



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2680/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Iluka Resources Limited

1.3. Property details

Property: Mineral Sands (Eneabba) Agreement Act, Mineral Lease 267SA
Local Government Area: Shire of Carnamah
Colloquial name: Adamson West Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 8 September 2016

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 at a 1:250,000 scale for the whole of Western Australia, and are a useful tool to examine the vegetation extent in a regional context. One Beard vegetation association is located within the application area (GIS Database):

379: shrublands; scrub-heath on lateritic sandplain in the central Geraldton Sandplain Region.

Woodman Environmental Consulting (WEC) (2008) conducted a flora survey over the application area in spring 2006 and summer 2007. The flora survey identified eight floristic community types (FCT's) within the application area (Iluka Resources, 2008; WEC, 2008). These are:

FCT 1C: open woodland to shrubland of *Eucalyptus pleurocarpa* and *Eucalyptus tottiana* over mixed shrubs dominated by *Banksia spp.* on yellow and grey sandy loams on mid and lower slopes;

FCT 1D: low shrubland of mixed species, with common species including *Schoenus pedicellatus*, *Stylidium repens*, *Hakea eneabba* and *Dryandra stenoprion* with very occasional open woodland of *Eucalyptus tottiana* on grey-brown to brown sands with very occasional laterite influence;

FCT 2: predominantly low open woodland of *Eucalyptus tottiana* and *Banksia menziesii* with occasional *Xylomelum angustifolium*, over low shrublands of mixed species including *Banksia leptophylla var. leptophylla*, *Melaleuca leuropoma* and *Hibbertia hypericoides* on grey over brown sands;

FCT 3B: low shrubland of mixed species including *Beaufortia elegans* and *Goodinia coerulea* with occasional low woodlands of *Eucalyptus pleurocarpa* on soil types ranging from white-grey, grey and brown sands and brown clays;

FCT 3C: predominantly low woodland of *Eucalyptus pleurocarpa* over low shrubland of mixed species including *Tetraria octandra*, *Cristonia biboba* and *Hibbertia spicata* as well as *Mesomelaena tetragonal* on white-grey, grey and brown sands with lateritic gravel or over laterite;

FCT 4: shrublands and heaths, with occasional woodland of *Eucalyptus pleurocarpa*, dominated by *Melaleuca spp.* and sedges on flats and depressions on grey-brown sands and sandy-clay;

FCT 5: shrubland and thickets dominated by *Melaleuca spp.* and *Banksia leptophylla* on sandy clays and sandy loams with some lateritic gravel on flats, depressions and creek-lines;

FCT 7: woodland of *Eucalyptus accedens* and occasional *Eucalyptus pleurocarpa* on brown sandy-loam with some lateritic gravel.

Clearing Description

Adamson West Project.

Iluka Resources Limited proposes to clear up to 91.6 hectares of native vegetation within a boundary of approximately 112 hectares for the purposes of mineral production. The project area is located approximately 10 kilometres south of Eneabba within the Shire of Carnamah.

Vegetation Condition	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994); to Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
Comment	The vegetation condition of the application area has been derived from the vegetation description provided by Woodman Environmental Consulting (2008), Iluka Resources (2008) and aerial photography viewed by the assessing officer. Clearing permit CPS 2680/1 was granted by the Department of Mines and Petroleum on 20 November 2008 and authorised the clearing of up to 91.6 hectares of native vegetation within an area totalling approximately 112 hectares. This permit was amended on 31 January 2013 to extend the duration of the permit to 15 March 2013, with clearing permitted until 15 March 2018. Iluka Resources Limited has applied to amend CPS 2680/2 for the purpose of updating the wording of Condition 9 on the Permit to better align with current standard wording.

3. Assessment of application against clearing principles

Comments

Iluka Resources Limited has applied to amend Condition 9 of the clearing permit to better align with current standard wording. This is in relation to rehabilitation and the use of local provenance vegetative materials and topsoil.

As the amendment is only for administrative purposes, the environmental impacts will not change and the assessment of the clearing principles is consistent with the assessment in clearing permit decision report CPS 2680/2.

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

Comments

There is one Native Title claim (WC1999/057) over the area under application (GIS Database). This claim has been filed at the Federal Court on behalf of the claimant group. 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 (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 (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, 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 clearing permit was advertised by the Department of Mines and Petroleum on 25 July 2016, inviting submissions from the public. No submissions were received.

Methodology DAA (2016)

4. References

- DAA (2016) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, <<http://maps.dia.wa.gov.au/AHIS2/>> accessed 29 August 2016.
- Iluka Resources (2008) Eneabba Mineral Sands Mine Adamson West Proposal, unpublished report, Perth, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Woodman Environmental Consulting (WEC) (2008) P1 and Hopkins Survey Areas - Flora and Vegetation Studies, unpublished report prepared for Iluka Resources Ltd by Woodman Environmental Consulting, Western Australia.

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 (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia):-

T	<p>Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, 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).</p> <p>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.</p> <p>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.</p> <p>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.</p>
CR	<p>Critically endangered species Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
EN	<p>Endangered species Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
VU	<p>Vulnerable species Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
EX	<p>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 <i>Wildlife Conservation Act 1950</i>, 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.</p>
IA	<p>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 <i>Wildlife Conservation Act 1950</i>, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
CD	<p>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 <i>Wildlife Conservation Act 1950</i>, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>

- 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.

