



Licence Number L8449/2010/1

Licence Holder Silver Lake Resources Limited

ACN 108 779 782

File Number: 2010/003336

Premises Mount Monger Operations
Legal description –
Mining tenements M26/38, M26/94, M26/129,
M26/251, M26/280, M26/282, M26/325, M26/389,
M26/393, M26/402, M26/410, M26/411, M26/415
M26/500, M26/636 and G26/167.
KALGOORLIE WA 6430 as depicted in schedule 1

Date of Amendment 01 February 2019

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act and follows.

Tim Gentle

Manager – Resource Industries (South)

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

Definitions and interpretation

Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
ACM	Asbestos containing material
ACN	Australian Company Number
Asbestos Guidelines	Refers to the document titled “Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (May 2009)”
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
CS Act	<i>Contaminated Sites Act 2003</i> (WA)
Decision Report	refers to this document
Delegated Officer	an officer under section 20 of the EP Act
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review
Licence Holder	Silver Lake Resources Limited
mtpa	million tonnes per annum
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997</i> (WA)
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
UDR	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> (WA)

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited to the amendment of Licence Category 64; class II putrescible landfill site: premises on which waste is accepted for burial at the Class II putrescible landfill at the Daisy Milano Waste Rock Dump

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*
- *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (May 2009)*

Amendment description

The Licence Holder proposes to increase the annual production capacity for category 64 special waste type 1 activities from 300 tonnes up to 4300 tonnes per annum (tpa). A Licence amendment application to increase the special waste type 1 volume of Asbestos containing material (ACM) was submitted by the Licence Holder. Category 12 screening of material will not be changed by this application and will not be assessed in this Decision Report.

Background

Silver Lake Resources Limited (SLR) conducts crushing and screening activities across a number of contiguous tenements at the Mount Monger Operations located approximately 54km southeast of Kalgoorlie and 50 km from Mount Monger.

Material from the Christmas Flat open pit and Daisy Milano underground mine is processed in the mining areas which are located less than 1 km apart. The mine is in open eucalypt woodland of the Coolgardie Bioregion with dominant land uses being grazing and mining. The main issue of potential concern is dust generated during handling and dust lift off from the waste rock dump. Fugitive dust will be managed using water suppression delivered by water cart.

ACM has been authorised for disposal at the Daisy Milano landfill under the existing licence approved on 3 March 2016. The Daisy Milano landfill currently accepts a maximum of 300 tonnes per annual period of inert waste (plastic, non-recyclable metal, packaging, tyres etc) and 100 tonnes of putrescible waste from site offices and crib rooms as well as cardboard and paper waste. These wastes will remain authorised by the licence and will not be reassessed.

On 30 May 2018, Silver Lake Resources Limited (SLR) submitted the licence amendment application (A1686484) which is the subject of this Decision Report. Supporting documents to the amendment application included a plan (A1686484) of the Waste Rock Dump design and landfill area plus two emails providing extra supporting information on 19 November 2018 (A1740240) and 4 December 2018 (A1745154). No extra construction is required as the existing Daisy Milano Waste Rock Dump (WRD) will be used to dispose of the extra volumes of ACM. Small volumes (less than 1%) of waste rock mined at Daisy Milano is classified as ACM which is bound within the waste rock. No changes to the existing volume of wastes, plus the landfill size or location requires further assessment in this Decision Report.

Mine planning indicates further volumes of ACM are likely to be intercepted and will require disposal. SLR will increase the volume of waste for disposal at the Category 64 landfill facility located at Daisy Milano to 4000 tonnes of ACM estimated to be encountered each year over the next ten years of mine operations.

The increased volume of ACM is indicated in the following Table 2 titled 'waste acceptance quantity amendment'.

Table 2: waste acceptance quantity amendment

Waste type	Licensed Quantity – tonnes per annum	Amendment Quantity - tonnes per annum	Storage infrastructure	Monitoring (if applicable)	Location
Special Waste type 1 (ACM)	300 tonnes	4000 tonnes	encapsulated in waste rock dump above ground level	N/A	as shown in schedule 1 map attached.
Inert Waste Type 1 and 2 and contaminated Solid Waste (including tyres)	Inclusive with Special Waste type 1	300 tonnes	encapsulated in waste rock dump above ground level	N/A	as shown in schedule 1 map attached.
Putrescible waste	100 tonnes	100 tonnes	encapsulated in waste rock dump above ground level	N/A	as shown in schedule 1 map attached.

DWER reviewed the **Application** and **supporting document** and confirmed the key infrastructure and equipment proposed are in place and the assessment will focus purely on the operation and management of the extra volume of ACM waste as a prescribed activity.

Table 3 below outlines the proposed changes to the Licence.

Table 3: Proposed design capacity changes

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
64	400 tonnes per annual period	4000 tonnes per annual period	Increase the disposal of Asbestos Containing Material (ACM) from mining operations to 4000 tonnes per annual period.

Other approvals

The Licence Holder has provided the following information relating to other approvals as outlined in Table 4.

Table 4: Relevant approvals

Legislation	Number	Approval
<i>Mining Act 1978 (WA)</i> (Department of Mines, Industry Regulation and Safety)	Registration Id: 53892 and subsequent Amendments	Daisy Waste Rock Dump (WRD) Expansion granted approval on 25 May 2015.
<i>Rights in Water and Irrigation Act 1914 (WA)</i> (Department of Water and Environmental Regulation)	GWL162889 – expire 30/6/2021 Combined Fractured Rock West Alluvium aquifer	Processing – 295,000 kL/yr

Amendment history

Table 5 provides the amendment history for W4675/2010/1 and L8449/2010/1.

Table 5: Works approval and Licence amendments

Instrument	Issued	Amendment
W4675/2010/1	10/06/2010	New Works Approval
L8449/2010/1	1/10/2010	New Licence
L8449/2010/1	5/9/2013	Licence amendment to REFIRE format
L8449/2010/1	01/05/2014	Licence amendment to remove ambient dust monitoring conditions
L8449/2010/1	12/03/2015	Licence amendment to include a Class II putrescible landfill
L8449/2010/1	03/03/2016	Licence amendment to authorize the disposal of special Waste type 1 at the putrescible landfill
L8449/2010/1	31/01/2019	Licence amendment to increase volume of Asbestos Containing Materials disposed at the Daisy Milano landfill

Location and receptors

There are no relevant environmental receptors within a 10 km vicinity of the prescribed activity which may be receptors relevant to the proposed emissions from that activity. The closest public receptor is Mt Monger Road which traverses past the base of Daisy Milano waste rock dump but is restricted public access road from 1.2 km west of the waste dump. All traffic passing the ACM waste rock dump is restricted to SLR mining activities and is subject to mine safety requirements. Daisy Milano landfill and mine operations is located 14.5 km north east of Lake Lefroy.

Risk assessment

Tables 5 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 5: Risk assessment for proposed amendments during operation

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Cat 64 Class II putrescible landfill site: premises on which ACM waste is accepted for burial	Disposal of 4,000 tonnes per year of ACM or special waste type 1	Fugitive Dust: associated with ACM handling.	No receptors (Note: potential impacts on mine works ate not considered here. OHS matters are regulated under the Mining Act 1978 administered by the Department of Mines, Industry Regulation and Safety)	Air:	Health and amenity impacts	N/A	N/A	N/A	As there are no human (public) or environmental receptors within 10 Km of the Waste Rock Dump (WRD) the risk of impact from fugitive dust emissions associated with handling the ACM is not applicable. Existing Licence conditions 1.2.1 permits SLR to landfill. Table 1.2.1 will be amended with the increased quantity of ACM. To ensure that asbestos fibers are not released during disposal of ACM, existing conditions 1.2.4 requires representative to oversee the disposal into referenced grids indicated on a site plan. Licence Condition 1.2.5 requires the specific site plan to be maintained. Schedule 1 Premise map will be amended to include ACM disposal area. These conditions will adequately protect future receptors therefore providing sufficient level of control for disposal of ACM.
		Fugitive Dust associated with Waste Storage.	No receptors Note: potential impacts on mine works ate not considered here. These safety matters are regulated under the Mining Act 1978 administered by the Department of Mines, Industry Regulation and Safety	Air:	Health and amenity impacts	N/A	N/A	N/A	As there are no public or environmental receptors within 1.2 to 10km of the Waste Rock Dump (WRD) the risk of impact from fugitive dust emissions associated with the waste storage is not applicable. Existing Licence condition 1.2.3 addresses ACM wastes being wet down, buried as soon as practicable after deposition and before compaction to prevent airborne liftoff. ACM waste will be stored in the Daisy Milano WRD and is roughly 15 metres above ground and 45 metres from the groundwater. This Licence conditions adequately protect future receptors from the storage of waste therefore providing a sufficient level of control for storage of ACM waste.

Decision

Given the remote location, the proposed activity will not result in an increased risk to the environment or to public health.. However, the assessment demonstrates that existing licence conditions 1.2.3, 1.2.4 and 1.2.5 are sufficient to manage the risk of such emissions whilst Table 1.2.1 will be amended to increase the annual volume of Special waste Type 1 being ACM plus update schedule 1 maps of the Daisy Milano landfill area.

The controls applied by the existing licence conditions (L8499/2010/1) include;

- ACM wastes being wet down and buried after deposition and before compaction to prevent airborne lift off (Condition 1.2.3);
- Licence Holder representative is required to oversee the disposal of ACM into referenced grids indicated on a site plan (Condition 1.2.4); and,
- The specific site plan to be maintained (Condition 1.2.5).

The Licence Holder requested amendment is conditioned by;

- Amending Table 1.2.1 to include the increased volume of ACM to be disposed at the Daisy Milano landfill; and,
- Replacing the Schedule 1 map titled “Landfill area map” as shown below.

Licence Holder’s comments

The Licence Holder was provided with the draft Amendment Notice on 17 December 2018. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

Amendment

1. Condition 1.2 of the Licence is amended by the deletion of the text shown in strikethrough and the insertion of the red text shown in underline below:

1.2 Premises operation

1.2.1 The Licensee shall only accept waste on to the landfill if:

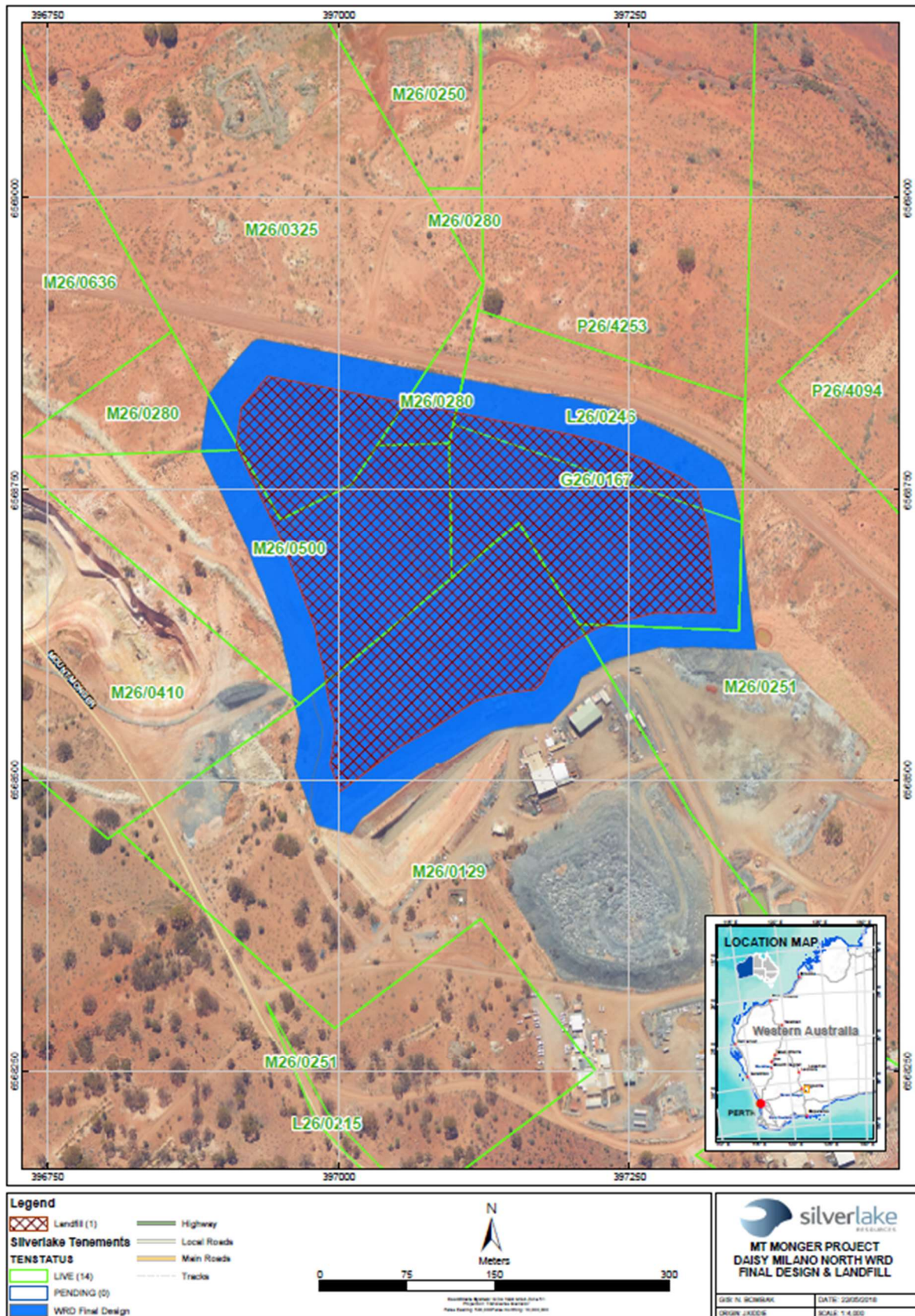
- (a) it is of a type listed in Table 1.2.1; and
- (b) the quantity accepted is below any quantity limit listed in Table 1.2.1; and
- (c) it meets any specification listed in Table 1.2.1.

Table 1.2.1: Waste acceptance		
Waste type	Quantity limit tonnes/ annual period	Specification ¹
Special Waste Type 1	4000	None specified Asbestos containing material – waste rock
Inert Waste Type 1	300	None specified
Inert Waste Type 2		Tyres and plastics only.
Contaminated solid waste		Must meet acceptance criteria for Class II landfills.
Putrescible Waste	100	Cement bonded asbestos. No fibrous asbestos shall be accepted.
Clean Fill	N/A	None specified

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

2. Replace schedule 1 maps titled “Landfill Area Map” with the map below:

The waste rock landform is shown in the map below. The red cross-hatched area depicts the landfilling area.



Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L8499/2010/1 – Mount Monger Operations	L8499/2010/1	accessed at www.dwer.wa.gov.au
2	Application for Licence amendment dated 30 May 2018 plus map of landfill – Silverlake Resources Limited	Application	DWER records (A1686484)
5	Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia published May 2009	Asbestos Guidelines	http://ww2.health.wa.gov.au/
5	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	DER 2015a	accessed at www.dwer.wa.gov.au
6	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	DER 2015b	
7	DER, November 2016. <i>Guidance Statement: Environmental Siting</i> . Department of Environment Regulation, Perth.	DER 2016	
8	DER, February 2017. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	DER 2017a	
9	DER, February 2017. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	DER 2017b	

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 17 December 2018 for review and comment. The Licence Holder responded on 24 December 2018 waiving the remaining comment period. No comments were submitted on the draft Amendment Notice.

Condition	Summary of Licence Holder comment	DWER response
Nil	Nil	