



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5056/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Talison Lithium Australia Pty Ltd

### 1.3. Property details

Property: Mining Leases 01/3, 01/6, 01/7, 01/16  
General Purpose Leases 01/1, 01/2  
Local Government Area: Shire of Bridgetown-Greenbushes  
Colloquial name: Greenbushes Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
120		Mechanical Removal	Mineral Production and Mineral Exploration

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 17 September 2015

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
<p>Beard vegetation associations have been mapped for the whole of Western Australia. One Beard vegetation association has been mapped within the application area:</p> <p>3: Medium forest; jarrah-marri (GIS Database).</p> <p>A Level 2 flora and vegetation survey was undertaken over ten mining leases, totalling approximately 10,060 hectares, which contain and surround the application area. The survey was conducted by botanists from Onshore Environmental in October 2011.</p> <p>Six vegetation associations were described and mapped over the application area and these were classified into four broad floristic formations according to dominant vegetation strata (Onshore Environmental, 2012).</p> <p><b>Eucalyptus Dense Forest 1a:</b> <i>Eucalyptus marginata</i> subsp. <i>marginata</i> and <i>Corymbia calophylla</i> Dense Forest over <i>Banksia grandis</i>, <i>Bossiaea linophylla</i> and <i>Persoonia longifolia</i> Open Scrub over <i>Pteridium esculentum</i>, <i>Macrozamia riedlei</i> and <i>Leucopogon verticillatus</i> Open Low Scrub B (with <i>Leucopogon capitellatus</i> and <i>Bossiaea ornata</i> Open Dwarf Scrub D) in brown sandy loam on upper hill slopes and plateaux.</p> <p><b>Eucalyptus Dense Forest 1b:</b> <i>Eucalyptus marginata</i> subsp. <i>marginata</i> and <i>Corymbia calophylla</i> Dense Forest over <i>Bossiaea ornata</i>, <i>Hibbertia hypericoides</i> and <i>Leucopogon capitellatus</i> Dwarf Scrub D in brown sandy loam over undulating hill slopes and plateaux.</p> <p><b>Eucalyptus Forest 2a:</b> <i>Eucalyptus marginata</i></p>	<p>Greenbushes Project.</p> <p>Talison Lithium Australia Pty Ltd (Talison) proposes to clear up to 120 hectares of native vegetation within a total boundary of approximately 1,251.3 hectares for the purpose of mineral production and mineral exploration. The proposal is directly adjacent to Greenbushes, in the Shire of Bridgetown-Greenbushes.</p>	<p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).</p> <p>To</p> <p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).</p>	<p>The vegetation condition was assessed by botanists from Onshore Environmental (2012).</p> <p>The application area consists of the existing Greenbushes Mine and the surrounding area, near Greenbushes townsite.</p> <p>Clearing Permit CPS 5056/1 was granted by the Department of Mines and Petroleum on 13 November 2014 authorising the clearing of 120 hectares within a permit boundary of approximately 1,250 hectares.</p>

subsp. *marginata*, *Corymbia calophylla* Forest (to Dense Forest) over *Banksia grandis*, *E. marginata* subsp. *marginata*, *C. calophylla* Low Forest A over *Pteridium esculentum*, *Leucopogon capitellatus* and *Bossiaea ornata* Dwarf Scrub C in brown loamy sand on upper hill slopes and plateaux.

**Eucalyptus Forest 2c:** *Eucalyptus rudis*, *Corymbia calophylla* and *Eucalyptus patens* Forest (to Woodland) over *Banksia littoralis* Open Low Woodland A over *Taxandria linearifolia*, *Taxandria parviceps* and *Pteridium esculentum* Heath A in brown sandy clay loam along drainage lines and flats.

**Leptospermum Scrub 3:** *Leptospermum erubescens* Scrub over *L. erubescens*, *Bossiaea aquifolium*, *Allocasuarina humilis* Heath A over *Hypocalymma angustifolium*, *Babingtonia camphorosmae* and *Thomasia foliosa* Low Heath C in brown loamy sand on granite outcrops and sheets.

\*Typha Dense Tall Sedges 4: \*Typha orientalis Dense Tall Sedges.

\*indicates introduced species

The application area also included areas that were mapped as cleared farmland, water body, townsite, mine rehabilitation and mine disturbance (Onshore Environmental, 2012).

### 3. Assessment of application against clearing principles

#### Comments

Talison has applied to amend CPS 5056/1 for the purpose of increasing the permit boundary by approximately 1.3 hectares. This is to facilitate the maintenance of powerline corridors and to ensure a safe separation distance between powerlines and native vegetation. The area authorised to be cleared will remain unchanged (120 hectares).

The proposed amended application area has been broadly mapped as vegetation association 3 (GIS Database) of which approximately 68% remains at the state and bioregional level (Government of Western Australia, 2014).

The vegetation types within the proposed additional permit areas are similar to the vegetation types within the original permit area (Onshore Environmental, 2012). There are no Threatened or Priority Ecological Communities or Threatened or Priority Flora species within the proposed additional permit areas (Onshore Environmental, 2012; GIS Database).

The proposed amendment will not impact on any additional fauna habitats. The dominant habitat types within the amended application area are Jarrah/Marri forest over *Banksia* midstory and Jarrah/Marri forest (Biologic, 2011). These two habitat types were identified as suitable breeding and foraging habitat for the three conservation significant species of black cockatoo (Biologic, 2011). In the assessment of CPS 5056/1, a residual impact to black cockatoo species was identified and consequently an offset condition placed on the permit. The proposed amendment to increase the permit boundary by 1.3 hectares will likely increase the area of suitable black cockatoo habitat covered by the permit. However, the area authorised to be cleared will not increase and the Jarrah/Marri forest over *Banksia* midstory and Jarrah/Marri forest habitat types are abundant in the local area (Biologic, 2011). Therefore, the proposed amendment will not likely significantly impact on conservation significant black cockatoo species.

The amended application area is located within Greenbushes State Forest (GIS Database). Talison has undertaken extensive consultation with the Department of Parks and Wildlife (DPaW) over the life of the Greenbushes operations with regard to mining operations and rehabilitation practices (Talison, 2012). Furthermore, advice from DPaW was sought for the original permit application through which DPaW raised the potential impacts to Threatened flora and fauna species and dieback, weed and fire management issues. Conditions imposed on CPS 5056/1 addressed these issues. Given the area authorised to be cleared will not change, it is unlikely that the proposed minor increase to the permit boundary will result in a significantly greater impact to Greenbushes State Forest.

Based on available information (GIS Database), the assessment against the principles is consistent with the assessment contained in Decision Report CPS 5056/1.

**Methodology** Biologic (2011)  
Government of Western Australia (2014)

Onshore Environmental (2012)  
Talisson (2012)  
GIS Database:  
- DPaW Tenure  
- Hydrography, linear  
- Pre-European Vegetation  
- Soils - Statewide  
- Threatened and Priority Flora  
- Threatened Ecological Communities

#### Planning instrument, Native Title, Previous EPA decision or other matter.

##### Comments

There are two native title claims (WC2003/006 and WC2006/004) over the application area (Department of Aboriginal Affairs (DAA), 2015). However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (ie. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance occurring in the vicinity of the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal sites of significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Water, and the Department of Parks and Wildlife, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit amendment application was advertised on 10 August 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

**Methodology** DAA (2015)  
GIS Database:  
- Aboriginal Sites of Significance

#### 4. References

- Biologic (2011) Greenbushes Level 1 Fauna Survey. Report Prepared by Biologic for Talison Lithium Australia Pty Ltd, November 2011.
- DAA (2015) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs, Government of Western Australia. <http://maps.dia.wa.gov.au/AHIS2/default.aspx>.
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. Department of Parks and Wildlife, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Onshore Environmental (2012) Flora and Vegetation Survey Greenbushes Mining Leases. Report Prepared by Onshore Environmental for Talison Minerals, February 2012.
- Talisson Lithium Australia (2012) Email Correspondence Between Assessing Officer of CPS 5056/1 and Manager Environment and Mining, October 2012.

#### 5. Glossary

##### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DPaW and DER)
<b>DER</b>	Department of Environment Regulation, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DotE</b>	Department of the Environment, Australian Government
<b>DoW</b>	Department of Water, Western Australia
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)

IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
s.17	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
TEC	Threatened Ecological Community

**Definitions:**

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}-

- T Threatened species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).  
  
Threatened Fauna and Flora are further recognised by DPaW according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.  
  
**Rankings:**  
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.  
EN: Endangered - considered to be facing a very high risk of extinction in the wild.  
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.
- X Presumed Extinct species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
- IA Migratory birds protected under an international agreement:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.  
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
- S Other specially protected fauna:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P1 Priority One - Poorly-known species:**  
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
- P2 Priority Two - Poorly-known species:**  
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.
- P3 Priority Three - Poorly-known species:**  
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.
- P4 Priority Four - Rare, Near Threatened and other species in need of monitoring:**  
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.  
(b) Near Threatened. Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.  
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.
- P5 Priority Five - Conservation Dependent species:**  
Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**Principles for clearing native vegetation:**

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.