



Works Approval Number	W5214/2012/1
Works Approval Holder	Lake Austin Mining Pty Ltd
ACN	607 635 192
File Number:	2012/003780
Premises	White Well Gold Project Mining Tenement M20/54 CUE WA 6640
Date of Report	10/03/2020

1. Definitions and interpretation

Definitions

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

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Amendment Report	refers to this document
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 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Minister	the Minister responsible for the EP Act and associated regulations
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
time limited operations	refers to the operation of the infrastructure and equipment identified under a works approval that is authorised for that purpose, subject to the relevant conditions.
TSF	Tailings Storage Facility
Works Approval	refers to W5214/2012/1, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
Works Approval Holder	Lake Austin Mining Pty Ltd

2. Amendment Description

The following guidance statements have informed the assessment and decision outlined in this Amendment Report.

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Licence Duration (August 2016)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

2.1. Purpose and scope of assessment

On 1 October 2019 Lake Austin Mining Pty Ltd applied to amend Works Approval W5214/2012/1 to increase Category 89 (Putrescible landfill site) capacity to 45 tonnes per annual period, from 25 tonnes. No changes to Category 5 are proposed under this amendment.

The increase in capacity is to accommodate for the disposal of putrescible domestic waste generated from the proposed accommodation camp and site offices. Putrescible domestic waste was previously proposed to be transported to the waste management facility in the town of Cue. The waste will comprise of approximately:

- 25 tonnes of scrap timber, minor scrap steel and plastics, cardboard and paper.
- 20 tonnes of putrescible domestic waste.

All the landfill areas will be located within the footprint of the mine waste rock dump. It is estimated that the average landfill trench dimensions will be a maximum of 30 metres long, 10 metres wide and 2 metres deep. The trenches will be ramped on one end to prevent fauna entrapment. Each completed landfill area will be covered on a monthly basis with a layer of inert oxidised (kaolin clay) mine waste prior to moving on to the next landfill area.

Table 2 below outlines the proposed changes to Works Approval W5214/2012/1

Table 2: Proposed design capacity changes

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
5	2,400,000 tonnes per annual period	N/A	No change proposed.
89	25 tonnes per annual period	45 tonnes per annual period	Increase in capacity of 20 tonnes per annual period.

2.2 Consolidation of Works Approval

As part of this amendment package DWER has consolidated the Works Approval by incorporating changes made under the following Amendment Notices:

- Amendment Notice 1, granted 17 August 2018 – Amendment to extend expiry date by three years, from 30 August 2018 to 31 August 2021.

The obligations of the Works Approval Holder have not changed in consolidating the Works Approval. DWER has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the works approval, the CEO has:

- updated the format and appearance of the Works Approval;
- revised works approval condition's numbers and removed any redundant conditions and realigned condition numbers for numerical consistency.

Previously issued Amendment Notices will remain on the DWER website for future reference and will act a record of DWER's decision making.

3. Other approvals

The Works Approval Holder has provided the following information relating to other approvals as outlined in Table 3.

Table 3: Relevant approvals

Legislation	Number	Approval
<i>Environmental Protection Act 1986</i>	Clearing Permit CPS 6981/2 granted by DWER on 04/06/2016. Expires on 30/06/2021.	Clearing Permit issued by DWER.
<i>Rights in Water and Irrigation Act 1914</i>	Licence to Take Water GWL181566(2) granted by DWER on 06/01/2016. Expires on 05/01/2026.	Amendment to increase annual water entitlement to 2,000,000 kilolitres currently under assessment by DWER. (RF13817-1)
<i>Mining Act 1978</i>	Mining Lease 20/54 issued by Department of Mines, Industry Regulation and Safety on 19/05/1987. Expires on 18/05/2029.	Approval to carry out mining operations in, on or under the land, subject to conditions of title.

4. Amendment history

Table 4 provides the amendment history for W5214/2012/1.

Table 4: Works approval amendments

Instrument	Issued	Amendment
W5214/2012/1	31/08/2012	Works Approval granted
W5214/2012/1	27/08/2015	Amendment to extend the expiry date from 29 August 2015 to 30 August 2018.
W5214/2012/1	28/04/2016	Amendment to transfer Holder, increased Category 5 design capacity, relocate TSF and processing plant, add Category 89, remove accommodation camp.
W5214/2012/1	17/08/2018	Amendment Notice 1 to extend the expiry date from 30 August 2018 to 31 August 2021.
W5214/2012/1	DRAFT	Amendment to increase Category 89 capacity from 25 to 45 tonnes per annual period.

5. Location and receptors

Table 5 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 5: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Yarraquin Station homestead	Approximately 15 km south of the Premises
Town of Cue	Approximately 30 km west of the Premises

Table 6 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 6: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Priority Ecological Community – Lake Austin vegetation complexes (banded ironstone formation) – Priority 1	Approximately 8 km south of the Premises
Threatened/Priority Fauna	A Level 1 fauna survey was conducted over a portion of the Prescribed Premises in March 2012 (Harewood, 2012). The survey consisted of a desktop study, a reconnaissance survey of fauna habitat types and opportunistic fauna sightings during the site visit (Harewood, 2012). A total of 36 fauna species were observed. No conservation significant species were recorded during the fauna survey (Harewood, 2012).
Minor, non-perennial watercourses	Two located within Prescribed Premises
Department of Biodiversity, Conservation and Attractions managed lands and waters – Former Lakeside Pastoral Lease	Approximately 36 km west of the Premises
<i>Rights in Water and Irrigation Act 1914</i> – East Murchison Groundwater Area	Intersects Prescribed Premises
<i>Country Areas Water Supply Act 1947</i> - Public Drinking Water Source Area – Cue Water Reserve	Approximately 15 km west

6. Risk assessment

Tables 7 and 8 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 7: Risk assessment for proposed amendments during construction

Risk Event				Consequence rating ¹	Likelihood rating ¹	Risk ¹	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Category 89 – Construction of new landfill cells	Dust	Air/windborne pathway causing impacts to health and amenity of closest human receptors.	No controls proposed for construction.	Slight	Unlikely	Low	The construction works are not expected to generate significant dust or noise emissions. Given the distance to the nearest human receptor impacts to human health and amenity are not considered likely to occur.	N/A
	Noise	No residence within the vicinity of the landfill. The closest residential premises is located approximately 18 km south of the Premises.						

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

Table 8: Risk assessment for proposed amendments during operation

Risk Event				Consequence rating ¹	Likelihood rating ¹	Risk ¹	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Category 89 – Disposal of putrescible waste into landfill cells.	Dust	Air/windborne pathway causing impacts to health and amenity of closest human receptors	Assessment of dust generation will be conducted during scheduled internal inspections. Dust generated from roads will be minimised using water trucks.	Slight	Unlikely	Low	An estimated 45 tonnes of waste is expected to be disposed of per annual period. The separation distance to the nearest human receptor is 18 km. Adverse impacts from dust and odour received at the nearest resident is not expected.	N/A The <i>Environmental Protection (Rural Landfill) Regulations 2002</i> are considered sufficient in regulating dust and odour emissions.
	Odour	No residence within the vicinity of the landfill. The closest residential premises is located approximately 15 km south of the Premises	Monthly burial of waste to control any potential odours.					

Risk Event				Consequence rating ¹	Likelihood rating ¹	Risk ¹	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
	Leachate and/or contaminated storm water	<p>Contamination of groundwater or surface water through seepage of leachates or direct discharge to surface waters.</p> <p>Minor, non-perennial watercourse located approximately 670 m south of landfill. Public drinking water source area 15 km west. The regional water table on M20/54 is approximately 25 metres below ground level.</p>	<p>Separation distances will apply to each landfill area as follows:</p> <ul style="list-style-type: none"> • Greater than 35 metres from lease boundary • Greater than 100 metres from any surface body of water • The regional water table on M20/54 is approximately 25 metres below ground level, therefore no less than 25 metres below the lowest proposed landfill area. <p>Landfill trenches will be constructed to have contoured banks/bunding to direct uncontaminated stormwater away from the trench. This will also minimise the potential for washing away of waste. Regular inspection and clean-up will be carried out if waste is washed or blown away, and this material will be returned to the landfill site.</p>	Minor	Unlikely	Medium	<p>The Delegated Officer considers the consequence of leachate to receptors is minor, given the proposed separation distance between landfill to groundwater and watercourses. The consequence of contaminated stormwater is also minor given the applicant is contouring the banks of the landfill trenches to direct stormwater away.</p> <p>The operations can be adequately managed either through provisions of the <i>Environmental Protection (Rural Landfill) Regulations 2002</i> or through licence conditions.</p> <p>The Delegated Officer considers the overall risk of leachate to be medium.</p>	<p>Table 1: Design and construction/installation requirements</p> <p>Each trench will be constructed:</p> <ul style="list-style-type: none"> • Only in the location identified on the proposed landfill layout map within the Waste Rock Dump: • 30m length by 10 m wide and 2 m depth; • Have contour banks/bunds to direct uncontaminated stormwater away from the trench.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017).

7. Consultation

Table 9: Summary of consultation

Method	Comments received	DWER response
<p>Town of Cue contacted via email for comment and advice on planning on 24 January 2020. (A1861636)</p> <p>Phone contact made with Shire of Cue Administration on 04/02/2020 who confirmed receipt of referral.</p> <p>Follow up email sent to Town of Cue requesting comment and advice on planning on 10 February 2020. (DWERDT251990)</p>	<p>No comments received.</p>	<p>Draft documents to be referred to applicant.</p>
<p>Applicant referred draft documents on 28/02/2020. (A1872401)</p>	<p>Written correspondence received on 05/03/2020 from applicant (DWERDT260579)</p> <p>Request to waive 21 day formal comment period received.</p>	<p>Amended instrument to be granted.</p>

8. Conclusion

The Delegated Officer has considered the potential impacts of dust, odour, noise, leachate and contaminated stormwater associated with the acceptance of putrescible waste and increase in throughput at the Category 89 landfill site. Based on this assessment, the Delegated Officer has determined that a works approval amendment will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

8.1. Summary of amendments

Table 10 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Works Approval as part of the amendment process.

Table 10: Works approval amendments and conversion map for new license format

Existing Licence condition/table/ schedule	Condition/table/ schedule summary	Revised Licence condition/table/ schedule	Conversion notes
N/A	-	-	Inclusion of a 'Works approval history' table to summarise all major changes to the works approval.

Existing Licence condition/table/ schedule	Condition/table/ schedule summary	Revised Licence condition/table/ schedule	Conversion notes
N/A	-	-	Updates to wording - 'Department of Regulation' (DER) to 'Department of Water and Environmental Regulation' (DWER).
N/A	-	-	Inclusion of 'Table 5 – Definitions', minor updates to wording and addition of referenced terms used in the Works Approval.
N/A	-	-	Interpretation heading relocated from conditions to a separate section at the start of the Works Approval.
Condition 1.1.1	<i>Interpretation and definitions</i>	-	Redundant condition. Revised to current licensing format.
Condition 1.1.2	<i>Interpretation and definitions</i>	-	Redundant condition. Revised to current licensing format.
Condition 1.1.3	<i>Australian or other standard</i>	-	Redundant condition. Revised to current licensing format.
Condition 1.1.4	<i>Reference to code of practice</i>	-	Redundant condition. Revised to current licensing format.
Condition 1.2.1	<i>Construction requirements</i>	Condition 1	Condition updated to new format. Reference to Table 1.2.1 changed to Table 1.
Table 1.2.1	<i>Construction Requirements</i>	Table 1	Table updated to replace 3 March 2016 document with corresponding construction requirements for the Category 89 amendment.

Existing Licence condition/table/ schedule	Condition/table/ schedule summary	Revised Licence condition/table/ schedule	Conversion notes
Condition 1.2.2	<i>Commissioning of works period</i>	Condition 4	Direct transfer.
Condition 2.1.1	<i>Sampling and NATA accreditation</i>	Condition 8	Direct transfer.
Condition 2.1.2	<i>Monitoring prior to commissioning</i>	Condition 9	Reference to Table 2.1.1 changed to Table 2.
Table 2.1.1	<i>Monitoring of ambient groundwater quality</i>	Table 2	Direct transfer.
Condition 3.1.1	<i>Commissioning of works in accordance with commissioning plan</i>	Condition 6	Removal of reference to Table 3.1.1 – Now refers to commissioning plan, detailed in Condition 5.
Table 3.1.1	<i>Improvement Program</i>	Condition 5	Removal of Table 3.1.1 and direct transfer into Condition 5.
Condition 4.1.1	<i>Submission of compliance document</i>	Condition 2	Direct transfer.
Condition 4.1.2	<i>Compliance document contents</i>	Condition 3	Direct transfer.
Condition 4.1.3	<i>Submission of commissioning report.</i>	Condition 7	Direct transfer.
Condition 4.2.1	<i>Notification Requirements</i>	Condition 10 and Condition 11.	Reference to Table 4.2.1 changed to Table 3.
Table 4.2.1	<i>Notification Requirements</i>	Table 3 and Table 4	Table 4.2.1 is split into Table 3 and Table 4 to suit updated template.
N/A	<i>Recordkeeping</i>	Condition 12	New standard condition added as per template.
N/A	<i>Recordkeeping specifications</i>	Condition 13	New standard condition added as per template.
Schedule 1: Maps	<i>Premises Map</i>	Figure 1: Premises Map	Updated with coordinate gridlines.

Existing Licence condition/table/ schedule	Condition/table/ schedule summary	Revised Licence condition/table/ schedule	Conversion notes
Schedule 1: Maps	<i>Ambient groundwater monitoring bore locations</i>	Figure 2: Ambient groundwater monitoring bore locations	Updated with labelled monitoring bore locations
N/A	<i>Proposed landfill layout</i>	Figure 3: Proposed landfill layout	Addition of landfill layout site map.

**A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES**

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

Appendix 1: Key documents

	Document title	Availability
1	Works Approval W5214/2012/1 – White Well Gold Project	accessed at www.dwer.wa.gov.au
2	Works Approval W5214/2012/1 - Amendment Application	DWER records (DWERDT207296)
3	Harewood, G. (2012) Terrestrial Fauna Survey (Level 1) of the White Well Project. Report Prepared for Cobra Resources Limited, by G. Harewood, April 2012.	ftp://ftp.dwer.wa.gov.au/permit/
4	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	accessed at www.dwer.wa.gov.au
5	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
6	DER, August 2016. <i>Guidance Statement: Licence duration</i> . Department of Environment Regulation, Perth.	
7	DER, February 2017. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
8	DWER, June 2019. <i>Guideline: Decision Making</i> . Department of Water and Environmental Regulation, Perth.	
9	DWER, June 2019. <i>Guideline: Industry Regulation Guide to Licencing</i> . Department of Water and Environmental Regulation, Perth.	