

Amendment Notice 1

L8457/2010/2
Silver Lake (Integra) Pty Limited
093 278 436
Suite 4, Level 3, South Shore Centre 85 South Perth Esplanade SOUTH PERTH WA 6151
10 February 2017
5 – processing; and 6 – mine dewatering
Salt Creek Processing Facility Mount Monger Road EMU FLAT WA 6431 Being Tenements M25/307, M25/125, M25/133, M25/71, G25/02, L25/33, M25/347, L25/27 and L25/31

Amendment

The Chief Executive Officer (CEO) of the Department of Environment Regulation (DER) has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Date signed: 10 February 2017

Tim Gentle

Manager Licensing – Resources Industries

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

Amendment Notice

This notice is issued under 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.

Amendment Description

On 26 October 2016, Silver Lake (Integra) Pty Ltd (Silver Lake) (Licence Holder) submitted an application to DER for an amendment to the Salt Creek Processing Facility Licence (L8457/2010/2).

This Notice is the result of the Licence Holder applying for an amendment under section 59B of the Act. The Licence Holder has applied to make the following changes:

- To include the dewatering of Majestic open pit to the Fingals open pit;
- To update the premises address and boundary to include a number of mining tenements; and
- To increase the dewatering throughput from 200 000 tonnes per annum to 400 000 tonnes per annum.

Risk Assessment

Tables 1 and 2 below apply a screening level risk assessment for the potential emissions which may arise from the application. The table identifies whether these emissions present a material risk requiring regulatory control.

Table 1 – Risk assessment for proposed amendments during construction

Activity	Potential emission	Potential receptors	Potential pathway	Potential impacts	Material risk	Reasoning
Cat 6	Dust: associated with installation of pipelines	Nearby residents: The nearest resident to the mine is located approximately 30 km to the west.	Air: Particulate matter (fugitive dust)	Dust can potentially result in health or amenity impacts to humans.	No	The Delegated Officer considers the material risk of dust emissions from the installation of the dewatering pipelines to be low, due to the distance to the nearest sensitive receptor and management methods proposed by the Licence Holder. No conditions are required.
Mine dewatering	Noise: associated with installation of pipelines		Air: Noise generated by the operation of equipment during construction	Amenity impacts to any nearby noise sensitive receptors	No	The Delegated Officer notes the lack of nearby sensitive receptors and determines that there is no risk of noise impact.

Table 2 – Risk assessment for proposed amendments during operation

Activity	Potential emission	Potential receptors	Potential pathway	Potential impacts	Material risk	Reasoning
	Dust: associated with operational activities	Nearby residents: The nearest resident to	Air: Particulate matter (fugitive dust)	Dust can potentially result in health or amenity impacts to humans	No	The Delegated Officer considers the material risk of dust emissions from the operation dewatering pipelines to remain low, due to the distance to the nearest sensitive receptor. The substantive offenses of the <i>Environmental Protection Act 1986</i> provide enforceable prohibitions for dust emissions that result in pollution or environmental harm.
Cat 6 Mine dewatering	Noise: associated with operational activities	the mine is located approximately 30 km to the west	Air: Noise generated by the operation of equipment n	Amenity impacts to any nearby noise sensitive receptors	No	The Delegated Officer notes the lack of nearby sensitive receptors and determines that there is no risk of noise impact.
	Waste: Saline water will be transported in pipelines and has the potential to be emitted if the pipelines were to leak or rupture	Surrounding vegetation	Land: infiltration through soil profile and direct inundation of vegetation	Contamination of surrounding land with hypersaline water, causing vegetation stress or vegetation deaths.	Yes	The Licence Holder has committed to installing all pipelines above ground or suitably buried and will utilise suitably designed containment structure/bunding to contain any potential leaks or spills from above ground sections. They have also stated that appropriate inspection regimes will be carried out on the pipelines. Based on the Licence Holder controls, the Delegated Officer considers that the consequence would be moderate and the likelihood is unlikely . Therefore the risk rating for pipeline spills is moderate . The Delegated Officer is satisfied that existing conditions on the Licence relating to pipeline management will be sufficient to manage the new pipelines. These conditions are: 1.2.1 The Licensee shall ensure that all pipelines containing environmentally hazardous substances are either: (a) equipped with automatic cut-outs in the event of a pipe failure; or (b) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.

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Activity	Potential emission	Potential receptors	Potential pathway	Potential impacts	Material risk	Reasoning
						and: 1.2.5 The Licensee shall: (a) undertake inspections as detailed in Table 1.2.2; (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 1.2.2: Inspection of infrastructure Scope of Type of inspection Frequency of inspection Dewatering Visual integrity Every 12 hours An additional standard condition (1.2.8) has been added addressing pipeline design and construction.
	Waste: Potential mounding of the water table in the vicinity of the receiving pits	Surrounding vegetation	Groundwater: subsurface lateral movement of pit lake water to groundwater table	Potential impacts to adjacent vegetation through inundation of roots.	Yes	The base of the Fingals pit is above groundwater level and has a volume of 1.3 M m ³ (including a 300 mm freeboard at the pit rim) which is adequate to store the 200 000 kL required to be discharged from the Majestic pit. The quality of the groundwater is saline with total dissolved solids measuring at 7 000 mg/L. Groundwater use within the vicinity of the mine is other mining operations. Groundwater depth is 40-50 metres below ground level (mbgl). The Licence Holder currently monitors all dewatering receiving pits for pH, TDS and volumetric flow, as will Fingals pit. Given the depth to groundwater, pit volume and lack of sensitive receptors, the Delegated Officer considers that the consequence would be <i>minor</i> and the likelihood is <i>rare</i> . Therefore the risk rating for groundwater mounding is <i>low</i> . The Delegated Officer will include Fingals pit as a receiving pit in condition 2.1.1. Fingals pit and the Imperial-majestic turkey's nest will also be included in condition 3.2.1 to formalise the Licence Holder's commitments and to ensure consistency throughout the premises.

Decision

The Delegated Officer has determined that the key emissions associated with the installation and operation of dewatering activities is waste via pipeline spills/ruptures.

The Delegated Officer has determined that the construction and operation of the dewatering pipelines will not result in emissions which are unacceptable to public health or the environment.

Instrument	Issued	Amendment	
L8457/2010/1	02/09/2010	Licence for Salt Creek Processing Facility	
L8457/2010/2	04/09/2013	Licence reissue and transfer to REFIRE format	
L8457/2010/2	23/01/2014	Licence amendment to construct and undertake the cyclonic tailings deposition trial	
L8457/2010/2	21/08/2014	Licence amendment to remove total cyanide monitoring and include an improvement condition for submission and implementation of a Groundwater Recovery Plan. Standard conditions 1.3.5 and 2.6.2 have also been added to the Licence	
L8457/2010/2	21/05/2015	Licence amendment to allow simultaneous dewatering and tailings deposition to Salt Creek in-pit TSF	
L8457/2010/2	31/12/2015	Licence amendment to increase nominated throughput	
L8457/2010/2	06/10/2016	Licence amendment to include mobile crusher and increase nominated throughput, to include two new dewatering discharge points and reduce dewatering throughput	
L8457/2010/2	10/2/2017	Amendment Notice 1 – to include Fingals pit as a dewatering discharge location, increase the dewatering throughput to 400 000 tonnes per annum and update the premises boundary address and map.	

Amendment History

Amendment

1. The licence prescribed premises location is amended with the addition of the mining tenements shown in red below:

Mining Tenements M25/307, M25/125, M25/133, M25/71, G25/02, L25/33, M25/347, L25/27, L25/31, M25/347, G25/02, L25/33, M25/307, L25/31, L25/41, M25/125, M25/133, L25/27, M25/71, M26/249, M26/197, M26/248, M26/409, M26/417, L25/16, L25/23, L25/49, L25/37 and M15/350

2. Condition 2.1.1 of the licence is amended by the insertion of the red text shown below:

The Licensee shall ensure that where waste is emitted to groundwater from the emission points in Table 2.1.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.1.1: Emission points to groundwater				
Emission point reference	Description	Source		
Rumbles open pit	Mine dewater from Maxwell's open pit via pipeline Mine dewater from Santa open pit via pipeline	Maxwell's open pit and Santa open pit		
Santa open pit	Mine dewater from Maxwell's open pit via pipeline	Maxwell's open pit		
Fingals open pit	Mine dewater from Majestic open pit via pipeline	Majestic open pit		

3. Condition 3.2.1 of the licence is amended by the insertion of the red text shown below:

The Licensee shall undertake the monitoring in Table 3.1.1 according to the specifications in that table.

Table 3.1.1: Monitoring of point source emissions to groundwater				
Emission point reference	Parameter	Units	Frequency	
Rumbles open pit	Volumetric flow rate	kL	Monthly	
Santa open pit	pH Total Dissolved Solids (TDS)	- mg/L	Quarterly	
Finals open pit	Volumetric flow rate	kL	Monthly	
Imperial-majestic turkeys nest	pН	-	Quarterly	
11001	TDS	mg/L		

4. The licence is amended by the insertion of condition 1.2.8:

The Licensee shall ensure that each item of infrastructure or equipment specified in column 1 of Table 1.2.3 is designed and constructed in accordance with the requirements specified in column 2 of Table 1.2.3

Column 1	Column 2
Infrastructure	Requirements (design and construction)
Dewatering pipelines	Located within bunded corridors
	All joints to be undertaken by a licensed and
	qualified polywelder
	All pipelines to be installed in accordance with
	AS4130 and the Plastics Industry Pipe
	Association of Australia Limited (PIPA)
	Guidelines POP003

5. The Licence is amended by the insertion of condition 1.2.9

The Licensee must not depart from the requirements specified in Table 1.2.3 except:(a) Where such departures are minor in nature and do not materially change of affect the infrastructure; or

(b) Where such departure improves the functionality of the infrastructure and does not increase the risks to public health, public amenity or the environment.

If condition 1.2.9(b) applies, then the Licensee must provide the CEO with a list of departures which are certified as complying with condition 1.2.8.

6. The Licence is amended by the insertion of condition 1.2.10

The Licensee shall submit a construction compliance document to the CEO, following construction of the dewatering pipelines and prior to operation.

7. The Licence is amended by the insertion of condition 1.2.11

The Licensee must ensure the construction compliance document:

- (a) Is certified by a suitably qualified professional engineer or builder stating that each item of infrastructure specified in Table 1.2.3 has been constructed in accordance with the conditions of the Licence with no material defects; and
- (b) Be signed by a person authorised to represent the Licensee and contain the printed name and position of that person within the company.
- 8. The Licence is amended by the insertion of condition 1.2.12

The Licensee shall operate the dewatering pipelines in accordance with the conditions of this Licence, following submission of the construction compliance document required under condition 1.2.10



Schedule 1, Premises map, is replaced with the following:

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Appendix 1: Key Documents

	Document Title	Availability
1	DER, 2015, <i>Guidance Statement:</i> <i>Regulatory Principles</i> . Department of Environment Regulation, Perth.	accessed at http://www.der.wa.gov.au
2	DER, September 2015, <i>Guidance</i> <i>Statement on Setting Condition</i> . Department of Environment Regulation, Perth.	
3	DER, November 2014, <i>Guidance</i> <i>Statement on Licensing Duration</i> . Department of Environment Regulation, Perth.	
4	DER, September 2015, <i>Guidance</i> <i>Statement on Licensing and Works</i> <i>Approvals</i> . Department of Environment Regulation, Perth.	
5	Licence amendment supporting documentation received on 26 October 2016:	DER Records (A1185729)
	 Silver Lake (Integra) Pty Limited, October 2016, L8457/2010/2 – Amendment Application Oct 2016 	