



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5117/3
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: 26 September 2013

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 victrix* 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

AtTw - *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 surveyed 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

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 22.2 hectares, for the purpose of rail activities and associated works. The project is located approximately 70 kilometres south of Karratha, in the Shire of Ashburton.

Clearing will be undertaken with a dozer. Vegetation will be stockpiled and used in rehabilitation where possible.

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.

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.

Clearing permit CPS 5117/2 was granted by the Department of Mines and Petroleum on 17 January 2013. On 19 July 2013, Robe River Mining Co Pty Ltd (Robe River) applied to amend CPS 5117/2 for the purpose increasing the permit boundary by 0.7 hectares, from 21.5 hectares to 22.2 hectares. The amount of clearing will remain at 18.5 hectares.

3. Assessment of application against Clearing Principles

Comments

Robe River has applied to increase permit boundary from 21.5 hectares to 22.2 hectares. The amount of clearing authorised will remain at 18.5 hectares.

A flora survey of the application area conducted by Biota (2008a, 2008b) and RTIO (2012a, 2012b) identified 14 vegetation communities occurring within the extended permit boundary. None of these vegetation communities are considered to be of higher diversity than those assessed within clearing permit decision report CPS 5117/2 and the vegetation types are not considered to be a remnant locally or regionally. No vegetation communities recorded are considered to be Threatened or Priority Ecological Communities and no Threatened or Priority Flora were recorded within the additional area (Biota, 2008a, 2008b; RTIO, 2012a, 2012b). 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).

A section of the application area falls within the Millstream-Chichester National Park (GIS Database). The Department of Parks and Wildlife (DPaW, 2013) had no additional comments to make to those described in clearing permit decision report CPS 5117/2.

The fauna habitats present within the application area are consistent with those described in clearing permit decision report CPS 5117/2. Therefore the proposed clearing is not likely to be at variance to Principle (b).

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 5117/2 (GIS Database).

Methodology

Biota (2008a)
Biota (2008b)
DPaW (2013)
Keighery (1994)
RTIO (2012a)
RTIO (2012b)
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, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

There is one Native Title Claim over the area under application. The claim WC99/14 was determined by the Federal Court on 2 May 2005. 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 several 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 (formerly the Department of Environment and Conservation) 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 was advertised on 5 August 2013 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to the application.

Methodology

GIS Database:
- Aboriginal Sites of Significance
- 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.
- Department of Parks and Wildlife (DPaW) (2013) Advice from Environmental Management Branch – Advice regarding Millstream-Chichester National Park for CPS 5117/3. Internal document, August 2013.
- 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.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (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
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005. Department of Conservation and Land Management, Como, Western Australia*} :-

- P1** **Priority One - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P2** **Priority Two - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3** **Priority Three - Poorly Known taxa:** taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4** **Priority Four – Rare taxa:** taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
- R** **Declared Rare Flora – Extant taxa** (= *Threatened Flora* = *Endangered* + *Vulnerable*): taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X** **Declared Rare Flora - Presumed Extinct taxa:** taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been

destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1** **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3** **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4** **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). Priority Codes for Fauna. Department of Conservation and Land Management, Como, Western Australia} :-

- P1** **Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2** **Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3** **Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4** **Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5** **Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (Environment Protection and Biodiversity Conservation Act 1999)

- EX** **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W)** **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CR** **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN** **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU** **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD** **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 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.