



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5117/4
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Robe River Mining Co Pty Ltd

1.3. Property details

Property: Iron Ore (Hamersley Range) Agreement Act 1963, Special Lease for Mining Operations 3116/4984 (Document I 195323 L), J761009 EL, Lots 9, 13, 32 on Deposited Plan 47815
Miscellaneous Licence 47/47
Miscellaneous Licence 47/67
Miscellaneous Licence 47/228

Local Government Area: Shire of Ashburton
Colloquial name: Autohaul Works Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
18.5		Mechanical Removal	Rail Activities and Associated Works

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 30 October 2014

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. Four Beard vegetation associations have been mapped within the application area:

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

175: Short bunch grassland - savanna/grass plain (Pilbara);

587: Mosaic: Hummock grasslands, open low tree-steppe; snappy gum over *Triodia wiseana*/Hummock grasslands, shrub-steppe; kanji over *Triodia pungens*; and

603: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* over hard spinifex (GIS Database).

Several large flora and vegetation surveys have been undertaken in the vicinity of the application area by botanists from Biota and Rio Tinto as part of the Rio Tinto rail duplication project. The results of the vegetation mapping were compiled and the survey reports that cover the nine polygons of the application area are Biota (2008a, 2008b) and RTIO (2012a, 2012b). The vegetation communities identified for each of the nine polygons of the application area are listed below.

Emu North Signalling Pad (two northern most polygons)

EvMg – *Eucalyptus victix* low open woodland over *Melaleuca glomerata* tall shrubland. This vegetation unit was recorded from the cobbly channels of the Harding River and its tributaries;

EvAtrTeCEc – *Eucalyptus victrix* low open woodland over *Acacia trachycarpa* tall open shrubland over *Triodia epactia* open hummock grassland and **Cenchrus ciliaris* tussock grassland. This vegetation occurred in numerous creeklines;

ChApyAbTwTe – *Corymbia hamersleyana* scattered low trees over *Acacia pyrifolia* scattered tall shrubs over *Acacia bivenosa* open shrubland over *Triodia wiseana*, *Triodia epactia* hummock grassland. This vegetation occurred on stony plains and hillslopes; and

Disturbed.

94.0 km Mark

P9 AbTwCa - *Acacia bivenosa* low open shrubland over *Triodia wiseana* hummock grassland with *Cymbopogon ambiguus* scattered tussock grasses; and

CD - Heavily disturbed.

97.7 - 98.3 km

P10 AcTw*Cc - *Acacia pyrifolia* var. *pyrifolia*, *Acacia colei* var. *colei* and *Hakea lorea* subsp. *lorea* open shrubland over *Triodia wiseana* open hummock grassland with **Cenchrus ciliaris* and *Eneapogon cylindricus* tussock grassland; and

CD - Heavily disturbed.

101 km

AiTw - *Acacia inaequilatera* tall open shrubland over *Triodia wiseana* hummock grassland; and

CD - Heavily disturbed.

106.7 km

D4 *Cc - **Cenchrus ciliaris* open to very open tussock grassland;

P11 AtRe*Cc - *Acacia tumida* var. *pilbarensis* scattered tall shrubs over *Rhagodia eremaea* scattered shrubs over **Cenchrus ciliaris* and *Bothriochloa ewartiana* closed tussock grassland; and

CD - Heavily disturbed.

108.5 km

Aerva javanica low open shrubland over *Dichanthium fecundum*, *Panicum decompositum*, *Chrysopogon fallax*, *Astrebla pectinata* and *Themeda triandra* open tussock grassland; and

Disturbed.

114.8 km

CD - Heavily disturbed.

116 km

AxTe - *Acacia xiphophylla* tall shrubland over *Triodia epactia* very open hummock grassland;

EIAbTbr - *Eucalyptus leucophloia* scattered low trees over *Acacia bivenosa* open shrubland over *Triodia brizoides* hummock grassland;

ChAtuTeCE - *Corymbia hamersleyana* low open woodland over *Acacia tumida* var. *pilbarensis* tall shrubland over *Triodia epactia* very open hummock grassland and **Cenchrus* species tussock grassland; and

Disturbed.

The extended application area applied for in CPS 5117/2 was also surveyed by Biota (2008a, 2008b) and RTIO (2012a, 2012b) which identified the following vegetation associations within the extended application area:

106.7 km

Acacia bivenosa scattered tall shrubs over *Triodia wiseana* hummock grassland with mixed very open herbland.

108.2 km

Aerva javanica scattered low shrubs over *dichanthium fecundum*, *Panicum decompositum*, **Cenchrus ciliaris*, *Chrysopogon fallax*, *Astrebla pectinata*, **Cenchrus setiger* and *Themeda triandra* open tussock grassland.

* indicates introduced species

Based on the Biota (2008a) flora and vegetation survey, one vegetation type has been mapped within the amendment area (amendment application CPS 5117/4):

77.6 km

ChApyAbTwTe - *Corymbia hamersleyana* scattered low trees over *Acacia pyrifolia* scattered shrubs over *A. bivenosa* over shrubland over *Triodia wiseana*, *T. epactia* hummock grassland.

Clearing Description

Autohaul Works Project.

Robe River Mining Co Pty Ltd proposes to clear up to 18.5 hectares of native vegetation within a total boundary of approximately 23.13 hectares, for the purposes of rail activities and associated works. The project is located approximately 70 kilometres south of Karratha, in the Shire of Ashburton.

Vegetation Condition

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

To:

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment

The clearing is to carry out various rail activities along the rail network including upgrading of level crossings, installation of communication and signalling equipment, upgrade of radio base stations and upgrade of access tracks. Clearing is also required to improve drainage and reduce scouring of embankments of the existing railway.

The application area comprises of nine polygons along the rail network in Millstream Chichester National Park, with most of the polygons named by the closest chainage marker along the rail line. The nine polygons are Emu North Signalling Pad (collectively the two northern most polygons), 94.0 km, 97.7-98.3 km, 101 km, 106.7 km, 108.5 km, 114.8 km and 116 km.

An application to amend CPS 5117/3 was received by the Department of Mines and Petroleum on 3 September 2014 for the purposes of increasing the clearing permit boundary from 22.22 hectares to 23.13 hectares.

3. Assessment of application against clearing principles

Comments

Robe River Mining Co Pty Ltd (Robe River) has applied to increase the permit boundary from 22.2 hectares to 23.13 hectares. The amount of clearing permitted within the permit boundary will remain at 18.5 hectares.

A flora and vegetation survey of the amendment area conducted by Biota (2008) identified one vegetation type occurring within the extended permit boundary. This vegetation type is not considered to be of higher diversity than those assessed within clearing permit decision report CPS 5117/3, and the vegetation type is not considered to be a remnant locally or regionally. No vegetation communities recorded are considered to be Threatened or Priority Ecological Communities (GIS Database; Rio Tinto, 2014).

A targeted flora survey was also conducted over the amendment area by Rio Tinto (2014) on 2 September 2014. No Threatened or Priority Flora species were identified during the survey (Rio Tinto, 2014).

Therefore, the proposed clearing is not likely to be at variance to Principles (a), (c) and (d), and is not at variance to Principle (e).

The faunal habitats present within the amended permit boundary are consistent with those assessed in clearing permit decision report CPS 5117/3. No core habitat for conservation significant species was observed during the targeted flora survey by Rio Tinto (2014). Therefore the proposed clearing is not likely to be at variance to Principle (b).

A section of the application area falls within the Millstream-Chichester National Park (GIS Database). The Department of Parks and Wildlife (DPaW, 2014) advised that the amendment area is in proximity to a known area of a weed species, *Acetosa vesicaria* (Ruby Dock), and weed management should be applied by the proponent. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Current environmental information has been reviewed and the assessment of clearing principles (f), (g), (h), (i) and (j) is consistent with the assessment in clearing permit decision report CPS 5117/3.

Methodology

DPaW (2014)
Keighery (1994)
Rio Tinto (2014)
GIS Database:
- DEC Tenure
- Evaporation Isopleths
- Groundwater Salinity
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Rangeland Land System Mapping
- Rainfall, Mean Annual
- Threatened and Priority Flora
- Threatened Ecological Sites Buffered

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

Comments

There is one Native Title claim over the area under application (GIS Database). The claim WC2001/005 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 known 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 application was advertised on 15 September 2014 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

- Methodology** GIS Database:
- Aboriginal Sites of Significance
 - Native Title Claims - Registered with the NNTT
 - Native Title Claims - Filed at the Federal Court
 - Native Title Claims - Determined by the Federal Court

4. References

- Biota (2008a) A Vegetation and Flora Survey of the Rio Tinto Rail Duplication Project – Cape Lambert to Emu Siding. Report Prepared by Biota Environmental Sciences for Rio Tinto Iron Ore, 2008.
- Biota (2008b) Rio Tinto Rail Duplication Emu to Rosella Phase 3: Native Vegetation Clearing Permit Report. Report Prepared by Biota Environmental Sciences for Rio Tinto Iron Ore, December 2008.
- DPaW (2014) Advice from Environmental Management Branch, Department of Parks and Wildlife – Advice regarding Millstream-Chichester National Park for CPS 5117/4. Internal document, October 2014.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Rio Tinto (RTIO) (2012a) Addendum to the Statement Addressing the 10 Clearing Principles for Autohaul. Report Prepared by Rio Tinto, April 2012.
- Rio Tinto (RTIO) (2012b) Statement Addressing the 10 Clearing Principles Autohaul Emu to Rosella. Report Prepared by Rio Tinto, June 2012.
- Rio Tinto (2014) Metadata statement for the Targeted Rare Flora Survey for Wallys Camp. Internal document, September 2014.

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 DPaW 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.