

Amendment Report

Application for Works Approval Amendment

Part V Division 3 of the Environmental Protection Act 1986

Works Approval Number	W6460/2020/1
Works Approval Holder	Covalent Lithium Pty Ltd
ACN	623 090 139
File Number	DER2020/000521~1
Premises	Earl Grey Lithium Project
	Mining Tenements M77/1066, M77/1080 and G77/129
	As defined by the premises map attached to the issued works approval
Date of Report	23 February 2023
Decision	Revised works approval granted

A/MANAGER, RESOURCE INDUSTRIES

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

Table of Contents

1.	Decis	ion su	mmary	1	
2.	Scope	Scope of assessment1			
	2.1	Regula	atory framework	1	
	2.2	Applica	ation summary	1	
		2.2.1	Category 12: Screening infrastructure	2	
		2.2.2	Commissioning and TLO of the Concentrator	3	
		2.2.3	Discharge of RO Plant brine into South Ventilation Raise	4	
	2.3	Part IV	of the EP Act	5	
3.	Risk a	assess	ment	ò	
	3.1	Source	e-pathways and receptors	6	
		3.1.1	Emissions and controls	6	
		3.1.2	Receptors	9	
	3.2	Risk ra	1	1	
4.	Consu	ultatio	n1	7	
5.	Concl	usion		3	
	5.1	Summa	ary of amendments1	3	
Refe	rences	S		9	
	endix 1 ssmer		ummary of Works Approval Holder's comments on risk draft conditions20	D	
	endix 2 Ipplica	2: S	ummary of direct interest stakeholder (DMIRS) comments on 2		
Appe	endix 2	2: App	lication validation summary2	3	
Table	e 1: Proj	posed c	design or throughput capacity changes	1	
Table	2: Aml	bient ba	aseline water quality of SVR	5	
Table	e 3: Woi	rks App	roval Holder controls	3	
Table	e 4: Sen	sitive h	uman and environmental receptors and distance from prescribed activity.	9	
			sment of potential emissions and discharges from the Premises during issioning and operation12	2	
			on1 [°]		
Table	7: Sun	nmary c	of works approval amendments1	3	

1. Decision summary

Works Approval W6460/2020/1 (W6460) is held by Covalent Lithium Pty Ltd (Works Approval Holder) for the Earl Grey Lithium Project (the Premises), located at mining tenements M77/1066, M77/1080 and G77/129 in the Shire of Yilgarn.

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 W6460/2020/1 has been granted.

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 Application summary

On 17 June 2022, the Works Approval Holder applied to the department to amend Works Approval W6460/2020/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Works approval amendment for the construction and time limited operation (TLO) of a mobile crushing and screening plant (Category 12), with design capacity of 500,000 tonnes per annum (tpa) with a proposed throughput of 500,000 tpa.
- Authorization to commission and operate (time limited) the Concentrator (subject of W6460/2020/1) details of the commissioning and operation of the Concentrator were included in the original Works Approval application that was assessed by DWER and included in the Decision Report, however commissioning and TLO authority was not provided due to the absence of a TSF for waste disposal.

A TSF has recently been approved for construction under works approval W6673/2022/1 which was granted on 28 November 2022.

• Include discharge of the RO Plant brine to the South Ventilation Raise as an additional discharge option to that already approved (saline water pit).

Table 1 below outlines the proposed changes to the existing Works Approval

Category	Current design throughput capacity	Proposed design throughput capacity	Description of proposed amendment
Category 5 – processing beneficiation of metallic ore	2,000,000 tonnes per annum	N/A	Commissioning and TLO of the Concentrator, and inclusion of discharge of brine from the RO Plant to the South Ventilation Raise as an additional discharge option to those already approved

Table 1: Proposed design or throughput capacity changes

Category 12: Screening etc. of material	N/A	500,000 tonnes per annum	Construction and TLO of a mobile crushing and screening plant, with design capacity of 500,000 tpa with a proposed throughput of 500,000 tpa.
---	-----	-----------------------------	--

2.2.1 Category 12: Screening infrastructure

The Earl Grey Lithium Project (EGLP) will comprise the mining and processing of two million tonnes per annum (Mtpa) of spodumene ore to produce approximately 50,000 tonnes per annum (tpa) of battery quality lithium hydroxide (LiOH) at the Covalent Lithium Refinery in Kwinana.

The EGLP requires an Integrated Waste Landform (IWL) / Tailings Storage Facility (TSF) for the disposal of 1.2 Mtpa of 'wet' tailings per annum. The Works Approval Holder applied to undertake works relating to the construction of the Integrated Waste landform (IWL) / Tailings Storage Facility (TSF) and works approval W6673/2022/1 was granted in November 2022.

The perimeter embankment of the TSF will be constructed using selected ex-pit mine waste rock and to ensure the suitable maximum particle size achieved, a mobile crushing and screen plant will be utilised and will comprise of:

- Vibrating grizzly with 150 mm aperture
- Jaw crusher in close circuit with a vibrating screen to achieve the above particle sizing
- Ancillary services as required, including diesel generators, lighting plants, parts laydown etc.

The screened and crushed rock will also be used for other purposes, including, but not limited to, mine stemming, and road surfacing materials. The crushing and screening plant will have a design capacity of 500,000 tpa with a proposed throughput of 500,000 tpa.

The crushing and screening plant will be located on M77/1080 to the west of the proposed IWL/TSF and southeast of the Earl Grey Waste Rock Landform (refer Figure 1) in an already cleared area.

Commissioning of the crushing and screening plant will consist of energizing and testing with the only emissions expected to be noise and dust which will be minimised through existing controls. As activities involved in commissioning of the crushing and screening plant are minimal no commissioning period has been authorised under this amendment. Any commissioning activities / emissions can be captured under the authorised TLO period.



Figure 1: Proposed location of mobile crushing and screening plant (in orange)

2.2.2 Commissioning and TLO of the Concentrator

The amendment application for W6460/2020/1 also requests approval for the commissioning and time limited operation of the Concentrator processing plant which will process 2 Mtpa of spodumene ore. The construction of the Concentrator has already been approved under this works approval.

The Concentrator is located approximately 105 km south-southwest of the Southern Cross town-site on mining tenements M77/1066 and G77/129 (the Premises), refer to Figure 1.

The area was formally known as the Mt Holland Mine Site and is an historic gold mining operation which operated between 1988 and 2001. There are several old open pits within an approximate 10 km radius of the site, including the existing Earl Grey mine pit.

Details of the commissioning of the Concentrator were included in the original works approval application for W6460/2020/1 and was assessed by the department and included in the Decision Report (available on the DWER website, refer W6460/2020/1). Commissioning and TLO was not authorised due to the absence of a TSF for waste disposal.

The Works Approval Holder has indicated that, following the submission of the construction compliance report required by condition 2 of the works approval, as each stage is built, commissioning of the Concentrator will commence. Commissioning of the Concentrator will be undertaken in stages and is expected to occur over a period of several months.

The commissioning activities will be staged by the Works Approval Holder in such a way as to ensure the operator can safely identify and resolve any design and construction issues, while evaluating and confirming the plant performance and its operation is to specification. Specific tasks that will be undertaken during the commissioning phase include testing of:

- Utilities and reagents systems
- Crushing plant circuit

- Mica removal circuit
- Dense media separation circuit
- Grinding and Desliming circuits
- Flotation circuits
- Dewatering circuits and separation of tailing products; and
- Overall sequencing and automation suiting site-based control system.

Monitoring and compliance

The Works Approval Holder indicate that during commissioning, the Concentrator will undergo a period of stabilisation. Monitoring of emissions data will be undertaken during commissioning to ensure the plant is trending towards stabilisation.

Once commissioning is completed, periodic monitoring of emissions will continue to be undertaken. Following completion of the commissioning, a validation and verification report will be completed. The Works Approval Holder will confirm the Concentrator can operate at the required level of compliance by providing a Compliance Assessment Report prior to transitioning to TLO phase for the Concentrator.

TLO / Operation of the Concentrator.

The Concentrator will produce six tailings streams which will be combined to form three waste streams, which will be disposed of at either the IWL/TSF located to the north of the Concentrator; or mixed with mine waste at the Waste Rock Landform (WRL) proposed to be located to the west of the Concentrator. The three waste streams expected to be produced by the Concentrator are:

1. Flotation tailings, magnetic separation overflow (magnetics) and deslime overflow (slimes) combined, then pumped to a TSF. The TSF has been approved for construction and operation under Works approval W6673/2022/1.

2. Dewatered mica from the mica removal circuit, which is mechanically combined with the dewatered Dense Medium Separation (DMS) rejects using a front-end loader. The combined material will then be transported to the WRL, for co-disposal with the mine waste. Approximately 3.3 Mtpa of DMS reject is expected to be disposed of to the WRL over the life of the mine. This equates to 10% of the material disposed of at the WRL. This waste stream was assessed by the Department of Mines, Infrastructure Regulation and Safety (DMIRS), refer to correspondence with DMIRS, see Table 6: Consultation for details. It also requires assessment under Part V of the EP Act as this waste is considered 'tailings'. Insufficient information has been provided within the works approval application to assess this discharge.

3. The RO plant will produce wastewater (brine) which will be hypersaline. It is expected that approximately 0.073 gigalitres of waste brine will be produced per year (200,000 L/day). It is proposed that this water will be discharged (via truck) to the old Earl Grey Pit and (via pipeline) to the South Ventilation Raise. The first disposal options was assessed (but not authorized) under the original assessment of the works approval. Discharge of brine to the South Ventilation Raise has not yet been assessed and is discussed further in section 2.2.3 and risk assessed in section 3.

2.2.3 Discharge of RO Plant brine into South Ventilation Raise

In the original works approval application, the Works Approval Holder describe how the water supply for processing is expected to be provided by scheme water that will be sourced from an offtake pipeline from the Kalgoorlie-Goldfields water pipeline near Southern Cross. Where possible though, process water will be reused in the process.

The Works Approval Holder explained that saline water has a detrimental effect on flotation

performance. Consequently, recycled process liquor is expected to be treated in a reverse osmosis (RO) plant prior to being fed back into the process circuit.

The purge stream from the RO plant is expected to produce approximately 200,000 L of saline water per day. This water will be collected within tanks at the Concentrator. Once adequate volumes have been collected, the wastewater will be pumped into water trucks and discharged to the historic Earl Grey pit.

This waste stream was assessed as part of the original works approval application.

As part of this works approval amendment, the Works Approval Holder proposes to include discharge of the RO Plant brine to the South Ventilation Raise (SVR) as an additional discharge option to that already approved in W6460/2020/1 (discharge into the Earl Grey mine pit). See location in Figure 1.

The operation of the RO Plant is expected to be at approximately 50% capacity during the commissioning phase and the Works Approval Holder provided ambient water quality monitoring results of the SVR, refer to Table 2.

Recorded SVR water quality	Conductivity (EC) µS/cm
July 2021	137,000
August 2021	138,000
December 2021	128,292
June 2022	119,375
Mean	130,667

 Table 2: Ambient baseline water quality of SVR

The Works Approval Holder state that the feed water into the RO Plant will be ~3,000 μ S/cm and the discharge are expected to be <40,000 μ S/cm. The RO brine will be analysed to confirm it is compliant with the derived trigger based on minimum baseline specific conductivity (EC) of 120,000 μ S/cm prior to discharge.

If EC of the RO brine reject is > 120,000 μ S/cm, the brine will be discharged to the saline water pit, as per the existing works approval.

To reduce contamination of groundwater, prior to entry into the RO plant, a Dissolved Air Flotation (DAF) unit will be used to remove any hydrocarbons in the RO feed stream.

The brine will be transported to the South Ventilation Raise by HDPE pipeline. The pipeline will be procured and installed to meet the relevant Australian Standards (AS/NZS 4130, AS/NZS 4131 and AS2033), welded and pressure tested to 125% maximum allowable operating pressure. The Works Approval Holder confirm that the piping is open discharge, and they believe there will be no backflow pressure build-up and therefore a low risk of rupture/failure.

The pipeline will be installed above ground and underground, with trenches inspected prior to installation and bedded with suitable material, which will further reduce the risk of physical damage during operations.

2.3 Part IV of the EP Act

The Earl Grey Lithium Project was referred to the Environmental Protection Authority (EPA) by Kidman Resources Limited (the original proponent) in May 2017. The proposal is to develop a pegmatite-hosted lithium deposit at the abandoned Mt Holland mine site. The Project was granted environmental approval under Part IV of the *Environmental Protection Act 1986* (EP

Act) via Ministerial Statement 1118 (MS 1118) in November 2019. A Revised Proposal was assessed under Part IV and Ministerial Statement 1199 was published in November 2022.

During the assessment, the EPA examined potential impacts on the key environmental factors of Flora and Vegetation and Terrestrial Fauna and has concluded that the proposal is environmentally acceptable and can be implemented subject to conditions. Conditions in MS 1118 and MS 1199 include the development of environmental management plans and exclusion zones for the protection of conservation significant flora and fauna, and offsets to counterbalance the significant residual impact to flora species *Banksia sphaerocarpa var. dolichostyla, Microcorys sp.* Mt Holland (Priority 1) and fauna species chuditch and malleefowl.

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 which have been considered in this Amendment Report are detailed in Table 3 below. Table 3 also details the proposed control measures the Works Approval Holder has proposed to assist in controlling these emissions, where necessary.

Emission	Sources	Potential pathways	Proposed controls	
Category 12: C	Category 12: Crushing and screening plant			
Dust	Crushing of material, vehicle movements, lift-off from stockpiles and/or stored product, earthworks etc.	Air/windborne pathway	 Water sprays to be located at the crushing and screening area. Vehicles to keep to designated roads. Stockpiles sprayed with water to suppress dust emissions. Dust suppression including water trucks and water sprays used to control dust. 	
Noise		Air/windborne pathway	 Plant and machinery serviced as per manufacturer's specifications 	
Contaminated stormwater runoff		Overland runoff	 Crushing and screening plant located within a bunded area to contain potentially contaminated runoff. Area kept clean to minimise contamination. 	
Category 5: Commissioning / operation of concentrator				

Table 3: Works Approval Holder controls

 handling of ore, crushing and screening of ore and material transfer points around chutes and conveyor belts. Transfer points will also ha along their interface zones conveyors Two insertable type dust c will be installed (primary C Screen) Bag house style dust colle servicing the reclaim tume conveyor system Water sprays installed at a to crushed ore stockpile (C) Use of water carts as need down dust generating suf- as roads, earthworks area clearing areas High moisture content in w ensures minimal dust gener TSF Use of weather forecasting extreme weather content in w ensures minimal dust gener TSF Use of weather forecasting extreme weather content in unsealed suffaces or road Depositional dust gauges' located within the flora exc zones to monitor potential deposition on flora and vej and A site-based weather stati 	st Operation Concent		ROM bin has an enclosure to all sides except the entry side
 screening of ore and material transfer points around chutes and conveyor belts. Transfer points will also ha along their interface zones conveyors Two insertable type dust could be installed (primary C Screen) Bag house style dust colle servicing the reclaim tunne conveyor transfer points; C dust is placed back on to t conveyor system Water sprays installed at a to crushed ore stockpile (C Use of water carts as need down dust generating automatical dust generating areas High moisture content in we ensures minimal dust generating activities can be implement Use of weather forecasting extreme weather condition result in increased dust en additional dust controls or activities can be implement Use of defined haul routes reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Deposition on flora and veg and A site-based weather stati be utilised to monitor and ot and search weather stati be utilised to monitor and ot and search weather stati be utilised to monitor and search weather stati be utilised to monitor and search weather stati be utilised to monitor and search and search and station and search and s	transpo handling	of ore,	bin and transfer points in the crushing
 and conveyor belts. Transfer points will also he along their interface zones conveyors Two insertable type dust of will be installed (primary C Screen) Bag house style dust colle servicing the reclaim tunnor conveyor transfer points (dust is placed back on to t conveyor system) Water sprays installed at of to crushed one stockpile (C Use of water carts as need dust generating areas High moisture content in w ensures minimal dust generating areas High moisture content in w ensures minimal dust generating average dust en additional dust controls or activities can be implement. Use of defined haul routes reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Depositional dust gauges i located within the flora exa zones to monitor potential deposition on flora and verand A site-based weather stati be utilised to monitor and the static be utilised to m	screenii ore and materia transfer	g of points	 Design applied to all transfer points (speed and trajectory) will seek to minimise dust generation during operation
 will be installed (primary C Screen) Bag house style dust colle servicing the reclaim turner conveyor transfer points; C dust is placed back on to t conveyor system Water sprays installed at c to crushed ore stockpile (C Use of water carts as need down dust generating surf as roads, earthworks area clearing areas High moisture content in w ensures minimal dust gene TSF Use of weather forecasting extreme weather condition result in increased dust en additional dust controls or activities can be implement Use of defined haul routes reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Depositional dust gauges located within the flora exc zones to monitor potential deposition on flora and vej and A site-based weather stati be utilised to monitor and the 	and cor		 Transfer points will also have skirts along their interface zones with conveyors
 servicing the reclaim tunner conveyor transfer points; C dust is placed back on to t conveyor system Water sprays installed at a to crushed ore stockpile (C Use of water carts as need down dust generating suff as roads, earthworks area clearing areas High moisture content in w ensures minimal dust generating suff as the store weather forecasting extreme weather conditional dust controls or result in increased dust en additional dust controls or activities can be implement Use of defined haul routes reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Depositional dust gauges to located within the flora exc zones to monitor potential deposition on flora and very and A site-based weather stati be utilised to monitor and to store the stati be utilised to monitor and to monitor an			 Two insertable type dust collectors will be installed (primary Crusher and Screen)
 to crushed ore stockpile (C Use of water carts as need down dust generating suff as roads, earthworks area clearing areas High moisture content in w ensures minimal dust gene TSF Use of weather forecasting extreme weather condition result in increased dust en additional dust controls or activities can be implement Use of defined haul routes reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Depositional dust gauges located within the flora exc zones to monitor potential deposition on flora and ver and A site-based weather stati be utilised to monitor and vertices and successions. 			 Bag house style dust collector servicing the reclaim tunnel feeders to conveyor transfer points; Captured dust is placed back on to the conveyor system
 down dust generating suff as roads, earthworks area clearing areas High moisture content in w ensures minimal dust gene TSF Use of weather forecasting extreme weather condition result in increased dust en additional dust controls or activities can be implement Use of defined haul routes reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Depositional dust gauges located within the flora exc zones to monitor potential deposition on flora and veg and A site-based weather stati be utilised to monitor and the static be u			 Water sprays installed at ore transfer to crushed ore stockpile (COS)
 ensures minimal dust gene TSF Use of weather forecasting extreme weather condition result in increased dust en additional dust controls or activities can be implement Use of defined haul routes reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Depositional dust gauges located within the flora exc zones to monitor potential deposition on flora and ver and A site-based weather stati be utilised to monitor and the 			 Use of water carts as needed to wet down dust generating surfaces such as roads, earthworks areas and clearing areas
 extreme weather condition result in increased dust en additional dust controls or activities can be implement Use of defined haul routes reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Depositional dust gauges located within the flora exc zones to monitor potential deposition on flora and ver and A site-based weather stati be utilised to monitor and results 			 High moisture content in wet tails ensures minimal dust generation from TSF
 reduced vehicle speed lim mobile equipment travellin unsealed surfaces or road Depositional dust gauges located within the flora exc zones to monitor potential deposition on flora and ver and A site-based weather statis be utilised to monitor and 			Use of weather forecasting to predict extreme weather conditions likely to result in increased dust emissions so additional dust controls or modified activities can be implemented
 Iocated within the flora exc zones to monitor potential deposition on flora and ver and A site-based weather stati be utilised to monitor and 			 Use of defined haul routes and reduced vehicle speed limits for mobile equipment travelling on unsealed surfaces or roads
be utilised to monitor and			 Depositional dust gauges will also be located within the flora exclusion zones to monitor potential dust deposition on flora and vegetation; and
			 A site-based weather station will also be utilised to monitor and record weather conditions.
Concentrator (crushing and screening circuit) andpathwayand serviced in line with the manufacturer's specification • Complaints relating to noise	Concen (crushir screenii	ator pathway and g	 Mobile equipment will be operated and serviced in line with the manufacturer's specifications Complaints relating to noise will be recorded and investigated as per the

	transfer of concentrate and tailings.		Covalent Incident Management Procedure.
Hydrocarbon/ chemical spills and leaks Contaminated stormwater (contamination from	Operation of Concentrator, and associated machinery	Direct discharge to land / overland flow through stormwater Seepage to soil and groundwater	• Areas within the process plant where hydrocarbons or reagents are stored or have the potential for sheet flow to be contaminated (stockpile areas, workshops, refueling areas etc.) will be developed as bunded containment areas.
hydrocarbon or process chemical spills/ leaks			• These areas will be directed to grated sumps from where potentially contaminated water will be pumped back to the processing facility.
and sediment runoff from stockpiles)			• In line with AS 1940:2017, the bunding will be sized to contain 110% of the capacity of the largest storage vessel within the bund.
			 Spill kits will also be located close by to refueling areas, mobile refueling facilities, workshops, and storage areas
			 If a hydrocarbon / chemical release occurs it will be controlled, contained and removed using spill kit materials or other absorbent material. Contaminated soils will be collected and disposed to an appropriately licensed waste facility; and
			Hydrocarbon and chemical spills are reported internally as an environmental incident and larger spills with the potential to cause contamination are reported externally to DWER.
Sediment laden stormwater	Water and sediments generated via runoff from the rockfill embankment batter slopes	Direct discharge / overland flow via stormwater	Sheet flow from the three catchment zones within the premises boundary will be directed to three unlined sediment ponds via perimeter drainage channels. Runoff will flow into the perimeter drains and then into the sediment ponds where fine particles will be allowed to settle. Water in these ponds will be allowed to evaporate. Periodic cleaning out of the sediment will occur when required.
Tailings waste	Concentrator waste stream	Direct discharge into IWL/TSF	This discharge has been assessed under W6673/2022/1.
Dewatered mica and DMS reject waste	Concentrator waste stream	Direct discharge into WRL	Not assessed.

Storage of RO plant brine in old Earl Grey Pit	RO plant	Seepage through soil into groundwater Pipeline spills / leaks	A high-density polyethylene (HDPE) above ground pipeline will carry brine to the pit. The pipeline will be bunded and inspected on a regular basis
Discharge of RO brine to south ventilation raise.	RO Plant	Direct discharge Pipeline spills/leaks	 Brine analysed every 24 hours with discharge to SVR allowed up to 120,000 µS/cm. Brine >120,000 µS/cm will be diverted to other approved discharge locations. Pipelines to be constructed from HDPE, and installed to meet the relevant Australian Standards (AS/NZS 4130, AS/NZS 4131 and AS2033) Underground pipeline will be installed in trenches. Pipeline constructed above ground to be installed within secondary containment adequate to contain any spill for a period equal to the time between routine inspections.

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 4 below provides a summary of potential human and environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 4: Sensitive human and environmental receptors and distance from prescribed
activity

Human receptors	Distance from prescribed activity
No human receptors	No human receptors within >10 km of the premises.
	The Earl Grey mine site accommodation camp is about 1,500 m from processing area but is not considered a sensitive receptor and will not be assessed further.
Environmental receptors	Distance from prescribed activity
Threatened Ecological communities	Ironcap Hills banded ironstone formation (overlaps premises boundary)
	Previous advice from DBCA was that the proposal is not expected to cause significant impacts. The Earl Grey Lithium Project was also assessed under Part IV (MS 1118 and MS 1119), and this environmental receptor is not considered further in this assessment.
Underlying 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)

	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 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
	Exclusion zones exist around threatened or priority flora present within the premise's boundary. This is managed under the ministerial statement (Flora management plan).
Threatened fauna	Several conservation significant fauna species have been found recently (last 5 years) at the site. <i>Leipoa ocellate</i> (Malleefowl) and <i>Dasyurus geoffroii</i> (Chuditch) have been sited within the premises boundary.
	Malleefowl mounds exist near the processing area. Exclusion zones exist around mounds which is managed under ministerial statement (Fauna management plan).
Surface water	No major surface water features within 5 km of the site.
	The only notable surface water feature is a constructed ephemeral drainage line that starts at the northwest tip of the airstrip and runs northeast past the processing plant area. Apart from this constructed drainage line, the Project area does not intersect any other identifiable drainage lines or creeks, with runoff generally occurring as sheetwash in a northeasterly direction.

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 considers 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 5.

The Revised Works Approval W6460 that accompanies this Amendment Report authorises construction and time-limited operations. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises i.e., Category 5 processing beneficiation of metallic ore and Category 12 crushing and screening activities. A risk assessment for the operational phase has been included in this Amendment Report, however licence conditions will not be finalised until the department assesses the licence application.

Table 5. Risk assessment of potential emissions and discharges from the Premises during construction, commissioning and
operation

Risk Event					Risk rating ¹	Works		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	C = consequence L = likelihood	Approval Holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Construction of crus	shing and screen	ing plant (Category 12)						
Placement of screen and associated equipment including vehicle movements (reversing beepers). Construction of stormwater	Dust	Air/windborne pathway	No Human receptors. Nearest town is Marvel Loch located 75 km north-west of the Premises. Vegetation adjacent to the Promises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	Minimal dust emissions are expected to be generated from construction activities. The distance to residential receptors is too great for dust impacts from construction of the project to occur. The Delegated Officer considers that a pathway for dust / noise emissions does not exist. Any potential dust emissions can be regulated by section 49 of the EP Act. Minimal noise emissions are expected to be generated from construction activities.
channels and stormwater sump.	Noise		to the Premises	Refer to Section 3.1	N/A	N/A	N/A	The distance to residential receptors is too great for noise impacts from construction of the project to occur. The Delegated Officer considers that a pathway for noise emissions does not exist. The provisions of the <i>Environmental</i> <i>Protection (Noise) Regulations 1997</i> are also applicable.
Operation of crushin	ig and screening	plant (Category 12)	1	1	1		I	
Screening, crushing, unloading, loading and storage of material	Dust	Air/windborne pathway	No Human receptors. Nearest town is Marvel Loch located 75 km north-west of the Premises. Vegetation adjacent to the Premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 1 updated: Construction requirements Condition 10: operating requirements	Impacts from dust emissions on vegetation are not expected to be significant due to the applicant's proposed controls. The applicant's controls (water sprays) will be conditioned within the works approval. The distance to residential receptors is too great for dust impacts from operation of the

Risk Event					Risk rating ¹	Works		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	ors Works C = Holder's Approval consequence controls Holder's controls L = likelihood sufficient?			Conditions ² of works approval	Justification for additional regulatory controls
			Impacts to priority flora within premises managed under ministerial statement.					project to occur. The Delegated Officer considers that a pathway for dust emissions to human receptors does not exist.
	Noise	Air/windborne pathway causing impacts to health and amenity	No Human receptors. Nearest town is Marvel Loch located 75km north-west of the Premises.	Refer to Section 3.1	N/A	N/A	N/A	Noise emissions are expected to be generated during operation of the crusher and screener and associated infrastructure, however the distance to human receptors is too great for noise impacts to occur. The Delegated Officer considers that a pathway for noise emissions does not exist.
								The provisions of the <i>Environmental</i> <i>Protection (Noise) Regulations 1997</i> are also applicable.
	Sediment laden stormwater Hydrocarbons	Overland runoff potentially causing	Terrestrial ecosystems: including vegetation adjacent to the	Refer to	C = Minor L = Unlikely	Y	Condition 1 updated: construction requirements	Low level onsite impacts and minimal off-site impacts from sediment emissions may occur during operations. It is unlikely for this risk event to occur due to
	(e.g. hydraulic oil or diesel and chemicals)	e.g. hydraulic bil or diesel and Soils Section 3.1 Medium Risk			Condition 10: operating requirements	the applicant's proposed controls. The applicant's infrastructure and operating controls will be conditioned within the works approval.		
Commissioning and	Operation of the	concentrator (Category 5	j)				L	
Operation of Concentrator.	Dust	Air/windborne pathway causing impacts to	No Human receptors. Nearest town is	Refer to Section 3.1	N/A	N/A	N/A	No change to risk rating given during original risk assessment
Screening, crushing, processing, unloading, loading		health and amenity	Marvel Loch located 75km north-west of the Premises.					No operational conditions required to be added to the Works Approval
and storage of material. Vehicle movements.		Air/windborne pathway potentially causing ecosystem disturbance due to smothering of	Native vegetation adjacent to premises Impacts to priority flora within premise	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Yes	Condition 1: infrastructure requirements Condition 10:	No change to risk rating given during original risk assessment The applicant's infrastructure controls have already been conditioned (condition 1) within

Risk Event					Risk rating ¹	Works		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	C = consequence L = likelihood	Approval Holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
		vegetation.	boundary managed under ministerial statement.				operating requirements	the works approval. The applicant's operating controls will be conditioned within the works approval.
	Noise	Air/windborne pathway causing impacts to health and amenity	No Human receptors. Nearest town is Marvel Loch located 75km north-west of the Premises.	Refer to Section 3.1	N/A	N/A	N/A	No change to risk rating given during original risk assessment The provisions of the <i>Environmental Protection</i> <i>(Noise) Regulations 1997</i> are also applicable.
	Hydrocarbon spills / leaks	Direct discharge to land Overland runoff during rainfall events potentially causing ecosystem disturbance offsite.	Localised contamination of soils. No nearby significant surface water features. Native vegetation (Impacts to priority flora managed under ministerial statement).	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Yes	Condition 1: infrastructure requirements	No change to risk rating given during original risk assessment The applicant's infrastructure controls have already been conditioned (condition 1) within the works approval. No additional regulatory controls are required for TLO of the concentrator. The general provisions of the EP Act apply. The provisions of the <i>Environmental</i> <i>Protection (Unauthorised Discharges)</i> <i>Regulations 2004</i> are also applicable.
	Sediment laden stormwater	Direct discharge to land Overland runoff during rainfall events potentially causing ecosystem disturbance offsite.	No significant nearby surface water features Native vegetation (Impacts to priority flora managed under ministerial statement).	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Yes	Condition 1: infrastructure requirements Condition 10: operating requirements	No change to risk rating given during original risk assessment The applicant's infrastructure controls have already been conditioned (condition 1) within the works approval. The applicant's operating controls will be conditioned within the works approval. The provisions of the <i>Environmental</i> <i>Protection (Unauthorised Discharges)</i> <i>Regulations 2004</i> are also applicable.

Risk Event					Risk rating ¹	Works				
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	C = consequence L = likelihood	Approval Holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls		
	produced by the Concentrator (tailings, DMS reject and mica).	application.	amendment application (not enough information has been provided to carry out a risk assessment). This needs to be included and assessed in a subsequent licence application. Tailings disposal into an IWL/TSF has been risk assessed under W6673/2022/1.							
Discharge of RO plant br to the Earl Grey Mine p (brine will b trucked to th pit – no pipeline)		Direct discharge to land (storage of brine in RO Pit) via overtopping potentially causing ecosystem disturbance.	Localised contamination of soils and impacts to vegetation No significant nearby surface water features		C = Minor L = Rare Low Risk	Y	N/A	No change to risk rating given during original risk assessment Mid-level onsite impacts to soil and vegetation may occur if the pit were to overtop causing a release of stored water to the environment (high in salts). This risk event may only occur in exceptional circumstances due to the large available storage volume within the old earl grey pit (approximately 1,216,240 m ³). No additional regulatory controls required on the works approval for TLO due to the short operating period. Operational conditions (such as a pit freeboard) may be required for long term operation however this will be determined at the licence stage.		
1		Seepage of brine from Earl Grey Pit into groundwater resulting in impacts to groundwater quality.	Groundwater	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	N/A	No change to risk rating given during original risk assessment. No regulatory controls required on the works approval.		
	Discharge of RO plant brine to the South Ventilation Raise (SVR)	Seepage through soil into groundwater	Groundwater	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Condition 10: operating requirements Condition 11: authorized discharge	The original works approval granted the Works Approval Holder authority to dispose of RO plant brine to the old Earl Grey Pit. As part of this amendment the Works Approval Holder propose to use the closer South Ventilation Raise (SVR) as secondary saline water storage for the project. Waste brine from the RO plant will be		

IR-T15 Amendment report template v3.0 (May 2021)

Risk Event	isk Event					Works		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	C = consequence L = likelihood	Approval Holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
							points	transported via pipeline to the SVR for storage. Based on the original works approval application, it is estimated that on average 18 m ³ /hr of brine will be deposited (split between the Earl Grey pit (via water truck) and SVR (via pipeline)).
								Depending on efficiency of the RO plant and level of salt in the process streams TDS of the waste brine will vary from 9,000 mg/L to 40,000 mg/L, with an expected average TDS of 15,000 mg/L (mainly as NaCI).
								Water currently in the SVR is from groundwater and surface water runoff. The groundwater monitoring data for the site indicates that water quality in the area ranges from 80,000 to 120,000 mg/L total dissolved solids
								As proposed by the applicant a requirement to only discharge RO brine of a certain quality has been conditioned on the WA for TLO.
		Direct discharge to land via pipeline rupture (transport of brine to SVR) potentially causing ecosystem disturbance offsite.	Localised soils and vegetation (Impacts to priority flora managed under ministerial statement). No significant nearby surface water features	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1: construction requirements Condition 10: operating requirements	Low level onsite impacts may occur due to rupture of pipelines transporting RO brine due to the saline nature of the waste. This risk event is unlikely to occur due to the applicant's controls (bunding, inspections of pipelines and most pipeline being installed underground). Applicant's proposed controls will also be conditioned on the works approval for TLO.

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 6 provides a summary of the consultation undertaken by the department.

Table 6: Consultation

Consultation method	Comments received	Department response
Local Government Authority (Shire of Yilgarn) advised of proposal 29 August 2022	No comment received	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of the amendment application on 29 August 2022	DMIRS replied on 2 September 2022. Refer to Appendix 2	Refer to Appendix 2
Department of Mines, Industry Regulation and Safety (DMIRS) letter, responding to DWER's request for advice in relation to the original works approval, dated 18 December 2020	A Mining Proposal (MP) (which includes a Mine Closure Plan) from Covalent for the Earl Grey Lithium Project (REG ID 91617) was assessed and stated that "Solid- based waste from the concentrator such as coarse rejects from the Dense Media Separation (DM) circuit will be deposited in the Waste Rock Landform whilst dewatered slurry-based tailings will be deposited within a proposed tailings facility (Phase 2 Mining Proposal, 2021)."	Comment noted. Refer to section 2.2.2 This waste stream has not been assessed as part of this works approval
Follow up by DMIRS, related to MP REG ID 101345, on 8 February 2023.	Mining Proposal REG ID 101345 was approved on 25 November 2022. This approved MP does include concentrator waste being disposed of in a waste dump.	amendment application. This requires assessment under a new application.
	Table 5-5 of the MP identifies that the "The South Waste Rock Landform (SWRL) will receive all Refinery (DBS co-product) and Concentrator process (DMS) waste, which will be progressively disposed but will not be within 2 m of the final landform surface (treated as per oxide waste)."	
Department of Biodiversity, Conservation and Attractions (DBCA) advised of proposal 29 August 2022	DBCA replied on 21 September 2022 stating that a review of the relevant documentation was undertaken and noting the capacity for the Department of Water and Environmental Regulation to apply appropriate regulatory measures for environmental management of the prescribed premises under Part V of the EP Act, DBCA has no comments on the application.	Comment noted.
Works Approval Holder was provided with draft amendment on (30 January 2023)	Covalent Lithium Pty Ltd responded to the draft amended instrument and draft amendment report on 16 February 2023. A summary of comments is listed in Appendix 1	Refer to Appendix 1

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 7 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.

Condition no.	Proposed amendments
Cover page	Updated registered business address and included Category 12 to Prescribed Premises category description.
Expiry date	Duration of works approval has been extended by 2 years to accommodate the extended commissioning period and TLO.
Condition 1, Table 1, point(s) 3 and 4	Added 'crushing and screening plant' and 'RO brine discharge pipeline to SVR' to the 'Design and construction requirements' table.
Condition 4 and condition 5, Table 2	Added conditions related to environmental commissioning requirements for commissioning of the Concentrator and associated infrastructure to start.
Condition 6 and condition 7	Added conditions related to requirements and submission timing of the Environmental Commission Report
Condition 8 and condition 9	Added conditions related to the commencement and duration of time limited operation (TLO)
Condition 10, Table 3, and condition 11, Table 4	Conditions related to time limited operations and authorised emission locations / discharge points
Condition 12 and condition 13	Conditions related to time limited operation compliance reporting
Table 5: Definitions	Added definition for HDPE to definitions table
Figure 1: Map of prescribed premises boundary	Replaced Figure 1 with updated version, showing location of Category 12 crushing and screening plant, and South Ventilation Raise
W6460/2020/1	Updated cross-referencing throughout

Table 7: Summary of works approval amendments

References

- 1. Covalent Lithium Pty Ltd 2022, *Application form: works approval amendment* W6460/2020/1 category 5 and category 12, Perth, Western Australia
- 2. Covalent Lithium Pty Ltd 2020, Earl Grey Lithium Project Works Approval Application Supplementary Information Document – Concentrator, Perth, Western Australia
- 3. Covalent Lithium Pty Ltd 2020, Covalent Lithium Earl Grey Mine Concentrator Works Approval (W6460/2020/1) - Request for further information/clarification, Perth, Western Australia
- 4. Covalent Lithium Pty Ltd 2022, Earl Grey Lithium Project Revised Proposal: Environmental Review Document. Report prepared by Globe Environments Australia Pty Ltd for Strategen-JBS&G on behalf of Covalent Lithium Pty Ltd. Revision 3. April 2022, Perth, Western Australia
- 5. 360 Environmental Pty Ltd 2020, *Detailed site investigation Mount Holland Mine Site, prepared for Covalent Lithium*, Perth, Western Australia
- Department of Water and Environmental Regulation (DWER) 2020, Works approval W6460/2020/1 and decision report for Earl Grey Lithium Project – Concentrator, Southern Cross, WA. Available from <u>https://www.der.wa.gov.au/our-work/licences-and-works-approvals/current-licences</u> under W6460/2020/1, Joondalup, Western Australia
- 7. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 8. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Joondalup, Western Australia.
- 9. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Risk Assessments*, Joondalup, Western Australia.

Appendix 1: Summary of Works Approval Holder's comments on risk assessment and draft conditions

Condition	Summary of Works Approval Holder's comment	Department's response
Table 1, Item 3	Works Approval Holder confirms that water sprays will be installed at crushing and screening points.	Noted by the Delegated Officer.
Table 1, Item 4	Delete condition related to the pipeline from the RO Plant to the Earl Grey pit (historical). There is no pipeline to the Earl Grey Pit. Any brine not able to be disposed to the South Ventilation Raise (due to quality) will be transported via truck for disposal to the historic Earl Grey Pit.	The Delegated Officer has deleted the reference to a pipeline between the RO plant and Earl Grey mine pit. The Earl Grey pit remains an authorised discharge point in the revised works approval.
Table 1, Item 5 "Pipeline to south ventilation raise"	Remove "majority" for completeness. The pipeline is constructed above ground and underground, but the majority is not underground.	Change has been accepted.
Table 2, Item 1	Increase 'Authorised commissioning duration' of the Concentrator from 3 months to 10 months. The commissioning phase of the Concentrator will ensure that all equipment undertake energisation, bump testing, sequence testing, water balancing, and ore commissioning. Following successful commissioning of utilities (power, air, and water services) the focus will be on ore commissioning of the crushing circuit, which will ensure adequate crushed stock is available for downstream wet plant commissioning. Ore commissioning of the wet plant will commence once the Tailings Storage Facility and grid-power station has been commissioned. The above definition was not available at the time of the initial works approval application. The maturity of the commissioning sequence and schedule has resulted in an extension of the commissioning period to 8 months, with two months proposed as a contingency buffer.	A commissioning duration was not specified in the original work approval application and a standard period of three months was assigned by DWER. The Delegated Officer acknowledges that commissioning sequence and schedule has matured and agrees with the Works Approval Holder's proposed change. Authorised commissioning duration has been revised to 10 months, giving the Works Approval Holder the required duration, with contingency time.
	Works Approval Holder clarify that only concrete bunds and sumps shall be leak tested and that this is not possible for earthen bunds. Earthen bunds will be visual observed for leaks / cracking.	The Delegated Officer has clarified the language and replaced the word 'all' with 'concrete'. The commissioning requirement now reads as, "concrete bunds and sumps shall be leak tested".

Condition	Summary of Works Approval Holder's comment	Department's response
Table 3, Item 4	Remove "Brine may only be used for dust suppression activities on the overburden dump" condition. RO brine will be discharged to the SVR or Earl Grey Pit, depending on water quality and not used for dust suppression	The Delegated Officer has made this change in the revised work approval.
		Reference to use for dust suppression has also been removed from condition 11
Table 3, Item 4	Change "Brine to be analysed every 24 hours with discharge to the south ventilation raise allowed up to 120,000 μ S/cm" to "Brine to be monitored via online instrumentation"	The Delegated Officer believes the proposed change reflects superior risk management
	Add "Discharge to the south ventilation raise allowed up to 120,000 μ S/cm, with online readings >120,000 μ S/cm confirmed by laboratory analysis prior to amendment of discharge location"	regarding the discharge of brine. The proposed change has been made to the
	The process water Reverse Osmosis (RO) plant will have instrumentation for online monitoring. This includes the monitoring of the salinity of RO brine, which will be tracked in the RO plant control system (HMI). Alarms from the HMI will be mimicked in the concentrator control system, such that elevated salinity levels will notify the control room operator. Furthermore, regular manual sampling will take place to ensure the instrument is within calibration tolerances.	revised works approval.
Table 3, Item 5	Remove condition related to the "RO Brine discharge pipeline between the Earl Grey mine pit and RO Plant". There is no pipeline from RO Plant to Earl Grey Pit.	The Delegated Officer has deleted the reference to a pipeline between the RO plant and Earl Grey mine pit.
		The Earl Grey pit remains an authorised discharge point in the revised works approval.
Table 4, RO Plant Brine	Remove condition "Used for dust suppression on overburden dump". RO brine will be discharged to the SVR or Earl Grey Pit, depending on water quality.	The Delegated Officer has made this change in the revised work approval.
Schedule 1: Maps	Amend <i>Figure 1: Map of the boundary of the prescribed premises</i> as per attached figure. The revised figure more accurately gives indicative location of the mobile crushing and screening plant.	The Delegated Officer has made the change in the amended works approval.

Appendix 2: Summary of direct interest stakeholder (DMIRS) comments on the application

Summary of DMIRS comment	Department's response		
Mining Proposal (MP) (REG ID 101345) was approved on 25 November 2022 and DMIRS has previously approved several MPs relating to EGLP, including MP REG ID 91617, which included a processing plant on M77/1066.	Comment is noted.		
The approved MP REG ID 101345 does include concentrator waste being disposed of in a waste dump . Table 5-5 of the MP identifies that the <i>"The South Waste Rock Landform (SWRL) will receive all Refinery (DBS co-product) and concentrator process (DMS) waste, which will be progressively disposed but will not be within 2 m of the final landform surface (treated as per oxide waste)."</i>			
None of the MPs that have been approved or are currently under assessment include <i>"Processing equipment or stockpile associated with basic raw material extraction"</i> on M77/1080, nor is there any mention of brine discharge to the South Ventilation shaft, nor a RO Plant.	The Delegated Officer notes the comment from DMIRS and suggests the Works Approval Holder liaise with DMIRS to ensure all required regulatory approvals are sought.		
For these activities to be lawfully conducted on tenure granted under the <i>Mining Act 1978</i> (Mining Act), they will need to have been approved via a MP.			
The MPs that DMIRS are assessing, and have previously approved, do include the <i>extraction</i> of saline groundwater from the South Ventilation shaft.			
In relation to crushing and screening of waste material, REG ID 101345 indicates that 51% of the waste at EGLP has a fibrous materials risk, and therefore dust control and avoidance or management of fibrous	The Delegated Officer notes this comment is in relation to worker safety which is regulated by DMIRS.		
materials in the crushing process will be of high importance.	Dust emissions have been assessed and controls placed on the works approval to manage impact to the environment / human receptors (other than mine workers).		
DMIRS notes the discharge of brine to the shaft, and any discharges from the mobile crushing and screening plant, will be regulated by DWER via the <i>Environmental Protection Act 1986</i> (EP Act).	Comment is noted.		

Appendix 2: Application validation summary

Application type					
Amendment to works approval	\boxtimes	Current works approval number:	W6460/2020/1		
Date application received		17 June 2022	·		
Applicant and Premises details					
Applicant name/s (full legal name/s)		Covalent Lithium Pty Ltd			
Premises name		Earl Grey Lithium Project			
Premises location		Mining Tenements M77/1066, M77/	/1080 and G77/129		
Local Government Authority		Shire of Yilgarn			
Application documents					
HPCM file reference number:		DER2020/000521~1			
Key application documents (addition application form):	al to	Supporting document Ministerial statement 1118 Stakeholder engagement register Siting and location maps			
Scope of application/assessment					
Summary of proposed activities or changes to existing operations.		 Works approval amendment for the construction of a mobile crushing and screening plant, with design capacity of 500,000 tpa with a proposed throughput of 500,000 tpa. It is anticipated that the plant will be installed and commissioned in Q3 2022. The plant will be located on M77/1080 to the west of the proposed TSF and southeast of the Earl Grey Waste Rock Landform in an already cleared area. 			
		 Commissioning of the Concentrator (subject of W6460/2020/1) details of the commissioning were included in the Works Approv Application and was assessed by DWER and included in the Decision Report, however commissioning authority was not provided due to the absence of a TSF for waste disposal. 			
		• Include discharge of the RO Plant brine to the South Ventilation Raise as an additional discharge option to those already approved (dust suppression, saline water pit).			

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity	
Category 5 – processing beneficiation of metallic ore	2,000,000 tonnes per annum	N/A	
Category 12: Screening etc. of material	N/A	500,000 tonnes per annum	

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 ⊠	No 🗆	Referral decision No: Managed under Part V □ Assessed under Part IV ⊠		
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ⊠	No 🗆	Ministerial statement No: MS 1118 EPA Report No: 1651		
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ⊠	No 🗆	Reference No: 2017-7950		
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠	No 🗆	Certificate of title □ General lease ⊠ Expiry: Mining lease / tenement ⊠ Expiry: Other evidence ⊠ Expiry:		
Has the applicant obtained all relevant planning approvals?	Yes □	No 🗆 N/A 🛛	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 □	No 🛛	CPS No: N/A Clearing approved under ministerial statement		
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □	No 🛛	Application reference No: N/A Licence/permit No: N/A		
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes ⊠	No 🗆	GWL201377(1) annual water entitlement 5,000kL duration 22/2/2019 to 29/5/2023 Process water supplied by scheme water sourced from Kalgoorlie- Goldfields water pipeline.		
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes 🗆	No 🖂	Name: N/A Type: Has Regulatory Services (Water) been consulted? Yes □ No □ N/A ⊠ Regional office:		

Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes No N/A S
Is the Premises subject to any other Acts or subsidiary regulations (e.g. Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx)	Yes ⊠ No □	Dangerous Goods Safety Act 2004
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes 🗆 No 🖾	
Is the Premises subject to any EPP requirements?	Yes 🗆 No 🛛	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes 🛛 No 🗆	Classification: possibly contaminated – investigation required (PC–IR) Date of classification: Oct 2020