



Licence

Environmental Protection Act 1986, Part V

Licensee: Golden Mile Milling Pty Ltd

Licence: L8298/2008/3

Registered office: 46 Maritana St
KALGOORLIE WA 6430

ACN: 602 161 008

Premises address: Lakewood Gold Processing Facility
Mining leases M26/242 and M26/367, Mount Monger Road,
KALGOORLIE WA 6430
As depicted in Schedule 1

Issue date: Thursday, 30 October 2014

Commencement date: Thursday, 6 November 2014

Expiry date: Tuesday, 5 November 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: 22 October 2015

.....
Danielle Eyre

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.

DER's industry licensing role

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

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER 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. DER 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 amendment is the result of a transfer of ownership from Silver Lake to Golden Mile Milling. No reassessment of environmental impacts, apart from fugitive dust emissions, has been conducted as part of this amendment.

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



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@der.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.¹

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	Specification¹
Plating and Heat Treatment			
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.
Industrial Wash Water			
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 ³	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) ¹	-	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		

¹ 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:

- be legible;
- if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- 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
- for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - off-site environmental effects; or
 - 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 ¹
-	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: Forms are in Schedule 2

- 3.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data;
 - (b) 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 ¹	Format or form ²
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: Forms are in Schedule 2



Schedule 1: Maps

Premises map

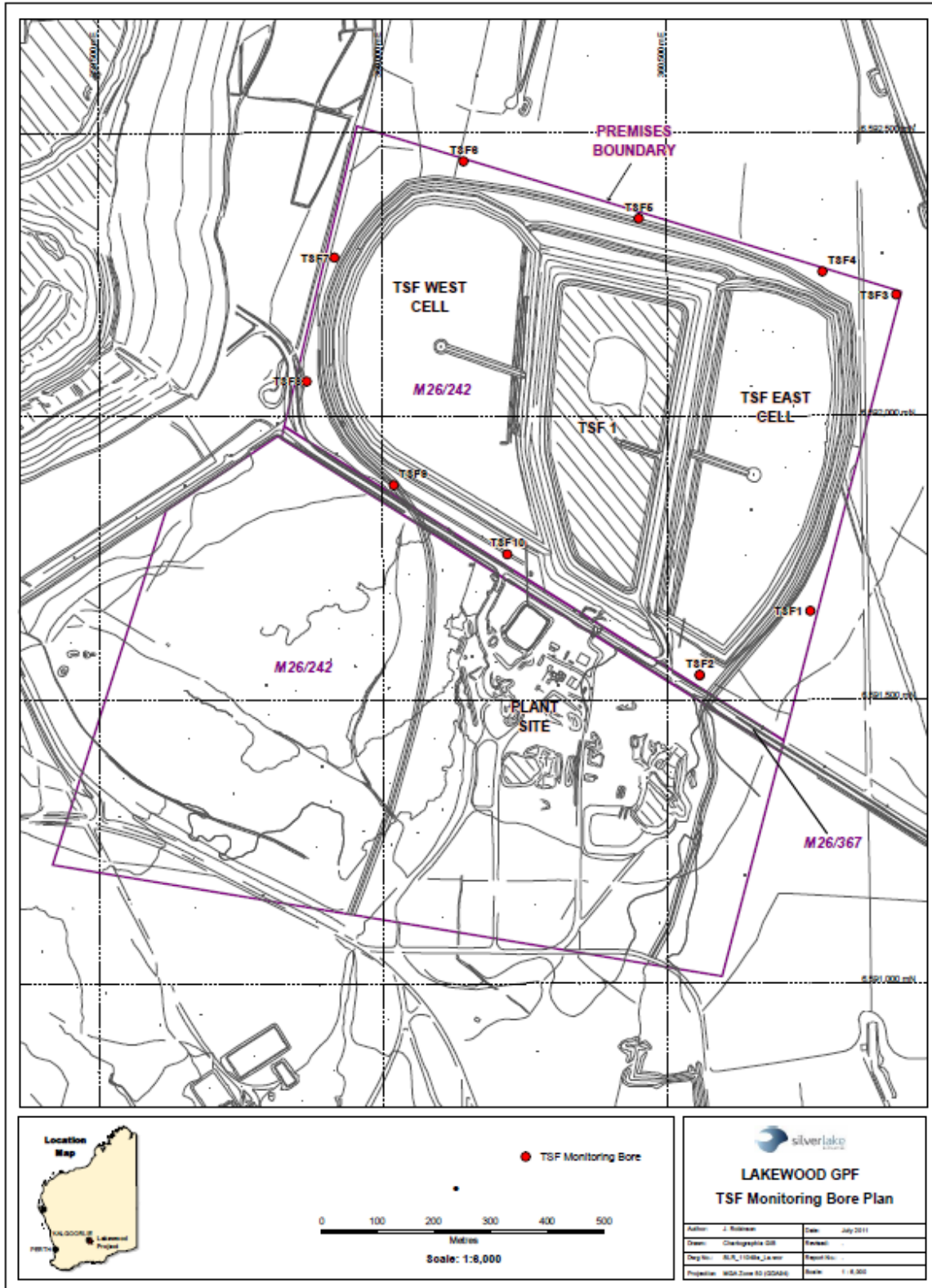
The Premises is shown in the maps below. The green line depicts the Premises boundary.





Map of monitoring locations

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





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name:	ABN:
Trading as:	
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes Please proceed to Section C

No Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:



SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each Licence condition that was not complied with.

a) Licence condition not complied with:	
b) Date(s) when the non compliance occurred, if applicable:	
c) Was this non compliance reported to DER?:	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to DER verbally Date _____ <input type="checkbox"/> Reported to DER in writing Date _____	<input type="checkbox"/> No
d) Has DER taken, or finalised any action in relation to the non compliance?:	
e) Summary of particulars of the non compliance, and what was the environmental impact:	
f) If relevant, the precise location where the non compliance occurred (attach map or diagram):	
g) Cause of non compliance:	
h) Action taken, or that will be taken to mitigate any adverse effects of the non compliance:	
i) Action taken or that will be taken to prevent recurrence of the non compliance:	

Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:



SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
An individual	<input type="checkbox"/> <input type="checkbox"/>	by the individual licence holder, or by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or by two directors of the licensee; or by a director and a company secretary of the licensee, or if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority (other than a local government)	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	<input type="checkbox"/> <input type="checkbox"/>	by the chief executive officer of the licensee; or by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Licence: L8298/2008/2
 Form: N1

Licensee: Golden Mile Milling Pty Ltd
 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	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: **Golden Mile Milling Pty Ltd**

Licence: **L8298/2008/3**

Registered office: 46 Maritana St
KALGOORLIE WA 6430

ACN: 602 161 008

Premises address: Lakewood Gold Processing Facility
Mining leases M26/242 and M26/367, Mount Monger Road,
KALGOORLIE WA 6430
As depicted in Schedule 1

Issue date: Thursday, 30 October 2014

Commencement date: Thursday, 6 November 2014

Expiry date: Tuesday, 5 November 2019

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Clarrie Green
Licensing Officer

Decision Document authorised by: Danielle Eyre
Delegated Officer



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/>	New Licence <input type="checkbox"/>
	Licence amendment <input checked="" type="checkbox"/>	Works Approval amendment <input type="checkbox"/>
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	5	900,000 tonnes per annual period
	61	4,200 tonnes per annual period
Application verified	Date: N/A	
Application fee paid	Date: 24/08/2015	
Works Approval has been complied with	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Compliance Certificate received	N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>	
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Ministerial statement No: EPA Report No:	



Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.	
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.	

3 Executive summary of proposal and assessment

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.

Ore is trucked to the Lakewood GPF plant from the nearby Mt Monger Operations, operated by Silver Lake Resources Limited. 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.

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.

Operations largely run off power obtained from the grid. There is no power generation on site. Diesel fuel (for light vehicles and other plant) is stored in a 55,000 litre tank which is located in a HDPE lined and bunded containment facility.

Dust emissions from the stockpiled ore and crusher hopper operations at the Lakewood GPF are anticipated to present a moderate risk to the surrounding native vegetation. The nearest known Priority or Threatened vegetation species to the Lakewood GPF is located approximately 4 km away and unlikely to be impacted by dust from the facility. 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.

Operations at the Lakewood GPF also have the potential to result in the contamination of groundwater as a result of seepage from the tailings storage facility (TSF). The naturally occurring groundwater levels at the Lakewood GPF are shallow (1 m to 3 m below ground level (mbgl)). To determine if seepage is occurring, the existing limit for weak acid dissociable (WAD) cyanide and conditions requiring recovery of seepage until WAD cyanide is below the limit of 0.5mg/L have been retained in the Licence. Groundwater salinity varies with rainfall and typically ranges from 35,000 to 200,000 mg/L TDS, with a pH between 4 and 7. The hydraulic gradient trends to the south to Hannans Lake which is 2.5m below the lowest embankment toe area of the Lakewood TSF. There are no stock dams or other beneficial uses of surface water in the vicinity of the Lakewood GPF.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence Section	Condition Number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference Documents
General conditions	N/A	Generic conditions 1.2.3 on the previous Licence has been removed in accordance with the new Licence template as storage of dangerous goods is managed by the Department of Mines and Petroleum.	N/A
Fugitive emissions	N/A	<p>Normal Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Dust is generated from the movement of vehicles, materials handling, open areas and from the operation of the crushing and screening plant. <i>Impact:</i> Particulate matter that are less than 10 (PM₁₀) or 2.5 (PM_{2.5}) micrometres in diameter can be drawn deep into the lungs creating health impacts. However, the nearest dwelling to the Lakewood GPF is located approximately 5 km to the northwest in Kalgoorlie and is unlikely to experience any dust impacts. The most significant impacts from dust are likely to be to native vegetation, which is at risk of smothering which can reduce the plants ability to photosynthesise potentially resulting in stunting or death. No known Priority species are located near to the facility. <i>Controls:</i> The Licensee utilises a water truck on unsealed trafficable areas onsite and on stockpiles and the crusher and conveyors are equipped with water sprays. The milling is a wet process with no dust generation expected past that point.</p> <p><u>Risk Assessment</u> <i>Consequence: Minor</i></p>	



		<i>Likelihood: Unlikely</i> <i>Risk Rating: Moderate</i> <u>Regulatory Controls</u> Generic fugitive dust conditions have been removed from the Licence. The risk of dust emissions to the environment has been re-assessed as being on the lower scale of the 'Moderate' risk rating applied based on the Emissions Risk Matrix. Therefore the application of Licence limits is not justified and proponent controls are expected to sufficiently reduce environmental risk from dust.	
Licence duration	N/A	No changes to the expiry date on the current Licence are proposed.	N/A

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
21/09/2015	Proponent sent a copy of the draft instrument.	No comments received.	N/A



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High