Government of Western Australia
Department of Water and Environmental Regulation

Amendment Report

Application for Works Approval Amendment

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

Works Approval Number	W6673/2022/1
Works Approval Holder	Covalent Lithium Pty Ltd
ACN	623 090 139
File Number	DWER2022/000129 / APP-0028658
Premises	Earl Grey Lithium Project Marvel Loch-Forrestania Road MOUNT HOLLAND WA 6426 Legal description – Mining tenement G77/137, M77/1066 and M77/1080 As depicted in Figure 1, Schedule 1 of the Revised Works Approval
Date of Report	29 August 2025
Decision	Revised works approval granted

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Alana Kidd
Manager, Green Energy
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Works approval W6673/2022/1 (W6673) is held by Covalent Lithium Pty Ltd (works approval holder, Covalent) for the Earl Grey Lithium Project (the premises, EGLP), located at Mining tenements G77/137 M77/1066 and M77/1080, Mt Holland Mine, Mt Holland.

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 construction and operation of the premises. As a result of this assessment, revised works approval W6673/2022/1 has been granted.

The revised works approval issued because of this amendment consolidates and supersedes the existing works approval previously granted in relation to the premises.

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://dwer.wa.gov.au/regulatory-documents.

2.2 Amendment summary

On 17 April 2025, the works approval holder submitted an application to the department to amend works approval W6673/2022/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Change the height of the tailings storage facility (TSF) stage 2 embankment from 3 to 4 metres (m) with reduced level (RL) changing from 442 to 443 m Australian Height Datum (AHD).
- Change the height of the TSF stage 3 embankment raise to be a maximum of 3 m with RL changing from 445 to 446 m AHD.
- Change the height of the TSF stage 4 embankment raise to be a maximum of 3 m with RL changing from 448 to 449 m AHD.
- Amend Figures 4 and 5 to reflect the height changes to the TSF listed above.
- Changes Zone A as reflected in Figure 4;
    - Zone A crest berm change from 1.5 to 2.5m.
    - Upstream batter slope of Zone A and B1 from 1V:2H to 1V:1.5H from stages 2 onwards; and.
    - Traffic-compacted zone B1 crest altered from 10 to 6 m in width.
- Changes to decant tower surround as reflected in Figure 5 TSF:
    - Stage 2 decant tower rockfill surround increase from 10 to 20 m wide.
    - Stage 2 causeway crest increase from 8 to 15 m wide.

The works approval holder has requested the proposed changes due to the scheduling and operational needs during the embankment raise. The original design required half of the TSF to be inactive during earthworks. The proposed amendment will allow both deposition lines to be operational during the embankment raise. In addition, it has been requested that the geometry of Zone B1 is altered to allow civil construction equipment to complete the construction.

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 *Guideline: Risk assessments* (DWER 2020).

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 construction and operation which have been considered in this Amendment Report are detailed in Table 1 below. This also details the proposed control measures the works approval holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Works Approval Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Construction of an increased height TSF embankment.	Air / windborne	No additional controls proposed **Existing controls**
Noise			No additional controls proposed **Existing controls**
Tailings / water potentially containing elements of environmental significance (Li, Rb, and Be).	Operation of the IWL/TSF	Increased risk of Seepage / Infiltration of supernatant water through basin and pit walls contaminating soil, groundwater and GDAs	No additional controls proposed **Existing controls** • Monitoring bores are installed around will be installed the TSF to monitor groundwater chemistry and standing water level (SWL). • Decant water will continue to be removed from the facility and the decant pond size will be maintained to be less than 110 m radius
Tailings / water potentially containing elements of environmental significance (Li, Rb, and Be).	IWL/TSF - overtopping due to insufficient freeboard capacity	Increased risk of overtopping or uncontrolled release / overland flow / infiltration contaminating soil, surface water, groundwater	**Proposed Control** • NW to SE embankment raised to RL 443m **Existing controls** • Minimum 500 mm total freeboard, comprising a minimum operational freeboard (vertical height between the tailings beach at the perimeter embankment and embankment crest

Emission	Sources	Potential pathways	Proposed controls
		and GDAs	level) of 300 mm and a minimum beach freeboard (vertical height between the 100 AEP water level above the normal operating pond and top of tailings beach) of 200 mm • The size of the water pond will be minimised to control the seepage rate. • VWPs will provide early warning of the rise in groundwater within the TSF Project Area.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the works approval 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 2 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 (*Guideline: Environmental siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Groundwater	There are no registered bores within the site; however, 12 registered bores within approximately 4 and 10 km from the southern boundary of Works Approval: W6460/2020/1 IR-T15 Amendment report template v3.0 (May 2021) 10 the site and two registered bores within approximately 6 and 10 km from the north-eastern boundary of the site (360 Environmental, 2020). Based on previous investigations, depth to the water table ranged from 58 metres below ground level (mbgl) to 70 mbgl. Groundwater is saline to hypersaline with total dissolved solids (TDS) levels varying between 7,640 mg/L and 119,000 mg/L. (360 Environmental, 2020).
Threatened and Priority fauna	Several conservation significant fauna species have been found recently (last 5 years) at the site. *Leipoa ocellate* (Malleefowl) and *Dasyurus geoffroii* (Chuditch) have been sited within the premises boundary. Managed under Part IV approval
Threatened and Priority flora	Classified threatened (under the WA Biodiversity Conservation Act 2016) and vulnerable (under the EPBC Act) species *Banksia sphaerocarpa* var. *dolichostyla* are reported to be present at the site. Managed under Part IV approval

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) 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 in-complete they have not been considered further in the risk assessment.

Where the works approval 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 works approval holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the works approval holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The risk ratings detailed in **Table 3** have, where appropriate, been established using data submitted by the Licence Holder in accordance with their existing Licence to operate the facility (L9326/2022/1). This data provides operational context to gain an understanding of the performance of the TSF.

The Revised Works approval W6673/2022/1 that accompanies this Amendment Report authorises construction and assesses operation. The conditions in the Revised Works approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 3. Risk assessment of potential emissions and discharges from the Premises operation

Risk Event					Risk rating[1] C = consequence L = likelihood	Works approval holder's controls sufficient?	Conditions[2] of works approval	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Works approval holder's controls**				
Construction								
TSF construction at increased embankment height	Dust	Air / windborne pathway causing impacts to health and amenity	Native vegetation immediately surrounding the Project Area. No receptors for noise	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 1	The Delegated Officer considers that existing controls are sufficient to regulate noise and dust emissions during construction of the TSF embankments
	Noise						N/A	
Operation (including time-limited operation)								
Operation of the IWL/TSF	Tailings / water potentially containing elements of environmental significance (Li, Rb, and Be).	Increased risk of Seepage / Infiltration of supernatant water through basin and pit walls contaminating soil, groundwater and GDAs	Native vegetation immediately surrounding the Project Area. Threatened and Priority flora – T, P2 and P3 ~350 m east, and 480 m south of the Project Area,	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Conditions 1, 2, 3, 6, 11 and 12	The 2023-2024 Annual Audit Compliance Report (AACR) submitted by the Licence Holder provides groundwater monitoring results for the existing operation. The quarterly monitoring results do not indicate the

Risk Event					Risk rating[1] C = consequence L = likelihood	Works approval holder's controls sufficient?	Conditions[2] of works approval	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Works approval holder's controls**				
			and MS1118 exclusion zones. Groundwater ~65-70 mbgl.					operation of the TSF is impacting groundwater. The Delegated Officer considers that the current conditions attached to L9326/2022/1 are sufficient to manage tailings water emissions.
IWL/TSF - overtopping due to insufficient freeboard capacity	Tailings / water potentially containing elements of environmental significance (Li, Rb, and Be).	Increased risk of overtopping or uncontrolled release / overland flow / infiltration contaminating soil, surface water, groundwater and GDAs	Groundwater ~65-70 mbgl. Threatened and Priority fauna within and near the Project Area. Land and soils beneath and surrounding the Project Area.	Refer to Section 3.1 Refer to Section 3.1	C = Major L = Rare **Medium Risk**	Y	Conditions 1, 4, 5, and 9	The 2023-2024 AACR did not contain the water balance data required under Licence condition 23 and this has been noted as a non-compliance. The Delegated Officer considers that the current licence conditions on L9326/2022/1 are sufficient to manage the water balance of the facility.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

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

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal (25 May 2025)	No Response received	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal (25 May 2025)	DMIRS replied on 25 July 2025 advising that Department Mines, Petroleum and Exploration (DMPE) is currently assessing a Mining Proposal (REG ID 500630) for this project (received 23 May 2025) which includes the proposed changes to TSF 1. The proposed changes of this application appear to match the proposed changes that have been applied for in Mining Proposal REG ID 500630. Geotechnical advice has been requested from this TSF from Mine Safety; however, advice has not yet been received.	Noted *Where DMPE request updates to the TSF design, the works approval holder may be required to update the works approval.*
Works approval holder was provided with draft amendment on 27 August 2025	Works approval holder provided minor administrative comment on the Works Approval.	The delegated officer agreed with the changes.

5. Conclusion

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

5.1 Summary of amendments

Table 5 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 5: Summary of works approval amendments

Condition no.	Proposed amendments
Condition 1 Table 1	*Height of TSF stage 2 embankment raise from 3m to 4m.*
Figure 2, 3 and 4	*Revised Figures to reflect the change embankment lift height*

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. Tetra Tech Coffey, 2025, *Mt Holland TSF1 Design Memo*, not published