



Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L8449/2010/1
Licence Holder	Silver Lake Resources Limited
ACN	108 779 782
File Number	2010/003336-1
Premises	Mount Monger Operations Mining Tenements: M26/129, M26/251, M26/410, M26/38, M26/280, M26/500, M26/636, M26/325, M26/389, M26/393, M26/94, M26/402, M26/411, M26/282, M26/415 and G26/167.
Date of Report	27 July 2020
Decision	Licence amendment granted

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An officer delegated by the CEO under section 20 of the EP Act

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1. Decision summary

Licence L8449/2010/1 is held by Silver Lake Resources Limited (Licence Holder) for the Mount Monger Operations (the Premises), located at 54km southeast of Kalgoorlie and 50km from Mount Monger.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, a Revised Licence L8449/2010/1 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://www.der.wa.gov.au>.

2.2 Application summary

On 11 May 2020, the Licence Holder submitted an application to the department to amend Licence L8449/2010/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Amendment to category 64 activities for an additional 600 tonnes of inert waste type 1 and 2 per year.

As part of this risk assessment process the Delegated Officer identified that up to 600 used tyres are being stored onsite prior to burial. Storing 100 or more used tyres on a premises at any one time triggers prescribed premises category 57 (used tyre storage). Through this amendment, DWER has included storage of up to 600 used tyres per year to be stored up to 12 months before disposal and burial in the landfill (i.e. inclusion of Category 57).

This amendment is limited only to changes to Category 64 and Category 57 activities from the Licence. No changes to the aspects of the existing Licence relating to Category 12 activities have been requested by the Licence Holder. Table 1 outlines the current waste acceptance at the site.

Table 1. Waste acceptance

Waste type	Quantity limit tonnes/ annual period	Specification ¹
Special Waste Type 1	4000	Asbestos containing material – waste rock
Inert Waste Type 1	300	None specified
Inert Waste Type 2		Tyres and plastics only.

Waste type	Quantity limit tonnes/ annual period	Specification ¹
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

Table 2 below outlines the proposed changes to the existing Licence

Table 2. Proposed throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
64	4,400 tonnes per annual period	5,000 tonnes per annual period	An additional 600 tonnes of inert waste type 1 and 2, contaminated solids and putrescible waste per year. Additionally storage of 600 used tyres on site for up to 12 months before burial.

2.3 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes made under the Amendment Notices as summarised in Table 3.

Table 3: Licences consolidated in this amendment

Instrument	Issued	Summary of approval
L8449/2010/1	01/10/2010	Licence granted
L8449/2010/1	05/09/2013	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	12/03/2015	Licence amendment to include a Class II putrescible landfill
L8449/2010/1	03/03/2016	Amendment notice: Licence amendment to authorise the disposal of Special Waste Type 1 at the putrescible landfill

The obligations of the Licence Holder have not changed in consolidating the licence. The department has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the format and appearance of the Licence;
- deleted the redundant AACR form set out in schedule 1 of the previous licence and advised the Licensee to obtain the form from the department's website;
- revised licence condition numbers, removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The full consolidation of licence conditions as they relate to this Revised Licence are detailed in Section 5.1. Previously issued Amendment Notices will remain on the department's website for future reference and will act as a record of the department's decision making.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guidance Statement: Risk Assessments* (DER 2017).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 3 below. Table 3 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 4: Licence Holder controls

Emission	Sources	Potential pathways	Proposed/existing controls
Acceptance of putrescible waste for burial	Uncovered waste associated with increased throughput.	Access to landfill. Ingestion affecting local fauna	Addressed in existing licence conditions: 1.2.6 (cover requirements) and 1.2.7 (wind-blown waste). Condition states putrescible waste and plastics to be covered "as soon as practicable after deposition".
	Odour from the degradation of putrescible waste (rotting food from meal scraps).	Air/wind dispersion	Existing condition 1.2.6 states putrescible waste and plastics to be covered "as soon as practicable after deposition".
	Leachate associated with increased input	Direct discharge to surface water courses and infiltration to groundwater	Landfill trenches are located on top of waste rock landfill 10-20m above ground level.

Emission	Sources	Potential pathways	Proposed/existing controls
Acceptance and storage of used tyres for burial. Up to 600 tyres stored for up to 12 months.	Smoke and fumes from possible fires associated with increased input	Air/wind dispersion	Addressed in existing licence conditions: 1.2.6 (cover requirements). Tyres are covered by end of the working day after deposition.
Inadequate management of waste disposed in landfills	Firefighting water runoff	Direct discharge to surface water courses and infiltration to groundwater	Landfill trenches are located on top of waste rock landfill 10-20m above ground level. Firefighting water runoff to be contained in the waste rock dump.

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 4 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 5: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Mount Monger homestead (residential residence for the Mount Monger Pastoral station)	1.3km north west from the landfill boundary.
Environmental receptors	Distance from prescribed activity
A number of perennial creek lines run through prescribed premises boundary	Within prescribed premises boundary.
Groundwater	The applicant indicates that groundwater is approximately 38m below ground level with TDS of 50,000mg/L and that there are no nearby users of the hypersaline groundwater.
Environmental receptors	Distance from prescribed activity
Livestock – area used for grazing	Adjacent to site

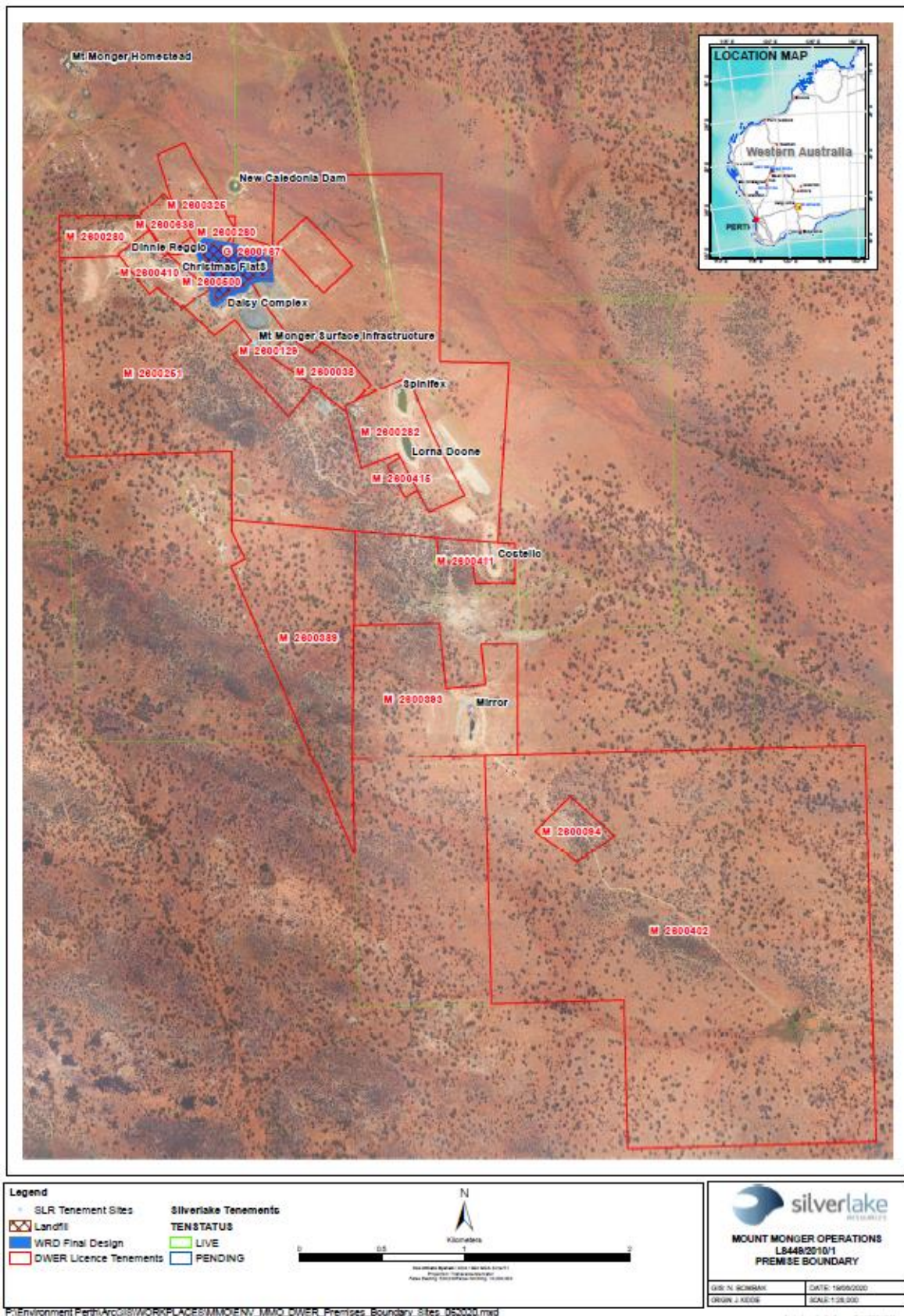


Figure 1. Distance to sensitive receptors (Mount Monger Homestead)

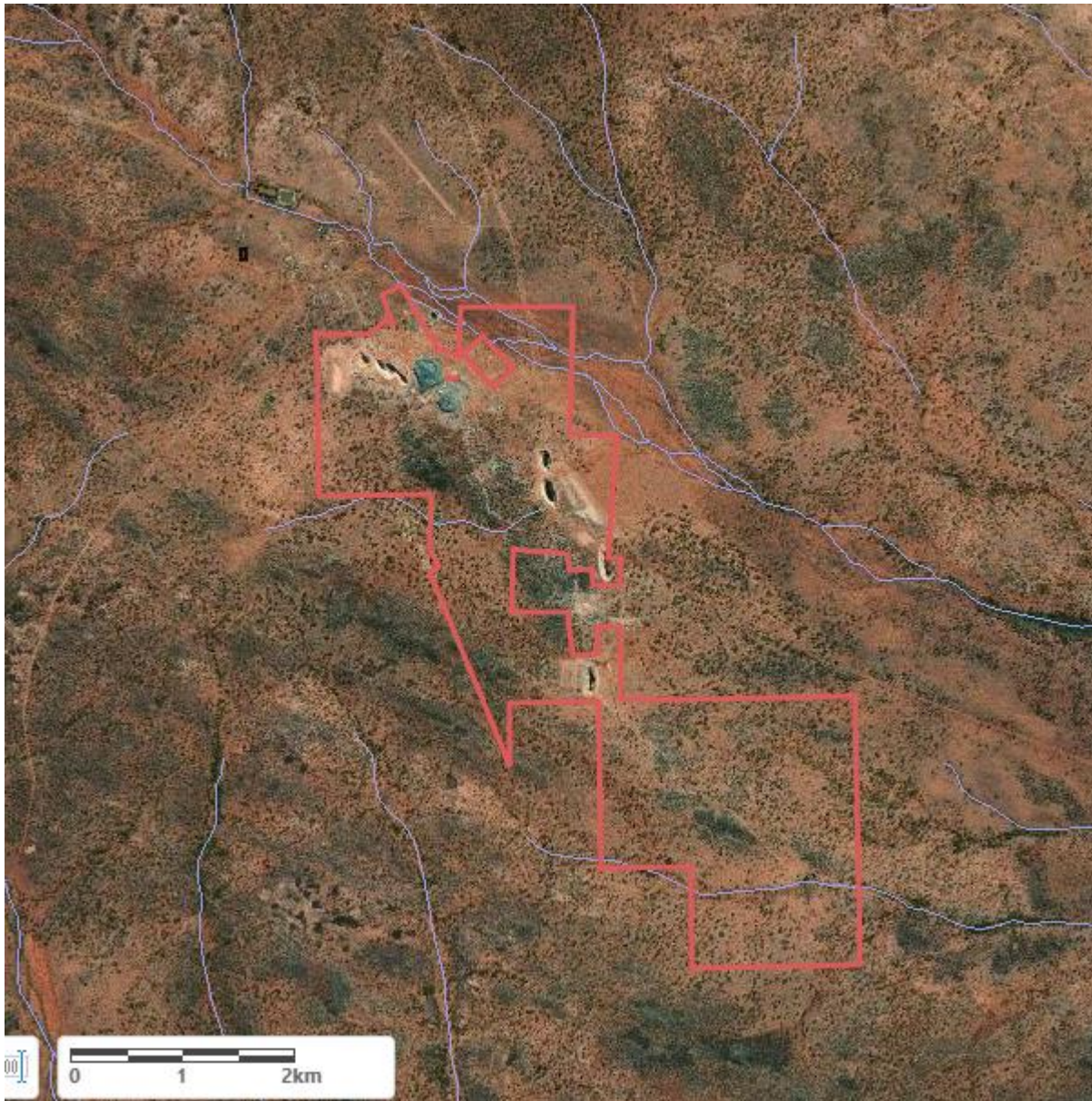


Figure 2. Distance to sensitive receptors (non-perennial creeks)

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 6.

The Revised Licence L8449/2010/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. category 64 and 57 activities.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 6. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Operation (including time-limited-operations operations)								
Acceptance of putrescible waste for burial	Uncovered waste associated with increased input	Access to landfill or windblown waste. Ingestion affecting local fauna.	Livestock, birds and other fauna.	Existing licence conditions: 1.2.6 (cover requirements) and 1.2.7 (wind-blown waste). Condition states putrescible waste and plastics to be covered "as soon as practicable after deposition".	C = Moderate L = Unlikely Medium Risk	N	Amendment of condition 1.2.6	Amended to indicate a timeframe for cover requirements (within a fortnight after deposition):
	Odour from the degradation of additional putrescible waste (rotting food from meal scraps)	Air/wind dispersion	Mount Monger Homestead	Current condition 1.2.6 states putrescible waste and plastics to be covered "as soon as practicable after deposition".	C = Minor L = Unlikely Medium Risk	N	Amendment of condition 1.2.6	Amended to indicate a timeframe for cover requirements (within a fortnight after deposition).
	Leachate associated with increased input	Direct discharge to surface water courses and infiltration to groundwater	Perennial creek lines (applicant states groundwater is 38m bgl)	Landfill trenches are located on top of waste rock landfill 10-20m above ground level.	C = Slight L = Unlikely Low	Y	N/A	Increase in putrescible waste is not likely to generate significant additional leachate. No additional regulatory controls required.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Acceptance and storage of used tyres for burial. Up to 600 tyres stored for up to 12 months prior to burial.	Smoke and fumes from possible fires associated with increased input	Air/wind dispersion	Surrounding vegetation/ fauna Mount Monger Homestead	Cover requirements for tyres in existing licence condition 1.2.6 which indicates tyres are to be covered by the end of the working day after deposition.	C = moderate L = Unlikely Medium Risk	N	Amendment of licence to include category 57. Conditions 1.2.8 – 1.2.12 Amendment of condition 3.2.1	Category 57 applies for premises on which 100 or more used tyres are stored. As tyres will be stored for up to 12 months prior to burial, conditions have been implemented to mitigate fire risk associated with additional tyre storage.
Inadequate management of waste disposed in landfills or tyre storage on-site	Firefighting water runoff	Direct discharge to surface water courses and infiltration to groundwater	Surrounding vegetation/ fauna	Landfill trenches are located on top of waste rock landfill 10-20m above ground level.	C = unlikely L = minor Medium	N	Condition 1.2.8	Increased fire risk associated with additional tyre storage requires further management of firefighting water.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 7 provides a summary of the consultation undertaken by the department.

Table 7: Consultation

Consultation method	Comments received	Department response
Shire of Kalgoorlie-Boulder advised of proposal (2/7/20)	N/A	N/A
Department of Mines, Industry Regulation and Safety advised of proposal (2/7/20)	N/A	N/A
Licence Holder was provided with draft amendment on (17/7/20)	Applicant requested to remove 15 tonnes as a requirement for maximum tyre storage capacity. Applicant stated they would remain within 600 tyres and 900 tonnes inert waste stated in Table 1.2.1.	No material change to the risk assessment. Department will remove 15 tonnes as a requirement from the licence. A maximum storage capacity of 600 tyres at any one time and requirements under inert waste will remain on the licence.

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 8 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 8: Summary of licence amendments

Condition no.	Proposed amendments
-	Amendment to include category 57
-	Amendment of introductory text to include updated operations
1.2.6	Amendment to timeframe for waste coverage
1.2.8 – 1.2.12	Mitigation of fire risk associated with additional tyre storage.
3.2.1	Update of reporting requirements to include fires or spills at the premises and actions taken to put out the fire or contain the spill.

Schedule 1	Updated prescribed premises map which shows location of Mount Monger Homestead and more clearly displays the waste rock landform location within the premises.
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Table 9: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
1.1.2	Interpretation and definitions	Definitions	Amended to include current DWER address and contact information.
1.2.1	Premises Operation	Condition 1.2.1, Table 1.2.1	Amendment of quantity of Special Waste Type 1 in accordance with amendment notice 1.
Schedule 2 Reporting & notifications	Annual Audit Compliance Report Form N1 Notification	N/A	Redundant attachment. Deleted from Licence Forms accessed at www.dwer.wa.gov.au

References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Silver Lake Resources, 2020 *L8449 Amendment Application* (DWER records A1892186)
5. Silver Lake Resources, 2020 *DER20100033361 response 200619* (DWER records A1904969)

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Works approval	<input type="checkbox"/>				
Licence	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>
		Has the works approval been complied with?			Yes <input type="checkbox"/> No <input type="checkbox"/>
		Has time limited operations under the works approval demonstrated acceptable operations?			Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
		Environmental Compliance Report submitted?			Yes <input type="checkbox"/> No <input type="checkbox"/>
		Date Report received:			
Renewal	<input type="checkbox"/>	Current licence number:			
Amendment to works approval	<input type="checkbox"/>	Current works approval number:			
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L8449/2010/1		
		Relevant works approval number:		N/A	<input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>
Date application received		11/05/2020			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Silver Lake Resources Limited			
Premises name		Mount Monger Operations			
Premises location		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, G26/167			
Local Government Authority		City of Kalgoorlie-Boulder			
Application documents					
HPCM file reference number:		2010/003336-1~1			
Key application documents (additional to application form):		Only application form submitted (response to RFI later sent)			
Scope of application/assessment					

Summary of proposed activities or changes to existing operations.	Licence amendment – category 64 Increase of waste volume from 400 tonnes per annual period to 1000 tonnes (inclusive of inert waste type 1 and 2 and contaminated solid wastes + tyres). Storage of up to 600 used tyres for up to 12 months before burial sent in response to RFI. The licence is also prescribed for category 12 activities (500,000 tonnes per annual period)	
Category number/s (activities that cause the premises to become prescribed premises)		
Table 1: Prescribed premises categories		
Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity
Category 64	400 tonnes per annual period	1000 tonnes per annual period
Legislative context and other approvals		
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	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"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Approval: Expiry date: If N/A explain why?

Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: Licence/permit No: Application says no, but there are existing groundwater licences for the prescribed premises: GWL 158446(3), allocation: 30,000, exp. Apr 11 2023 GWL 162889(4), allocation: 295000, exp 30 June 2021
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: N/A Are the proposed activities/landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Landfill Waste Classification and Waste Definitions 1996 Environmental Protection (Controlled Waste) Regulations 2004
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p>Classification:</p> <p>9 sites within premises boundary listed as: possibly contaminated – investigation required (PC–IR)</p> <p>Date of classification: 25 March 2020</p>