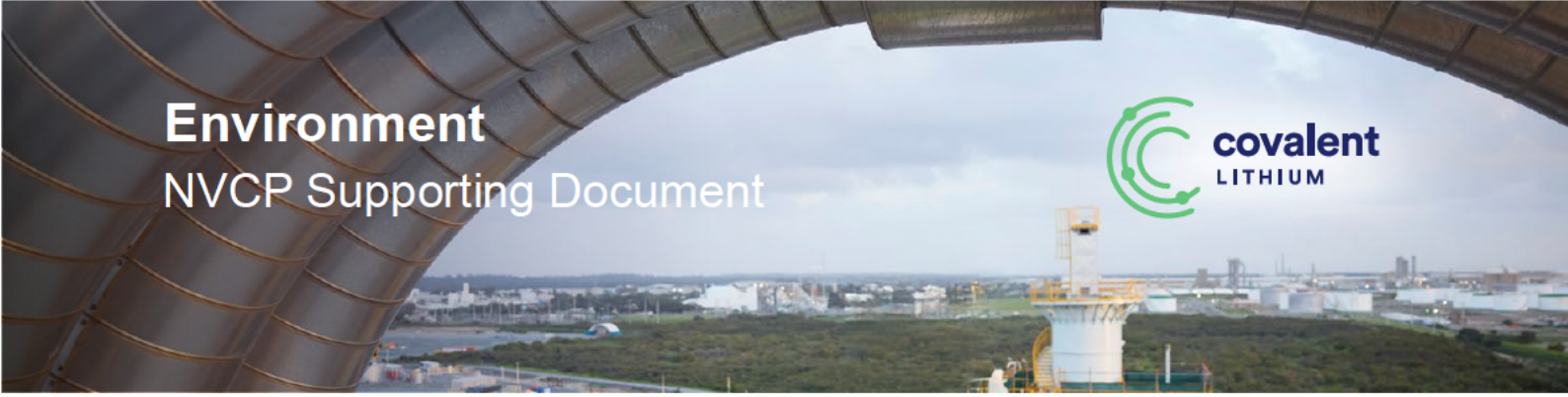


Environment
NVCP Supporting Document

1. INTRODUCTION

Covalent is applying for a purpose clearing permit to undertake bushfire fuel load reduction in the site boundary vegetation. This memo report provides supporting information to the Native Vegetation Clearing Permit (NVCP) application form.

2. BACKGROUND

Covalent Lithium is in the process of the construction and commissioning of a Lithium Hydroxide Refinery on Lot 15 Mason Road, Kwinana Beach. The refinery will process spodumene ore concentrate to produce battery grade Lithium Hydroxide Monohydrate, which is primarily used in Lithium-ion Batteries in electric vehicles. The spodumene ore concentrate will be sourced and produced at Covalent Lithium's Earl Grey Lithium Project site in Mount Holland, located approximately 105 km south-southeast of Southern Cross in the Shire of Yilgarn.

Construction of the Refinery commenced in September 2021. Staggered commissioning activities commenced in March 2024. Commissioning is ongoing in 2025 with first production of Lithium Hydroxide anticipated in mid-2025.

In late 2024 the City of Kwinana undertook a site inspection and recommended further bushfire mitigation at 15 Mason Road, Kwinana (Attachment 3) which included:

- 'Parkland clearing adjacent to critical infrastructure such as the sites power switching yard'
- 'Staged fuel reduction of this boundary bushland including removal of invasive species and mowing of grasses, maintaining native and habitat trees along the corridor subject to environmental considerations and approvals by Covalent Lithium.'

3. PROJECT APPROVALS

The project was assessed under Part IV of the Environmental Protection Act (EP Act) with Ministerial Statement 1170 issued on 15 July 2021. Ministerial Statement 1170 allows for the clearing of 11.2 hectares of native vegetation with a 76 ha Development Envelope. To date 9.14 ha of vegetation has been cleared. Clearing of the remaining hectares is allocated for future bushfire Asset Protection Zones (APZ). The Ministerial Statement approval did not consider a need to undertake fuel load reduction clearing within the site boundary vegetation.

The project was also assessed under the Planning and Development Act by the City of Kwinana with the Notice of Determination (DA9534.2) approved on 27 July 2021. A Bushfire Management Plan (BMP) and Bushfire Risk Management Plan (BRMP) were included in this assessment. Whilst identifying APZ clearing areas, these plans or approval did not consider a need to undertake fuel load reduction clearing within the site boundary vegetation.

Construction and commissioning activities are being undertaken in accordance with Works Approval W6499 granted under Part V of the EP Act.

4. SITE BOUNDARY VEGETATION

A survey of the vegetation and fauna within the DE was completed by GHD in May 2019 (Attachment 2). It is worth noting, historical photographs from the 1980's (Figure 1) indicate Lot 15 Mason Road was virtually entirely cleared of vegetation. While the existing vegetation within the DE can be considered as vegetation regrowth, the GHD survey was completed without considering this previous context.

Figure 1: Mason Road in 1980's

The boundary vegetation is described in GHD (2019) as a Eucalyptus woodland dominated by a mixture of *Eucalyptus gomphocephala, E. decipiens* and *E. cornuta* over scattered *Callitris preissii, Melaleuca lanceolata* and *M. huegelii* over sparse native and introduced/weed shrubs including *Acacia saligna, A. cyclops* and **Schinus terebinthifolius* over weedy grasses and herbs.

The condition of the vegetation remaining within the survey area was considered to be Degraded to Completely Degraded. The entire survey area has a long history of clearing and associated disturbances. The vegetation present appears to represent a mixture of remnant natives, natural regrowth and planted trees and shrubs. The survey area is heavily weed infested and evidence of foxes and rabbits was observed throughout the site. There is a large fuel load within the boundary vegetation. Examples are shown in Figure 2.

No flora of conservation significance was recorded from the survey area. The survey area has been historically cleared and is highly modified, and considered unlikely to support conservation significant species based on the available habitat present.

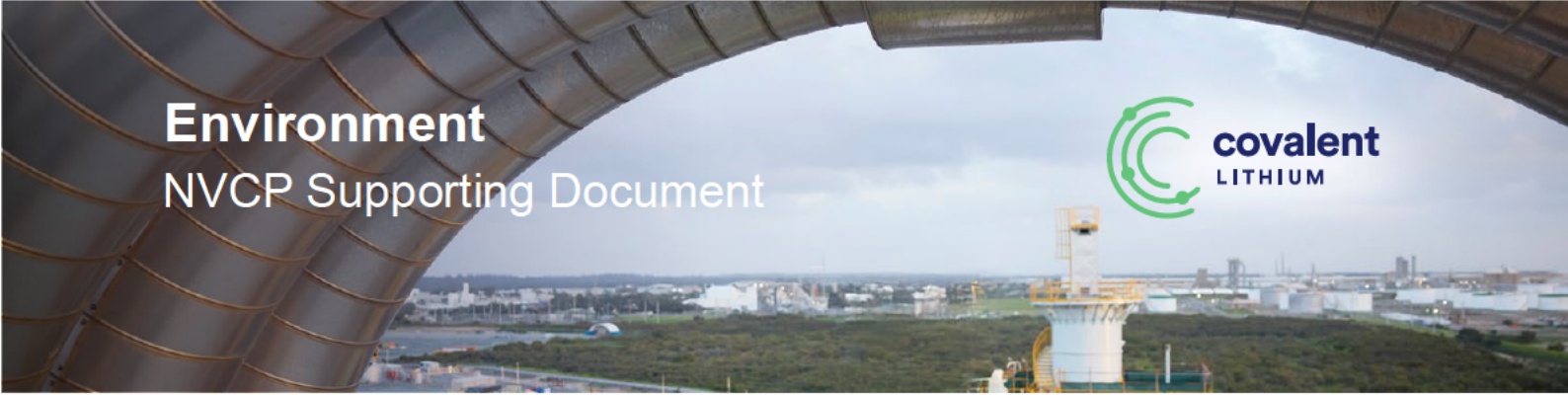
The Eucalyptus woodland was identified by GHD (2019) as providing foraging species (e.g. Eucalyptus gomphocephala) and roosting habitat of low value for the Carnaby's Cockatoo (*Calyptorhynchus latirostris*) and Forest Red Tail Black Cockatoo (*Calyptorhynchus banksii naso*).

- A lack of proteaceous species and native eucalypt species such as Marri (*Corymbia calophylla*) and Jarrah (*Eucalyptus marginata*); and
- Distance from known Black Cockatoo breeding and roosting habitat. The closest known breeding site is in Karnup, approximately 21 km south-east of the Proposal DE.

The Black Cockatoo habitat assessment identified 88 potential breeding trees (DBH >500 mm) within the Proposal DE (Figure 3). None contained visible hollows necessary for Black Cockatoo breeding. There was no evidence of roosting observed during the GHD 2019 survey.

Covalent identified two of the potential breeding trees as requiring clearing in the Part IV assessment. These trees were cleared during site establishment.

Figure 2: Examples of Dense Vegetation in Boundary Vegetation



5. ALTERNATIVE MITIGATION MEASURES

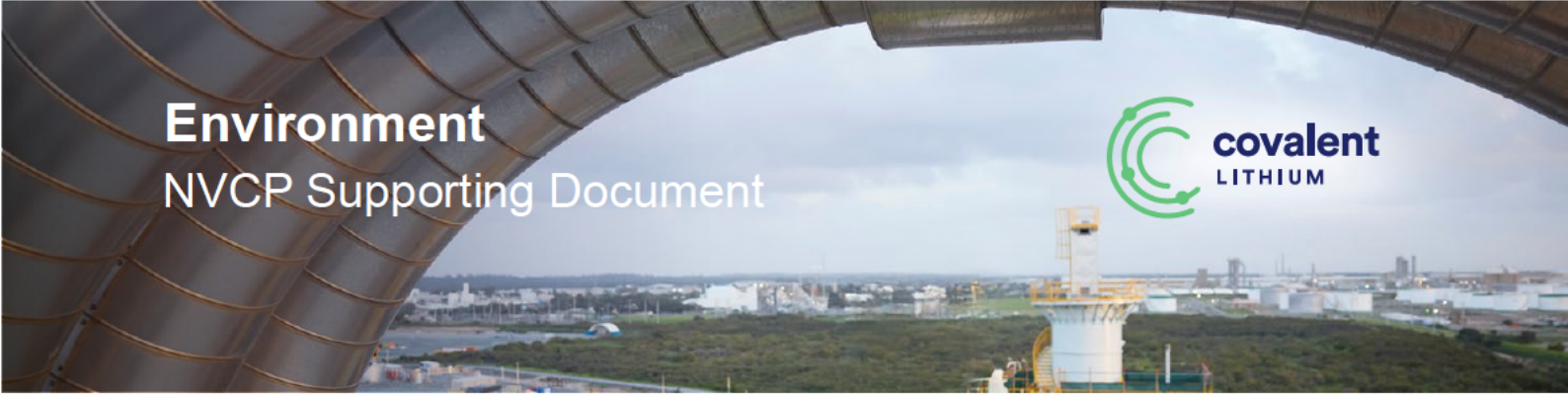
To minimize the scale of clearing and fuel reduction required the following management measures have been implemented:

Electrical, gas and chemical pipework and infrastructure management measures:

- Asset Protection Zones (APZ) have been incorporated within the existing footprint to maximise the distance to the boundary vegetation.
- The services corridor and switchyard area are maintained with a non-vegetated surface or as low threat vegetation.
- Bunding is installed around transformers within the switchyard and substation, to prevent the spread of an oil fire
- In the event of a bushfire, power at the facility can be shut down to reduce further ignition sources within the switchyard.
- Any above ground chemical pipework is made of steel and fire-resistant materials to prevent damage.
- The reagent metering station is fire rated on 3 sides and the roof. In addition, walls extend to ground level and any pipework penetrations are sealed with non-combustible material.
- Gas metering station is low-pressure only and majority is below ground within the plant.
- Below ground chemical pipework has been avoided where possible, as above-ground pipework enables regular visual inspection. Below ground pipework however was proposed through the vegetated buffer to prevent damage from falling trees from potential fire and allowing firefighters to cool pipework if required.
- Pipework is fitted with measures such as the ability to cease tank filling, leak detection and the ability to depressurise the pipework.

Other management methods around the refinery:

- Provision of adequate emergency water supply and vehicular access. Such as a fire hydrant and reel system onsite and existing hydrants at 100m intervals on Donaldson Road.
- Fire extinguishers around the site in accordance with AS 2444.
- The calciner and roasting functions in the pyrometallurgical circuit are monitored and controlled by a Burner Management System (BMS). The BMS utilises safety Programmable Logic Controllers (PLC's) for surveillance and management of flames and unburnt gases, including a live shutoff facility, to manage the pyrometallurgical circuit and gas control, thereby limiting potential for unwanted ignition.
- The site has fire protection and detection equipment to address an onsite fire as well as bushfire fighting purposes.
- Emergency management and evacuation procedures are in place and personnel onsite are trained.
- All dangerous and flammable goods onsite are compliant with relevant standards.



6. PROPOSED CLEARING ACTIVITIES

Clearing will be selective pruning and removal of vegetation within the boundary vegetation to reduce the fuel load. The boundary vegetation purpose permit footprint is 3.42 ha as shown in Figure 3. Clearing will be conducted with mechanised equipment for example loader or small dozer plus tree pruning and lopping with chainsaws where necessary.

The following avoidance measures will be done to minimise environmental impacts:

a) avoid the clearing of native vegetation - All large native trees will be retained, weed and introduced species will be targeted for removal, as well as dead and dry vegetation.
b) minimise the amount of native vegetation to be cleared – native understorey will be retained where possible.
c) reduce the impact of clearing on any environmental value – the area is within a potential feeding area for the Carnaby's Cockatoo which is listed as 'Endangered' and potential habitat for the Quenda. The large native trees and identified habitat trees for the Carnaby's Cockatoo are to be retained.

The follow measures will be done as follows to minimise impact to the environment:

Fauna Management:

a) A field survey has been completed by GHD in 2019 which identified 88 potential breeding habitat trees for the Black Cockatoo, however none of the trees has hollows. Therefore, the area does not currently contain suitable breeding habitat now but may in the future. There was no evidence of Black Cockatoos in the area at the time of the study or since commencement of the project.
b) No Black Cockatoo habitat trees (Figure 3) or large native trees will be cleared.
c) Prior to commencing clearing area will be walked to check for any presence of Black Cockatoos.
d) Clearing will occur from the Northern portion of the site to the southern portion towards adjacent native vegetation and reasonable time will be given to allow any fauna present to move from the cleared area to the native vegetation ahead.

Weed and Dieback Management:

a) All earth-moving machinery will be cleaned prior to entering and leaving the area.
b) Will ensure that no known dieback or weed affected material is brought into the area to be cleared.

Wind Erosion Management:

a) Area will be mulched after clearing to prevent any wind erosion and dust in the area.

covalent LITHIUM

Map Ref: KWI-APP-001-01-02 NVCP Application	Projection: GDA 1994 MGA Zone 50	
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Kwinana Lithium Hydroxide Refinery
Proposed Native Vegetation Clearing