



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6915/4
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, Mining Lease 267SA (AM 70/267)
Mining Lease 70/821
Local Government Area: Shire of Carnamah
Colloquial name: South Tails Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
49.64		Mechanical Removal	Construction, Mineral Sands Processing and Rehabilitation Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 15 October 2020

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. Two Beard vegetation associations are located within the application area (GIS Database):

Beard vegetation association 49: Shrublands; mixed heath; and
Beard vegetation association 379: Shrublands; scrub-heath on lateritic sandplain in the central Geraldton Sandplain Region.

Note: More than 95% of the application area falls within Beard vegetation association 379.

Woodman Environmental Consultancy (Woodman) mapped the application area in 2010 and identified five Floristic Community Types within the 3.4 hectares of vegetation remaining (Woodman, 2016):

- **FCT 1a:** Open Low Woodland to Open Low Scrub of *Eucalyptus pleurocarpa* and/or *Eucalyptus todtiana* over mixed shrubs dominated by *Banksia* spp. and *Hakea* spp. over sedges on grey to brown sands with very occasional laterite influence on lower to mid slopes;
- **FCT 1b:** Open Woodland to Scrub of *Eucalyptus* spp. and/or *Banksia* spp., with occasional *Xylomelum angustifolium*, over mixed shrubs dominated by myrtaceous spp., *Banksia* spp., and *Jacksonia* spp. on grey sand on mid to upper slopes;
- **FCT 2b:** Scrub of *Banksia attenuata*, with emergent *Eucalyptus todtiana* or *Eucalyptus pleurocarpa*, over Low Scrub dominated by *Banksia* spp. on predominantly yellow sands on mid and upper slopes;
- **FCT 7:** Open Low Woodland of *Eucalyptus pleurocarpa* to species rich Low Heath generally dominated by *Banksia* spp., *Daviesia* spp., *Lambertia multiflora* var. *multiflora* and *Xanthorrhoea drummondii* on grey sands with a moderate to heavy laterite component; and
- **FCT 18:** Thicket dominated by *Melaleuca viminea* subsp. *viminea*, with occasional *Eucalyptus loxophleba* subsp. *loxophleba* or *Eucalyptus camaldulensis* in clay flats.

Clearing Description South Tails Project
Iluka Resources Limited proposes to clear up to 49.64 hectares of native vegetation within a total boundary of approximately 51.34 hectares, for the purpose of construction, mineral sands processing and rehabilitation activities. The project is located approximately 150 kilometres south-east of Geraldton in the Shire of Carnamah.

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

Comment

The condition of the vegetation under application was determined via flora and vegetation surveys conducted over the application area by Woodman in 2010 and 2016.

The clearing permit area consists primarily of highly disturbed vegetation, on the edges of existing cleared areas. Approximately 80% of the clearing area is rehabilitated native vegetation. The clearing permit is required to ensure the long-term success of the rehabilitation, by ensuring appropriate landform shaping and drainage control. Although there will be a temporary impact to vegetation, the end result post rehabilitation will increase the likelihood of rehabilitation success.

Clearing permit CPS 6915/1 was granted by the Department of Mines and Petroleum (DMP) (now the Department of Mines, Industry Regulation and Safety (DMIRS)) on 10 March 2016 and was valid from 2 April 2016 to 1 March 2019. The permit authorised the clearing of 49.64 hectares of native vegetation within a boundary of approximately 51.34 hectares, for the purpose of rehabilitation. On 10 May 2016, Iluka Resources Limited applied to alter the annual reporting date of the permit from 31 July to 15 March and alter the reporting period from 1 July - 30 June to 1 January - 31 December. The proposed amendment aligned CPS 6915/1 with other existing permits for the Eneabba site. DMP also made administrative amendments to the permit, in order to ensure rehabilitation conditions are met, by extending the duration of the permit by four years and aligning the expiry date to the amended reporting date. CPS 6915/2 was granted on 9 June 2016 and was valid until 15 March 2024.

Clearing permit CPS 6915/2 was amended on 11 April 2019 for the purpose of extending the period in which clearing is authorised by five years. The area of clearing authorised and the permit boundaries remained unchanged.

On 13 August 2020, Iluka Resources Limited applied to amend CPS 6915/3 for the purpose of changing the purpose of clearing to 'construction, mineral sands processing and rehabilitation activities' and updating Condition 9. The area of clearing authorised and the permit boundaries remain unchanged.

3. Assessment of application against Clearing Principles

Comments

Iluka Resources Limited applied to amend CPS 6915/3 for the purpose of changing the purpose of clearing to 'construction, mineral sands processing and rehabilitation activities' and updating Condition 9.

The area to be utilised for construction and mineral sands processing is 2.6 hectares in a highly disturbed brownfields mine site with no nearby surrounding sensitive receptors (visible in map below). The proposed processing area was selected to maximise the use of existing cleared areas whilst still being in close proximity to the required existing processing facilities (Iluka, 2020). The vegetation located within the proposed processing area is generally in poorer condition than the surrounding intact vegetation due to the presence of wind-blown sand and deposition of sediment from run-off (Iluka, 2020). Once the Eneabba Upgrade Project ceases, these areas will be rehabilitated in accordance with the Eneabba Mine Closure Plan (Iluka, 2020).

Given the 2.6 hectares of clearing will be for mineral processing which has a 10 year project life (under the *Mining Act, 1978* and *Mineral Sands (Eneabba) Agreement Act 1975*) this area will not be able to be rehabilitated within 24 months of clearing, as required under Condition 9. Due to this, the condition has been updated requiring that rehabilitation is undertaken within 24 months only for areas that are no longer being utilised.



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 reports CPS 6915/1, 6915/2, and 6915/3.

Methodology Iluka (2020)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There is one native title claim over the area under application (DPLH, 2020). This claim has been registered with the National Native Title Tribunal 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 (DPLH, 2020). 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 Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, 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 31 August 2020 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2020)

4. References

- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage.
<http://maps.daa.wa.gov.au/AHIS/> (Accessed 6 October 2020).
- Iluka (2020) Application to Amend Native Vegetation Clearing Permit CPS 6915/3 – Supporting Document, Eneabba Mineral Sands Mine, Western Australia. Supporting document prepared by Iluka Resources Limited, July 2020.
- 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 (2016) Eneabba Mineral Sands Mine Native Vegetation Clearing Proposal - Native Vegetation Clearing for Rehabilitation Landform Construction. Report prepared for Iluka Resources Limited, by Woodman Environmental Consulting Pty Ltd, January 2016.

5. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016, Western Australia</i>
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DoE	Department of the Environment, Australian Government (now DAWE)
DoEE	Department of the Environment and Energy (now DAWE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DSEWPac	Department of Sustainability, Environment, Water, Population and Communities (now DAWE)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986, Western Australia</i>
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)</i>
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:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia):-

T **Threatened species:**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of ‘Specially Protected Fauna’ listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of ‘Rare Flora’ listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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 in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN **Endangered species**

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU **Vulnerable species**

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct Species:

EX **Extinct species**

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW **Extinct in the wild species**

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species;

cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI

Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD

Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS

Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P

Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.