specified.

Monitoring point reference	Parameter	Units	Limit	Averaging period	Frequency
MB2 – MB6	Standing water level (SWL) MB2 – MB4 and MB6 only	mbgl	4	Spot sample	Monthly
	Standing water level (SWL) MB5 only	mbgl	2		Monthly
	pH <sup>1</sup>	pH units	-		Monthly
	Total dissolved solids (TDS) <sup>1</sup>	mg/L	-		Monthly
	Electrical conductivity (EC)	-	-		Monthly
	WAD CN	mg/L	0.5		Quarterly
	Total CN	mg/L	-		Quarterly
	Ca, Mg, Na, K, CO <sub>3</sub> , Cl, SO <sub>4</sub> , Al, As, Cd, Cr, Cu, Fe, Mn, Ni, Zn, Pb, Co	mg/L	-		Annually

Note 1: pH and TDS are permitted to be measured in the field in accordance with Australian Standard 5667.

- **23.** The Licence Holder must undertake an annual assessment of vegetation within the zone of influence of the TSF. The assessment must:
  - (a) photograph and record the presence and condition of key vegetation features within the zone of influence;

- (b) compare the results of the assessment against previous years assessments and identify whether any deterioration in the presence and/or quality of vegetation has taken place; and
- (c) be undertaken by a person qualified in vegetation identification and sampling.

## Records

- **24.** All information and records required by the Licence must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - (c) except for records listed in 24(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
  - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - (i) off-site environmental effects; or
    - (ii) matters which affect the condition of the land or waters.
- **25.** The Licence Holder must ensure that:
  - (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
  - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- **26.** The Licence Holder must complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- **27.** The Licence Holder must implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

# Reporting

**28.** The Licence Holder must submit to the CEO an Annual Environmental Report within 90 calendar days after the end of the annual period. The report shall contain the information listed in Table 10 in the format or form specified in that table.

Condition or table (if relevant)	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the year and any action taken	None specified
26	Annual Audit Compliance report	AACR
27	Complaints summary	None specified

### Table 10: Annual Environmental Report

Table 7	Monitoring of dewatering effluent	None specified
Table 8	Process monitoring	None specified
Table 9	Ambient groundwater monitoring	None specified
23	Assessment of vegetation	None specified

**29.** The Licence Holder must ensure that the Annual Environmental Report also contains:

- (a) any relevant process, production or operational data; and
- (b) an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets.
- **30.** The Licence Holder must submit the information in Table 11 to the CEO according to the specifications in that table.

Table 11: 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	Not applicable	Within 14 days of the CEOs request	As received by the Licence Holder from third parties

**31.** The Licence Holder must ensure that the parameters listed in Table 12 are notified to the CEO in accordance with the notification requirements of the table.

### Table 12: Notification requirements

Condition or table	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
23 Table 9	Breach of any limit specified within the Licence.	No later than 5PM of the next usual working day.	N1

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

Note 2: Forms are in Schedule 3

# **Definitions**

In this licence, the terms in Table 13 have the meanings defined.

### **Table 13: 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 of the immediately following year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality</i> – Sampling – Guidance on sampling of groundwaters
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
Controlled waste	has the definition in <i>Environmental Protection (Controlled Waste)</i> <i>Regulations</i> 2004
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	Environmental Protection Act 1986 (WA)

Term	Definition
EP Regulations	Environmental Protection Regulations 1987 (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 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.
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 (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Qualified, Competent Civil or Structural Engineer	<ul> <li>means a person who:</li> <li>a) holds a Bachelor's degree recognised by Engineers Australia;</li> <li>and</li> <li>b) has a minimum of five years of experience working in a supervisory role in civil or structural engineering; and</li> <li>c) is employed by an independent third party external to the Works Approval Holder's business;</li> </ul>
	or is otherwise approved in writing by the CEO to act in this capacity.
quarterly	means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March
Schedule 1	means Schedule 1 of this Licence unless otherwise stated
Schedule 2	means Schedule 2 of this Licence unless otherwise stated
six monthly	means the 2 inclusive periods from 1 April to 30 September and 1 October to 31 March in the following year
spot sample	means a discrete sample representative at the time and place at which the sample is taken
TRH	means Total Recoverable Hydrocarbons
TSF	means Tailings Storage Facility

#### L7750/2001/10

Term	Definition
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia
waste	has the same meaning given to that term under the EP Act.
Zone of influence	means the area of a receiving environment with the potential to be altered or changed as a result of an emission or discharge

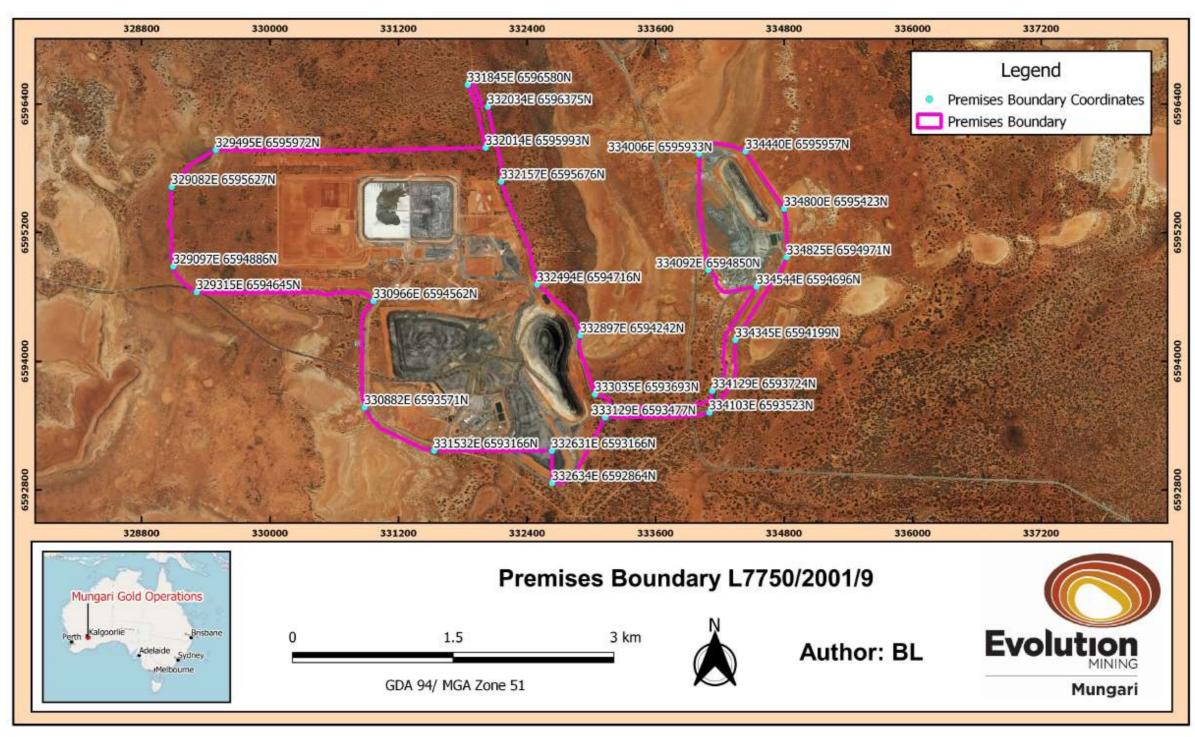
## END OF CONDITIONS



# Schedule 1: Maps

## **Premises map**

The boundary of the prescribed premises is shown in the map below (Error! Reference source not found.).

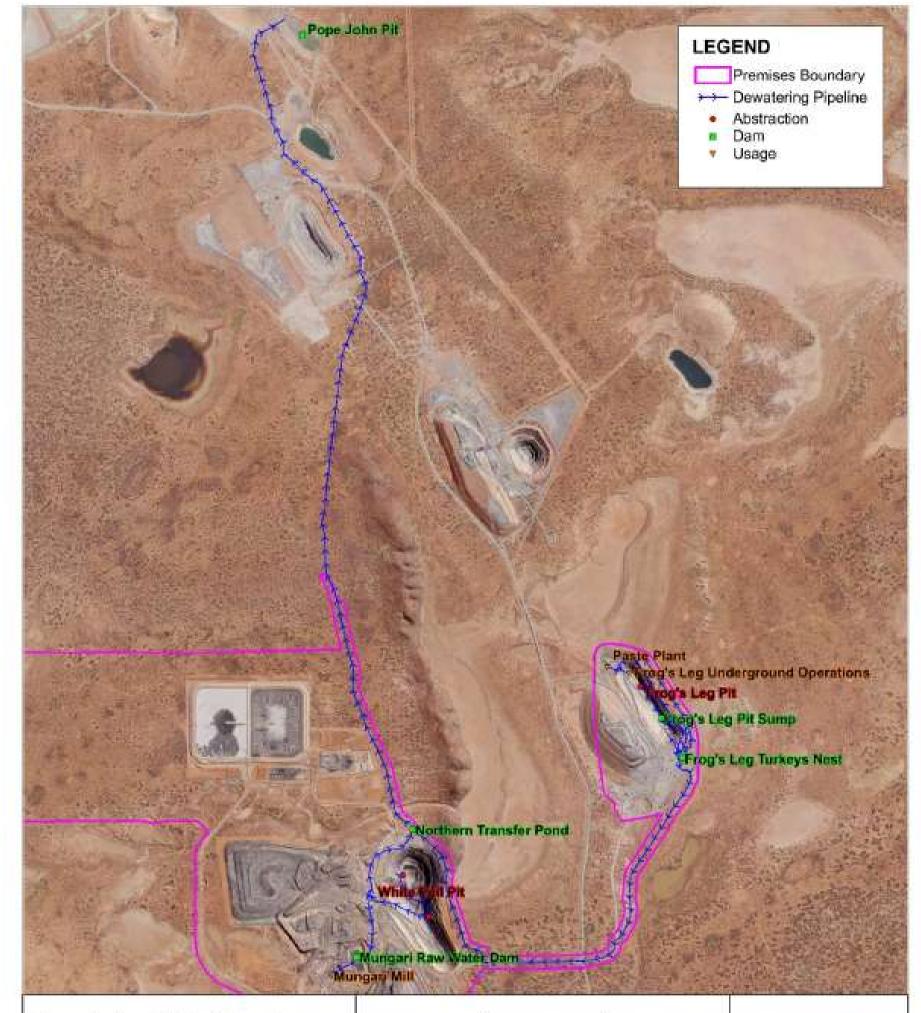


#### Figure 1: Premises boundary

#### L7750/2001/10



# Dewatering infrastructure and pathways



Dewatering Pipline Lavout



Dewatering Fipline Layout	Kometen GDA 94 / MGA Zone 51		
MGO dewatering pipework layout with abstraction and discharge points	Ň	Version: 1.0 Date: 30/11/20 Author: SR	Evolution Mungari

Figure 2: Dewatering discharge infrastructure, monitoring points and pathway

L7750/2001/10

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

16



# **TSF and Monitoring Bores**

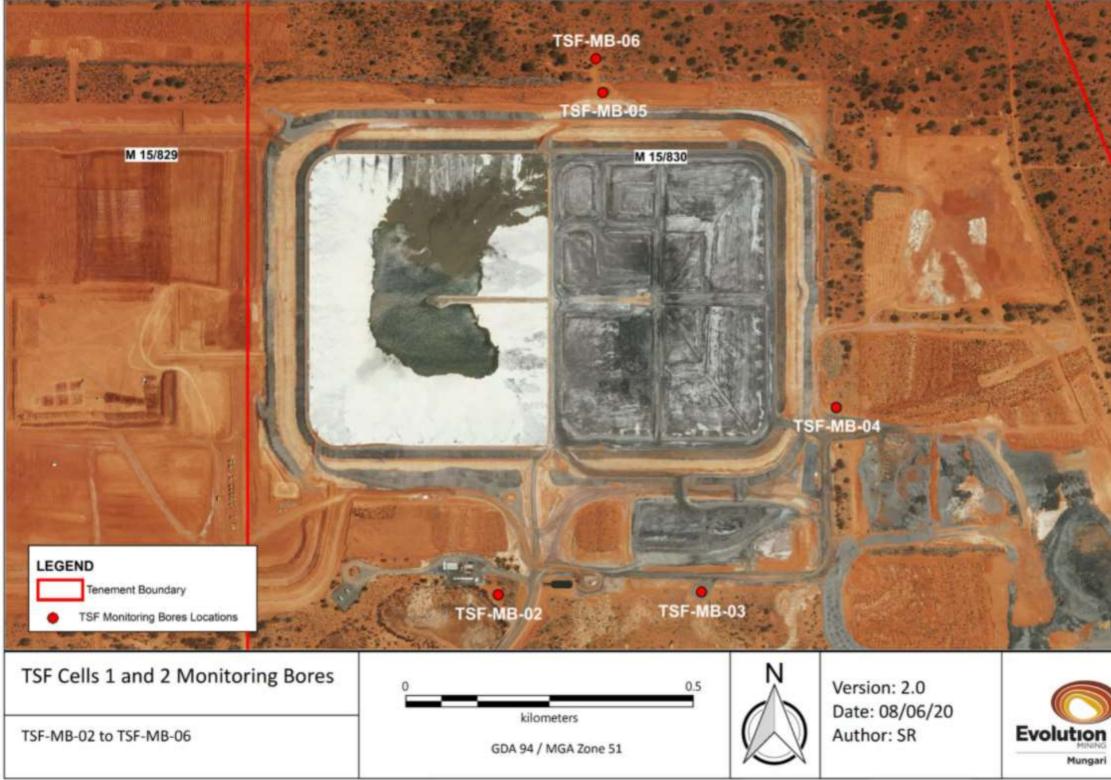


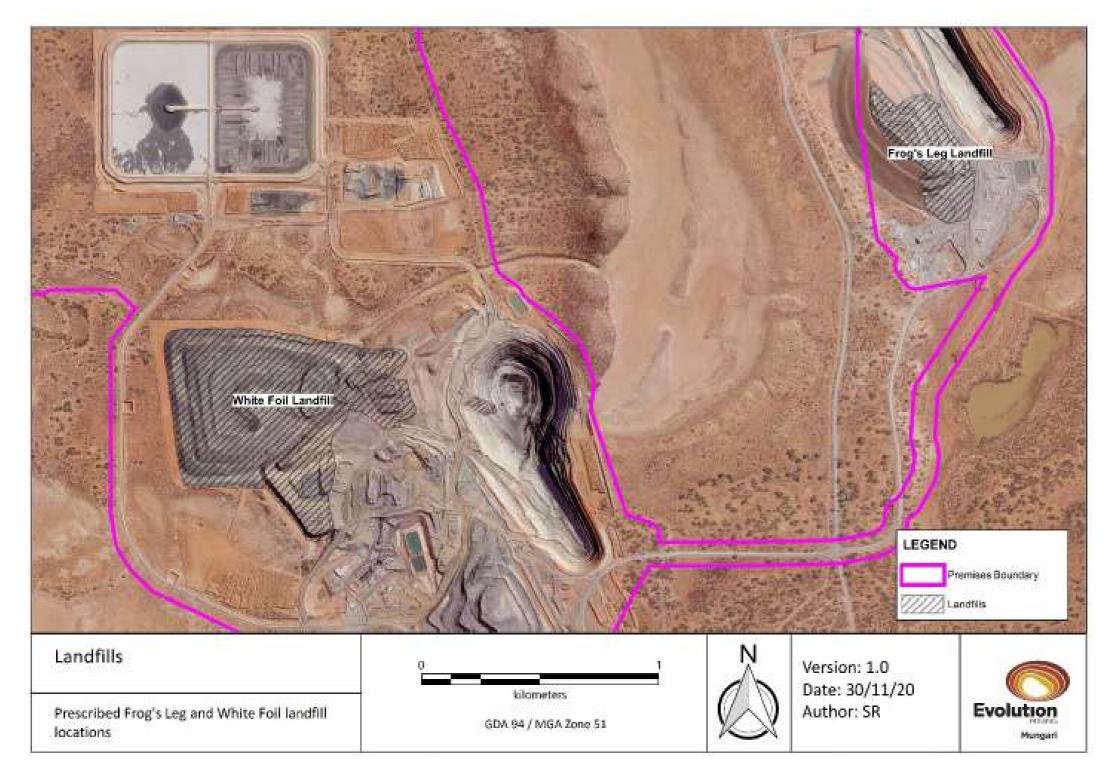
Figure 3: TSF Cells 1 and 2 and Monitoring Bores MB1 – MB5

#### L7750/2001/10





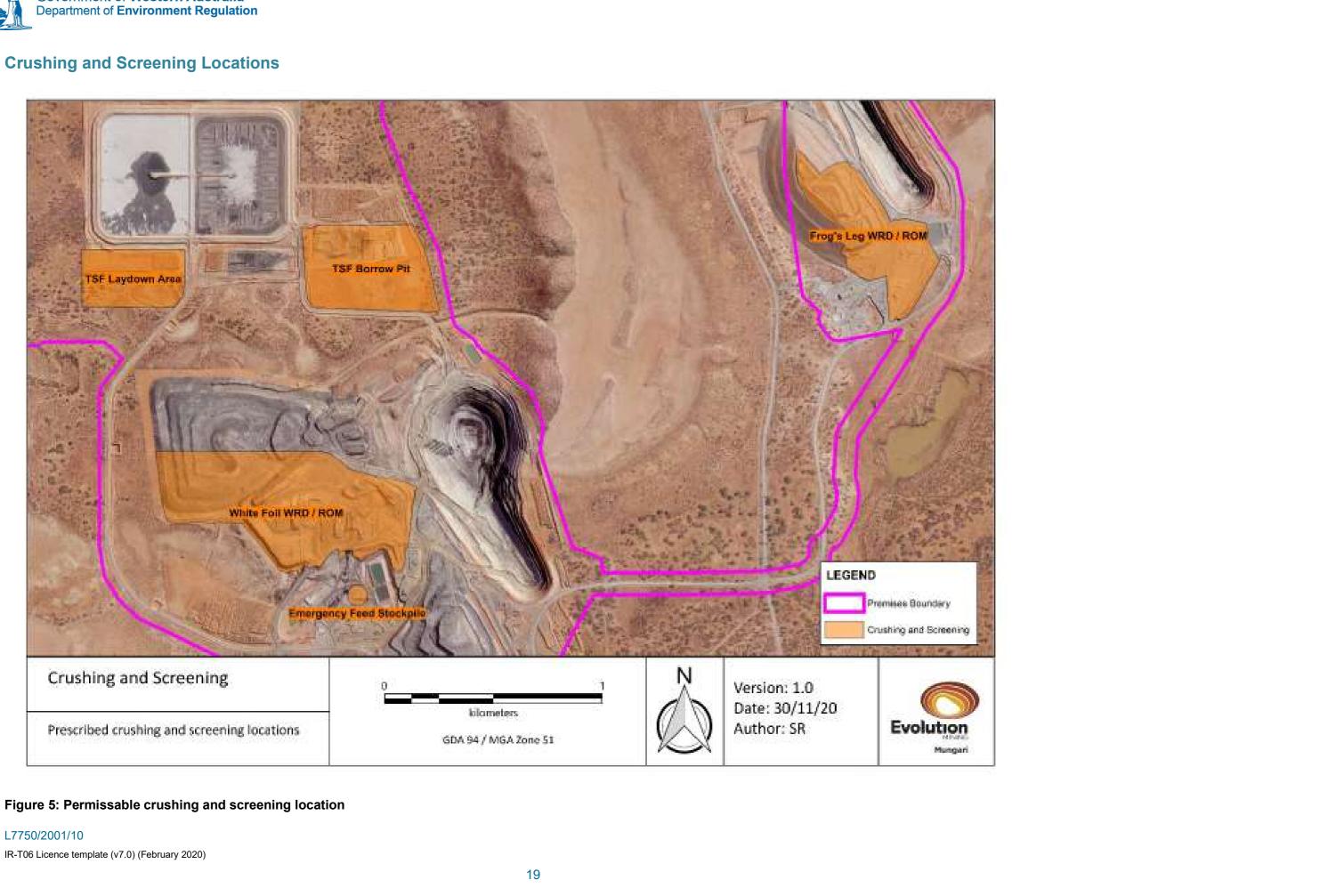
# Landfill Locations



## Figure 4: Permissable landfill trench areas

#### L7750/2001/10





#### L7750/2001/10

# **Schedule 2: Premises boundary**

The premises boundary is defined by the coordinates in Table 14. Table 14: Premises boundary coordinates (GDA 1994 Zone 51)

Easting	Northing
331845	6596581
332034	6596376
332157	6595677
332494	6594717
332897	6594242
333035	6593694
334129	6593724
334544	6594696
334092	6594851
334006	6595933
334440	6595958
334800	6595423
334825	6594971
334345	6594199
334103	6593523
333129	6593477
332634	6592864
332631	6593166
331532	6593166
330882	6593572
330966	6594563
329315	6594646

#### L7750/2001/10

Easting	Northing
329097	6594886
329082	6595628
329495	6595972
332014	6595993

# Schedule 3: N1 Form

Licence: Form: L7750/2001/9 N1 Licensee: Evolution Mining (Mungari) Pty Ltd Date of breach:

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

These pages outline the information that the operator must provide.

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

## Part A

Licence Number	
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	
Evolution Mining (Mungari) Pty Ltd	
Date	