



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 2362/3  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: **Iluka Resources Limited**

### 1.3. Property details

Property: *Mineral Sands (Eneabba) Agreement Act 1975*, Mineral Lease 267SA  
Local Government Area: Shire of Carnamah & Shire of Three Springs  
Colloquial name: Depot Hill/Brandy Flats

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
39		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 for the whole of Western Australia, and are a useful tool to examine the vegetation extent in a regional context. Three Beard vegetation associations were located within the application area. These were:

49 Shrublands; mixed heath;

378 Shrublands; scrub-heath with scattered *Banksia spp*, *Eucalyptus todtiana* & *Xylomelum angustifolium* on deep sandy flats; and

379 Shrublands; scrub-heath on lateritic sandplain.

Woodman Environmental Consulting (WEC) (2007) conducted vegetation mapping of the proposed clearing area in November 2007. Through this survey they identified two Floristic Community Types which occur in the application area:

1) Woodland to tall shrubland dominated by *Xylomelum angustifolium* and/or *Banksia spp*. on grey sand on dune crests and upper slopes; and

2) Low shrubland of mixed species including *Mesomelaena stygia sub-sp. deflexa*, *Georgeantha hexandra*, *Hakea spathulata* and *Cassyltha glabella* on white-grey sand over lateritic gravels.

**Clearing Description** Iluka Resources Limited has applied to clear 39 hectares of native vegetation, within a total application area of approximately 263 hectares for the purpose of mineral production. The Project is located 4.5 kilometres north-east of the town site of Eneabba in the Shire of Carnamah and the Shire of Three Springs.

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

**Comment** Sand mining is not a new venture in the Eneabba area. The Depot Hill/Depot Hill East and some of the Brandy flats area were originally mined by the Jennings Mining Group in the late 1970s (Iluka Resources Ltd, 2008). Once mining operations ceased there was little attempt to rehabilitate the area. This has left areas which were previously mined in a degraded state.

The application area is divided into a northern section referred to as the Brandy Flats application area, and a series of closely bunched areas in the south-east called the Depot Hill application area.

The proposed clearing is for mineral sands mining as a continuation of the existing mining activities at Iluka Resources Limited's Eneabba mineral sands operation. Clearing will be conducted mechanically with a lowered blade, in accordance with methods already in practice at the mine site.

Clearing Permit CPS 2362/1 was granted by the Department of Mines and Petroleum (DMP) on 17 May 2008 and authorised the clearing of up to 39 hectares of native vegetation for the purpose of extraction of mineral sands.

Iluka Resources Limited has applied to amend CPS 2362/2 for the purpose of updating the wording of Condition 8 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 8 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 2362/2.

#### Methodology

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

#### Comments

There is one native title claim over the application area (DAA, 2016). This claim (WC98\_057) has been registered with the National Native Title Tribunal on behalf of the claimant group (GIS Database). However, 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 known sites of Aboriginal significance in the vicinity of the application area (DAA, 2016). 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, 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, Native Vegetation Clearing Proposal (Depot Hill/Brandy Flats), 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) (2007) Declared Rare Flora Search – Adamson West and Depot Hill/Brandy Flats, prepared for Iluka Resources Ltd 2008.

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