



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7246/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Altura Exploration Pty Ltd

1.3. Property details

Property: Mining Lease 45/1230
Mining Lease 45/1231
Miscellaneous Licence 45/400
Miscellaneous Licence 45/404
Local Government Area: Shire of East Pilbara
Colloquial name: Pilgangoora Lithium Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 1 June 2017

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area has been broadly mapped as Beard vegetation association 190: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* and *A. trachycarpa* over hard spinifex, *Triodia wiseana*; Very poor rocky country on gneiss (GIS Database).

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*;

93: Hummock grasslands, shrub steppe; kanji over soft spinifex; and

619: Medium woodland; river gum (*Eucalyptus camaldulensis*).

A level 2 flora and vegetation survey was undertaken over part of the application area by Natural Area (2016a) during 11 to 22 March 2016. A total of five vegetation communities were identified within M 45/1230 and M 45/1231:

1. *Triodia wiseana* Hummock Grassland on low hills: Spinifex Grassland dominated by *Triodia wiseana*, with small patches of *Triodia epactia* towards the base of hillslopes. *Acacia inaequilatera* and *Acacia acradenia* are found throughout this vegetation type in low densities;
2. *Triodia epactia* and *Triodia wiseana* Hummock Grasslands on stony plains: A Hummock Grassland dominated by *Triodia epactia* and *Triodia wiseana* with scattered patches of *Triodia pungens* in seasonally wet areas. This vegetation type was burnt prior to 2013, but has since regenerated. Scattered *Acacia inaequilatera* occur throughout this vegetation type; annuals such as *Goodenia muelleriana*, *Ptilotus axillaris* and *Ptilotus clementii* are found here after seasonal rainfall;
3. *Eucalyptus camaldulensis* Open Woodland along major drainage lines: Open Woodland of *Eucalyptus camaldulensis* with a reduced understorey of *Marsilea exarata*, *Pluchea tetranthera* and non-native Buffel Grass (*Cenchrus ciliaris*). This vegetation type is located along major drainage lines and is characterised by clayey loam soils with a thick layer of leaf litter produced from the *E. camaldulensis*;
4. *Acacia acradenia* and *Petalostylis labicheoides* Open Shrubland over *Triodia pungens* Hummock Grassland along minor drainage lines: Low Open Scrubland of *Acacia acradenia*, *Acacia inaequilatera* and *Petalostylis labicheoides* over a dense Spinifex Grassland of *Triodia pungens*, with *Triodia wiseana* and sparse *Corymbia hamersleyana* trees found along the edges of the drainage line. This vegetation type was found along minor drainage lines with clayey loam soils; and
5. *Acacia* tall Open Shrubland over *Triodia wiseana* Hummock Grasslands: Tall Open *Acacia* Shrubland dominated by *Acacia acradenia* and *Acacia inaequilatera* over a *Triodia wiseana* Hummock Grassland,

with isolated patches of *Triodia longiceps* on hill slopes. Shrubs scattered throughout this vegetation type include *Scaevola pulchella*, *Corchorus parviflorus*, *Euphorbia tannensis subsp. eremophila*, *Grevillea wickhamii* and the occasional *Hakea chordophylla*. This area is characterised by disturbance associated with exploration mining; large soil deposits have been colonised by opportunistic species such as *Acacia acradenia*.

A desktop flora assessment for the access road route to and from the project area (L 45/400 and L 45/405) was undertaken by Natural Area (2016b). The desktop review assessed that the vegetation types within the 2.6 kilometre new road section that will extend from the north-western portion of the site are expected to be similar to those identified during the flora survey above by Natural Area (2016a), particularly those dominated by *Triodia* or *Acacia* species. *Triodia* grasslands are expected in drier areas, with *Acacia* shrublands around creek lines. The vegetation types along the existing roads included *Acacia* shrublands along the Wodgina Road and *Acacia* shrubland over *Triodia* grassland (Natural Area, 2016b).

Clearing Description	Pilgangoora Lithium Project. Altura Exploration Pty Ltd proposes to clear up to 374.58 hectares of native vegetation within a total boundary of approximately 542.6 hectares, for the purpose of mineral production. The project is located approximately 89 kilometres east of Marble Bar, in the Shire of East Pilbara.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994); to Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
Comment	Clearing permit CPS 7246/1 was granted by the Department of Mines and Petroleum (DMP) on 20 October 2016, and was valid from 12 August 2016 to 12 August 2023. An application to amend CPS 7246/1 was submitted to the DMP on 20 April 2017. The applicant requested an increase in the clearing boundary from 374.58 hectares to 542.6 hectares. The amount of clearing remains unchanged. The total amount of clearing for CPS 7246/2 is 374.58 hectares.

3. Assessment of application against clearing principles

Comments Altura Exploration Pty Ltd has applied to increase the clearing permit boundary from 374.58 hectares to 542.6 hectares. The amount of clearing authorised remains unchanged. The amendment to the clearing boundary is required to facilitate changes to the mine site layout and to allow further flexibility in the alignment of the access road (Preston Consulting, 2017).

The proposed amendment to the previously approved clearing boundary will impact on vegetation communities 1, 2, 3, 4 and 5 identified by Natural Area (2016a; 2016b). As the authorised clearing area remains unchanged, it is unlikely that there will be additional impacts to vegetation communities within the amended clearing boundary. The vegetation associations recorded in the proposed amendment area are well represented in the region and are not a significant remnant of native vegetation. No new vegetation communities will be cleared as part of the amendment (Preston Consulting, 2017). The proposed amendment to the clearing boundary will not impact any Threatened flora, Priority flora or Threatened Ecological Communities or Priority Ecological Communities (Preston Consulting, 2017).

Fauna habitats within the amended clearing boundary comprise of *Triodia* Hummock Grasslands on rocky plains and small hills, and Open Woodlands and Shrubland over *Triodia* Hummock Grasslands along major and minor drainage lines (Natural Area, 2014; 2016a). The habitat types found within the application area are considered to be well represented in the local region and the application area does not contain habitats or faunal assemblages that are ecologically significant (Natural Area, 2014; 2016a; 2016b). The proposed amended clearing boundary will not impact on Threatened fauna species or conservation significant fauna habitat (Preston Consulting, 2017).

There are several minor, ephemeral watercourses including (Chinnamon Creek) that intersect the amended clearing permit boundary (Preston Consulting, 2017; GIS Database). No additional watercourses will be impacted as part of the amended clearing permit boundary. The proposed clearing is at variance to clearing Principle (f). A vegetation management condition exists on the original permit which requires Altura Exploration Pty Ltd to avoid clearing riparian vegetation and to ensure that surface water flow is maintained or reinstated downstream into existing natural drainage lines. The vegetation management condition remains on the amended clearing permit, CPS 7246/2.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 7246/1.

Methodology Natural Area (2014)
Natural Area (2016a)
Natural Area (2016b)
Preston Consulting (2017)

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

Comments There is one native title claim over the application area (WC1999/008) (DAA, 2017). This claim has been registered with the National Native Title Tribunal on behalf of the claimant groups. However, the mining tenements have been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. 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 within the application area (DAA, 2017). 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 Parks and Wildlife and the Department of Water, 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 amendment application was advertised on 8 May 2017 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received which did not object to this application. The submission was in relation to cumulative native vegetation clearing impacts which have been addressed in the assessment of the clearing Principles.

Methodology DAA (2017)

4. References

- DAA (2017) Aboriginal Heritage Inquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 24 May 2017).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Natural Area (2014) Flora and Fauna Survey Report – Pilgangoora. Report prepared for Altura Mining Ltd, by Natural Area Consulting Management Services, February 2014.
- Natural Area (2016a) Flora, Vegetation and Fauna Survey Report - Pilgangoora Lithium Project. Report prepared for Altura Mining Ltd, by Natural Area Consulting Management Services, June 2016.
- Natural Area (2016b) Memo - Desktop assessment of road route to/from project. Memo prepared for Altura Mining Ltd, by Natural Area Consulting Management Services, June 2016.
- Preston Consulting (2017) Application to Amend Native Vegetation Clearing Permit (CPS 7246/1), Pilgangoora Lithium Project, Supporting Information. Report prepared for Altura Mining Limited, by Preston Consulting Pty Ltd, April 2017.

5. Glossary

Acronyms:

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

Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

- T** **Threatened species:**
Published as Specially Protected under the *Wildlife Conservation Act 1950*, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).
Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.
Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the Wildlife Conservation Act.
The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.
- CR** **Critically endangered species**
Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- EN** **Endangered species**
Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- VU** **Vulnerable species**
Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- EX** **Presumed extinct species**
Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.
- IA** **Migratory birds protected under an international agreement**
Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- CD** **Conservation dependent fauna**
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- OS** **Other specially protected fauna**
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P** **Priority species**
Species which are poorly known; or
Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.
- P1** **Priority One - Poorly-known species:**
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such

species are in urgent need of further survey.

P2

Priority Two - Poorly-known species:

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3

Priority Three - Poorly-known species:

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations 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 locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

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 are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

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.