



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6131/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Alliance Mineral Assets Ltd

1.3. Property details

Property: Mining Lease 15/400
General Purpose Lease 15/17
Local Government Area: Shire of Coolgardie
Colloquial name: Bald Hill Tantalite Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 26 November 2015

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Two Beard vegetation associations were mapped within the application area (GIS Database):

Beard Vegetation Association 509: Succulent steppe with woodland; gimlet & saltbush; and

Beard Vegetation Association 676: Succulent steppe; samphire.

A site inspection of the application area was conducted in August 2000 by Muir Environmental (Muir) and two vegetation types were identified:

- 1) *Acacia bivenosa* tall open shrubland to tall shrubland over *Triodia epactia* hummock grassland with *Cenchrus ciliaris* very open tussock grassland; and
- 2) Patches of low woodland of various *Acacia* species (1.5m to 2m tall) and *Eucalyptus griffithsii* and *Myoporum platycarpum* (4m to 6m tall) over sparse, low shrubs to 0.5 m tall.

Clearing Description Bald Hill Tantalite Project

Alliance Mineral Assets Ltd is proposing to clear up to 70.1 hectares of native vegetation, within a total boundary of approximately 502 hectares, for the purpose of mineral production. The proposed clearing is located approximately 58 kilometres south east of Kambalda, in the Shire of Coolgardie.

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994)

To

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

Comment

Clearing permit CPS 6131/1 was granted by the Department of Mines and Petroleum (DMP) on 21 August 2014 and authorised the clearing of up to 30.1 hectares of native vegetation within a boundary of approximately 502 hectares. The clearing allowed for the recommencement of mining operations at the site. The permit holder has applied to amend CPS 6131/1 to increase the amount of clearing from 30.1 hectares to 70.1 hectares. The permit boundary has not changed.

The vegetation condition was determined via a site inspection conducted by Muir Environmental (Muir 2000).

3. Assessment of application against clearing principles

Comments

Alliance Mineral Assets Ltd has applied to increase the amount of clearing by 40 hectares. The total amount of clearing will increase from 30.1 hectares to 70.1 hectares; however the clearing permit boundary will remain the same. The environmental values of the entire clearing permit boundary (502 hectares) were assessed under clearing permit CPS 6131/1 and no significant environmental issues were identified. The majority of the vegetation to be cleared is in a 'Degraded' condition (Keighery, 1994) and is very sparse throughout the application area (GIS Database).

A search of current available databases confirmed that no Threatened or Priority flora species are likely to be impacted by the proposed amendment (DPaW, 2015; GIS Database). Records show that two Priority 3 flora species and three Priority 4 flora species are known within a 20 kilometre radius (local area) of the application area (DPaW, 2015). The soils mapped over the application area are described as neutral red earths with a variable content of ironstone gravel (GIS Database; Northcote et al. 1960-68). Of the Priority flora species known from the local area, suitable habitat may be present for *Calytrix plumulosa* (P3) and *Lepidosperma lyonsii* (P4), though it is considered unlikely that the proposed clearing will impact on the conservation status of these flora species should they be present within the application area.

There are no known Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) within 200 kilometres of the application area. Muir (2000) did not identify any TECs or PECs during a site inspection of the application area.

According to available records, the only fauna species of conservation significance known from the local area is the Malleefowl (*Leipoa ocellata*) (DPaW, 2015). Given that the application area lacks abundant leaf litter used for the construction of nesting mounds (GIS Database; DotE, 2015), it is unlikely to represent significant habitat for Malleefowl. Much of the application area has been disturbed by previous mining and exploration, as well as historical removal of timber and overgrazing by stock (Muir, 2000). The vegetation that remains within the clearing permit boundary is very patchy and sparse (GIS Database). Large amounts of better quality vegetation is present throughout the local area and region, therefore impacts to local fauna species are expected to be minimal.

There are no conservation areas within 40 kilometres of the application area and the Beard vegetation associations mapped for the site (Beard associations 509 and 676) are well represented, with over 95% of their pre-European extent remaining within the state and bioregion (Government of Western Australia, 2014).

Two introduced flora species have been recorded within the application area; *Carthamus lanatus* (Saffron Thistle) and *Citrullus lanatus* (Paddy melon) (Muir, 2000). Clearing activities have the potential to result in an increase in the incidence of weed species, which may negatively impact on the biodiversity of the local area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of the existing weed management condition.

There are two minor, non-perennial watercourses that intersect the application area (GIS Database). Muir (2000) did not observe any district vegetation growing in association with these drainage lines. While riparian vegetation may be absent, the clearing of native vegetation in or around watercourses has the potential to impact surface water flows and sediment loads. Potential impacts to watercourses as a result of the proposed clearing may be minimised by the implementation of a watercourse/vegetation management condition.

Given the local climate of the region (low rainfall and high evaporation), the proposed clearing of an additional 40 hectares of sparse, predominately degraded vegetation, is unlikely to result in an increased risk of flooding or significant land degradation issues (BoM, 2015; GIS Database). Due to existing hyper-saline groundwater conditions, adverse impacts to groundwater quality are also considered unlikely (GIS Database).

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, and the proposed clearing may be at variance to Principle (f), is not likely to be at variance to Principles (a), (b), (c), (g), (h), (i) and (j) and is not at variance to Principle (d) and (e).

Methodology

BoM (2015)
DotE (2015)
Government of Western Australia (2014)
Muir (2000)
Northcote *et al.* (1960-68)
GIS Database:
- DPaW Tenure
- Groundwater Salinity, Satewide
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater Areas
- IBRA WA (Regions - Sub Regions)
- Pre-European vegetation

- Threatened and Priority Flora List
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

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

Comments

There is one Native Title Claim (WC1999/002) over the application area (DAA, 2015). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the tenure has 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 Sites of Aboriginal Significance located in the application area (GIS Database; DAA, 2015). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal 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 26 October 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

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

4. References

- BoM (2015) Climate Statistics for Australian Locations. A Search for Climate Statistics, Australian Government Bureau of Meteorology. <<http://www.bom.gov.au>>.
- DAA (2015) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, < <http://maps.dia.wa.gov.au/AHIS2/>>.
- DotE (2015) *Leipoa ocellata* in Species Profile and Threats Database, Department of the Environment, Canberra. <from:<http://www.environment.gov.au/sprat>>.
- DPaW (2015) NatureMap, Department of Parks and Wildlife <<http://naturemap.dec.wa.gov.au>>.
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Environment and Conservation, 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.
- Muir (2000) Notice of Intent, Bald Hill Tantalite Project. *Supporting information for CPS 6131/1*. Muir Environmental, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

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
DotE	Department of the Environment, 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 DotE)
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
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 the Department 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.