



# Licence

## *Environmental Protection Act 1986, Part V*

**Licensee:** Golden Mile Milling Pty Ltd

**Licence:** L9124/2018/1

**Registered office:** PAT Leighton FCA  
77 Maritana Street  
KALGOORLIE WA 6430

**ACN:** 602 161 008

**Premises address:** Lakewood Gold Processing Facility  
Mining leases M26/242 and M26/367  
Mount Monger Road,  
LAKEWOOD WA 6431  
As depicted in Schedule 1

**Issue date:** 21 May 2018

**Expiry date:** 20 May 2019

**Prescribed premises category**

Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
5	Processing or beneficiation of metallic or non-metallic ore: premises on which – (a) Metallic or non-metallic ore is crushed, ground, milled or otherwise processed; (b) Tailings from metallic or non-metallic ore are reprocessed; or (c) Tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	50 000 tonnes or more per year	900 000 tonnes per annual period
61	Liquid waste facility: premises on which liquid waste produced on others premises (other than sewage waste) is stored, reprocessed, treated or irrigated.	100 tonnes or more per year	4 200 tonnes per annual period

**Conditions**

This Licence is subject to the conditions set out in the attached pages.

Date signed: 21 May 2018

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Caron Goodbourn  
A/Manager Licensing (Process Industries)  
Officer delegated under section 20  
of the *Environmental Protection Act 1986*



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## Introduction

This Introduction is not part of the Licence conditions.

### DWER's industry licensing role

The Department of Water and Environmental Regulation (DWER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DWER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DWER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DWER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

### Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: <http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply. Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.



### Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

### Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

### Premises description and Licence summary

The Lakewood Gold Processing Facility (Lakewood GPF) is located approximately 5km south-east of the city of Kalgoorlie-Boulder on mining leases M26/242 and M26/367. The premises is situated within an area heavily disturbed by historical gold mining activities. The area was historically used as a main tailings stockpile for the 'Golden Mile' with over 70 million tonnes of tailings stockpiled.

Lakewood GPF is owned and operated by Golden Mile Milling Pty Ltd (Golden Mile Milling), a gold exploration and mining company. The premise was originally constructed as Lakewood Mill in 1989, and were operated intermittently for tailings re-treatment prior to purchase by Silver Lake Resources Limited (Silver Lake) in 2007. In June 2015, Silver Lake sold the Lakewood GPF to Golden Mile Milling.

Ore is trucked to the Lakewood GPF plant from the nearby Mt Monger Operation mines, which are operated by Silver Lake. Ore is stockpiled and loaded into the existing Lakewood GPF crusher and hopper via a loader. Ore is ground in the ball mill with water to form a slurry. Lime is added for pH control with a target pH of approximately 7. The ore undergoes cyanide leaching in tanks and gold is recovered via an activated carbon adsorption process. A water truck is used on stockpiled ore and at the crusher hopper to control dust. Water sprays are located throughout the crusher circuit, including conveyors and transfer points.

The Lakewood GPF receives controlled waste in a liquid form from Bureau Veritas, Kalgoorlie and Carbon Management Solutions, Kalgoorlie. The waste is directed from the truck to a sump located in the cyclone feed floor. The liquid is pumped from the sump into the carbon in leach circuit via the cyclone feed hopper. The cyanide in the waste liquid is consumed as part of the processing operations. This licence is a replacement of L8298/2008/3 and no assessment has been conducted.

The licences and works approvals issued for the Premises since 06/11/2008 are:

Instrument log		
Instrument	Issued	Description
L8298/2008/1	06/11/2008	New application
W4561/2009/1	10/09/2009	Works Approval for new Tailings Storage Facility
W5012/2011/1	08/09/2011	Works Approval for mill upgrade
L8298/2008/2	03/11/2011	Licence reissue
W5487/2013/1	09/09/2013	Works Approval for new Tailings Storage Facility (TSF2)
L8298/2008/3	30/10/2014	Licence reissue in new format with addition of category 61
L8298/2008/3	22/10/2015	Transfer of licence to Golden Mile Milling Pty Ltd
L8298/2008/3	2018	Licence ceased to have effect on non-payment
L9129/2018/1	21/05/2018	Replacement licence issued for ceased licence L8298/2008/3.

### Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall



nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

**END OF INTRODUCTION**



## Licence conditions

### 1 General

#### 1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

**'Act'** means the *Environmental Protection Act 1986*;

**'annual period'** means the inclusive period from 1 October until 30 September in the 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 5667.10'** means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

**'AS/NZS 5667.11'** means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*;

**'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 of Environment Regulation;

**'CEO'** for the purpose of correspondence means;  
Chief Executive Officer  
Department administering the Environmental Protection Act 1986  
Locked Bag 33  
CLOISTERS SQUARE WA 6850  
Email: info@dwer.wa.gov.au;

**'code of practice for the storage and handling of dangerous goods'** means the document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

**'controlled waste'** has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;

**'freeboard'** means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

**'Licence'** means this Licence numbered L8298/2008/2 and issued under the Act;

**'Licensee'** means the person or organisation named as Licensee on page 1 of the Licence;

**'NATA'** means the National Association of Testing Authorities, Australia;

**'NATA accredited'** means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;



**'Premises'** means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

**'quarterly'** means the 4 inclusive periods from 1 October to 31 December and in the following year, 1 January to 31 March, 1 April to 30 June, 1 July to 30 September;

**'Schedule 1'** means Schedule 1 of this Licence unless otherwise stated;

**'Schedule 2'** means Schedule 2 of this Licence unless otherwise stated;

**'spot sample'** means a discrete sample representative at the time and place at which the sample is taken;

**'µS/cm'** means microsiemens per centimetre.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:

- (a) pollution;
- (b) unreasonable emission;
- (c) discharge of waste in circumstances likely to cause pollution; or
- (d) being contrary to any written law.

## **1.2 General conditions**

1.2.1 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.

1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.3 The Licensee shall:

- (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
- (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.<sup>1</sup>

Note1: *The Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.

## **1.3 Premises operation**

1.3.1 The Licensee shall ensure that all pipelines containing environmentally hazardous substances are either:

- (a) equipped with telemetry systems and pressure senses 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 routine inspections.

1.3.2 The Licensee shall ensure that tailings are only discharged into containment cells with the relevant infrastructure requirements and at the locations specified in Table 1.3.1.





**Table 1.3.1: Containment infrastructure**

Containment point reference	Containment cell or dam number(s)	Material	Infrastructure requirements
C1	TSF Western Cell	Tailings	Constructed and operated in accordance with the document titled 'Proposed Extension to Tailings Storage Facility, Lakewood Gold Processing Facility MINING PROPOSAL' Coffey Mining, 22 June 2009 A minimum top of embankment freeboard of 300 mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained Methods of operation minimise the likelihood of erosion of the embankments by wave action
C2	TSF Eastern Cell		
C3	TSF Cell No. 1		Constructed and operated in accordance with the document titled 'Additional Embankment Tailings of Tailings Storage Facility 1, Lakewood Mill Mining Proposal, Silver Lake Resources Ltd', Coffey Mining, 20 December 2007
C4	Liquid Waste Facility	Controlled waste	Lined with 1mm HDPE to achieve a permeability of at least $<10^{-9}$ m/s or equivalent

1.3.3 The Licensee shall:

- (a) undertake inspections as detailed in Table 1.3.2;
- (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.

**Table 1.3.2: Inspection of infrastructure**

Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	Daily
Return water lines	Visual integrity	Daily
Embankment freeboards of containment infrastructure listed in Table 1.3.1	Visual to confirm required freeboard capacity is available	Daily

1.3.4 The Licensee shall manage and maintain an internal toe drain and earthen bunds along the perimeter embankments of the tailings storage facility, which shall be used to collect and recover any liquid matter resulting from seepage or breach of the embankments.

1.3.5 The Licensee shall only allow waste to be accepted on to the Premises if:

- (a) it is of a type listed in Table 1.3.3; and
- (b) the quantity accepted is below any limit listed in Table 1.3.3; and
- (c) it meets any specification listed in Table 1.3.3

**Table 1.3.3: Waste acceptance**

Waste	Waste Code	Quantity Limit	Specification <sup>1</sup>
<b>Plating and Heat Treatment</b>			
Cyanides (inorganic)	A130	100,000 L/annual period	Accepted by truck in liquid form and directed to a sump located in the cyclone feed floor.
<b>Industrial Wash Water</b>			
Industrial wash water contaminated with a controlled waste	L150	3,500,000 L/annual period	Accepted by truck in liquid form and directed to a sump located in the cyclone feed floor.



Note 1: Additional requirements for the acceptance of controlled waste are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

1.3.6 The Licensee shall ensure that the wastes accepted onto the Premises are only subjected to the process(es) set out in Table 1.3.4 and in accordance with any process requirements described in that table.

Table 1.3.4: Waste processing		
Waste type	Process	Process requirements
Cyanides (inorganic) and Industrial wash water contaminated with a controlled waste	Receipt, handling and temporary storage prior to processing in the carbon In leach circuit	Waste must be stored and processed in a manner that prevents incompatible wastes mixing.

## 2 Monitoring

### 2.1 General monitoring

2.1.1 The licensee shall 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;
- (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].

2.1.1 The Licensee shall ensure that:

- (a) monthly monitoring is undertaken at least 15 days apart; and
- (b) quarterly monitoring is undertaken at least 45 days apart;

### 2.2 Monitoring of inputs and outputs

2.2.1 The Licensee shall undertake the monitoring in Table 2.2.1 according to the specifications in that table.

Table 2.2.1: Monitoring of inputs and outputs				
Input/Output	Parameter	Units	Averaging period	Frequency
Waste Inputs	Liquid waste	Litres	N/A	Each batch arriving at premises

### 2.3 Process monitoring

2.3.1 The Licensee shall undertake the monitoring in Table 2.3.1 according to the specifications in that table.

Table 2.3.1: Process monitoring					
Monitoring point reference	Process description	Parameter	Units	Frequency	Method
TSF Western Cell	-	Volumes of tailings deposited into the TSF	m <sup>3</sup>	Continuous	None specified
TSF Eastern Cell	-				
TSF Cell No.1	-				





**2.4 Ambient environmental quality monitoring**

2.4.1 The Licensee shall undertake the monitoring in Table 2.4.1 according to the specifications in that table and record and investigate results that do not meet any target specified.

**Table 2.4.1: Monitoring of ambient groundwater quality**

Monitoring point reference and location	Parameter	Limit	Units	Averaging period	Frequency
Monitor Bores TSF1-TSF10	Standing water level (SWL) <sup>1</sup>	-	mbgl	Spot sample	Quarterly
	pH	-			
	Total dissolved solids (TDS)	-	mg/L		
	Electrical conductivity	-	µS/cm		
	Arsenic	-	mg/L		
	Cadmium	-	mg/L		
	Chromium	-	mg/L		
	Copper	-	mg/L		
	Lead	-	mg/L		
	Nickel	-	mg/L		
	Zinc	-	mg/L		
	Weak acid dissociable cyanide (WAD cyanide)	0.5mg/L	mg/L		

<sup>1</sup> SWL shall be determined prior to collection of other water samples.

2.4.2 Where monitoring results indicate groundwater contamination has occurred exceeding the requirements of condition 2.4.1, the Licensee shall install and operate a groundwater recovery bore system. The recovered water shall be discharged to tailings storage facility. Groundwater recovery shall continue until monitoring facilities indicate compliance with condition 2.4.1 has been achieved.

**3 Information**

**3.1 Records**

- 3.1.1 All information and records required by the Licence shall:
- (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 3.1.1(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.
- 3.1.2 The Licensee shall 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.
- 3.1.3 The Licensee shall 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.
- 3.1.4 The Licensee shall 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.

### 3.2 Reporting

3.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by 1 December after the end of the annual period. The report shall contain the information listed in Table 3.2.1 in the format or form specified in that table.

Table 3.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 2.4.1	Monitoring of ambient groundwater quality	None specified
3.1.3	Compliance	Annual Audit Compliance Report (AACR)*
3.1.4	Complaints summary	None specified

\*Note 1: Form can be found at [www.dwer.wa.gov.au](http://www.dwer.wa.gov.au)

3.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:

- any relevant process, production or operational data;
- an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets.

### 3.3 Notification

3.3.1 The Licensee shall ensure that the parameters listed in Table 3.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 3.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day.  Part B: As soon as practicable	N1

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

Note 2: Form is in Schedule 2



# Schedule 1: Maps

## Premises map

The Premises is shown in the maps below. The green line depicts the Premises boundary.

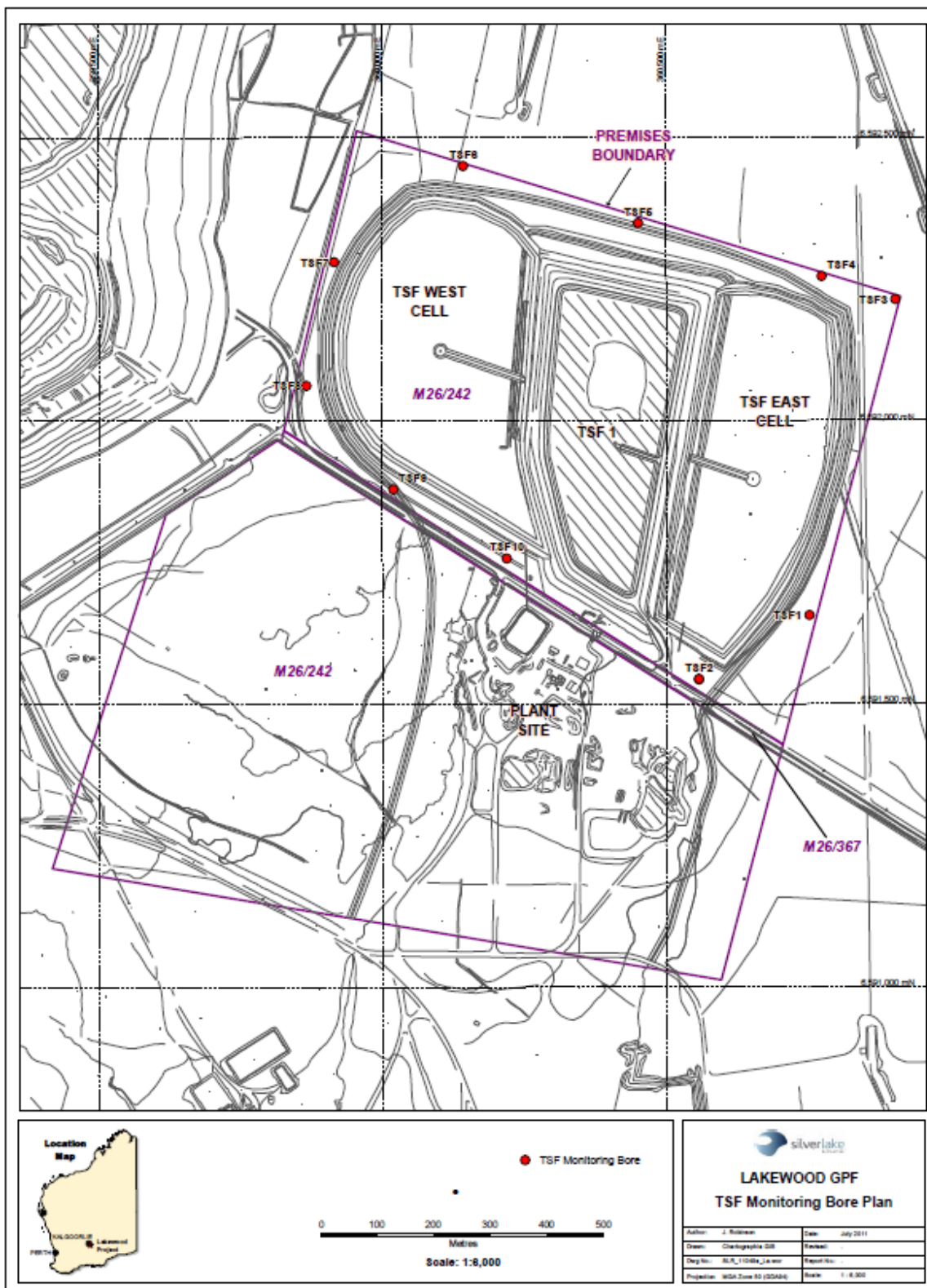






### Map of monitoring locations

The locations of the monitoring points defined in Table 2.4.1 are shown below.





## Schedule 2: N1 form

Licence: L9124/2018/1 Licensee: Golden Mile Milling Pty Ltd  
 Form: N1 Date of breach:

### Notification of detection of the breach of a limit

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

### Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	