

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5744/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Robe River Mining Co Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 47/228

Local Government Area: Shire of Ashburton
Colloquial name: Rail Duplication Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

.2 Mechanical Removal Construction of Temporary Water Infrastructure and

Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 10 October 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. Two Beard vegetation associations are located within the application area (GIS Database):

Beard vegetation association 93: Hummock grasslands, shrub steppe; kanji over soft spinifex and;

Beard vegetation association 152: Hummock grasslands, grass steppe; soft & hard spinifex soft spinifex (GIS Database).

A flora and vegetation survey of the application area and surrounding area conducted by Biota (2008) during 1 to 11 April 2008 identified 47 vegetation types, and four distinct vegetation communities within a eucalypt-spinifex savannah within the application area:

ApyAtrTeCcil – Acacia pyrifolia, A. trachycarpa scattered shrubs over Triodia epactia open hummock grassland over *Cenchrus ciliaris open tussock grassland;

AtrScanCcilHmix – Acacia trachycarpa, Sesbania cannabina open heath over *Cenchrus ciliaris very open tussock grassland over very open herbland;

AtrTe - Acacia trachycarpa open shrubland over Triodia epactia hummock grassland;

EvApyTeCcil – Eucalyptus victrix scattered low trees over Acacia pyrifolia high open shrubland over Triodia epactia scattered hummock grassland over *Cenchrus ciliaris open tussock grassland; and

Disturbed.

Clearing Description Rail Duplication Project. Robe River Mining Co Pty Ltd proposes to clear up to 1.2 hectares of native vegetation

within a total boundary of approximately 11.1 hectares for the purposes of the construction of temporary water infrastructure and associated activities. The project is located approximately 46 kilometres south of Roebourne, in

the Shire of Ashburton.

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

1994);

To:

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery,

1994).

Comment The vegetation condition was assessed during a survey undertaken by Biota (2008).

Vegetation clearing will be undertaken by mechanical means and the vegetation and topsoil will be stockpiled for

use in rehabilitation.

3. Assessment of application against Clearing Principles

Comments

The proposal to clear 1.2 hectare of native vegetation within an application area of 11.1 hectares for the purpose of constructing a temporary water reserve and associated activities is unlikely to have any significant environmental impacts. The application area occurs within the Chichester (PIL1) subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by undulating Archaean granite and basalt plains which include significant areas of basaltic ranges. Plains support a shrub steppe characterised by *Acacia inaequilatera* over *Triodia wiseana* (formerly *Triodia pungens*) hummock grasslands, while Eucalyptus leucophloia tree steppes occur on ranges (CALM, 2002).

There are no known Threatened or Priority flora located within the application area (Biota, 2008; GIS Database). No Threatened Ecological Communities or Priority Ecological Communities were recorded within the application area (Biota, 2008; GIS Database). The condition of the vegetation types was classified from 'degraded' to 'good' (Keighery, 1994; GIS Database).

There are no permanent watercourses mapped within the area under application however, there is one ephemeral drainage line (GIS Database). A survey conducted by Biota (2008) identified one vegetation type growing in association with the drainage line which is common throughout the local and regional area (GIS Database). Provided disturbance to riparian habitats is avoided or minimised where possible, and strict weed hygiene procedures are followed, the proposed works are not expected to substantially impact any watercourses or wetlands. Potential impacts to riparian vegetation may be minimised through the implementation of a vegetation management condition.

Based on the flora and vegetation survey conducted by Biota (2008), the survey did not identify critical feeding or breeding habitat for any conservation significant fauna species as the application area does not contain significant fauna habitat (DEC, 2013; GIS Database).

The application area occurs within the Millstream-Chichester National Park with a large portion of the application area intercepting the Deepdale railway corridor within the Millstream-Chichester National Park (GIS Database). Given that the application area is located within the Millstream-Chichester National Park all of the vegetation units recorded within the application area contributes toward the environmental values of the A Class Reserve. The recorded vegetation types, however, are widely represented within the local and regional area (Biota, 2008). Whilst this proposed clearing would only impact on a very small portion of the National Park, the activities are likely to result in an area of permanent disturbance. Given the 'degraded' to 'good' condition of the application area and the small scale of the proposal, the proposed clearing within the National Park will not pose a significant impact to the environmental values of the Millstream-Chichester National Park. DPaW (2013) is satisfied that provided the clearing is managed in accordance with the related mining proposal, the proposed clearing will have minimal impacts at a local and regional scale, given the small disturbance foot print.

The land systems associated with the application area have a low risk of erosion unless vegetative cover is removed (Van Vreeswyk et al., 2004). However, given the small nature and scale of the proposed activities, the clearing is not likely to result in appreciable land degradation.

The application area occurs within the Harding Dam Catchment Area, which was gazetted under the *Country Areas Water Supply Act 1947*. This area has been assigned a 'Priority 1' classification, however the Department of Water (DoW) has advised that the clearing application is acceptable provided activities are carried out in accordance with DoW's water quality protection guidelines (DoW, 2013). The application area is located within the proclaimed Pilbara groundwater area under the Rights in Water and Irrigation Act 1994 (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the DoW. The proposed clearing of 1.2 hectares is not likely to cause deterioration in the quality of surface or underground water or increase the incidence or intensity of flooding (GIS Database).

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principles (f) and (h), may be at variance to Principle (g), is not likely to be at variance to Principles (a), (b), (c), (d), (i), and (j), and is not at variance to Principle (e).

Methodology CA

CALM (2002)

DEC (2013)

DoW (2013)

DPaW (2013)

Biota (2008)

Keighery (1994)

Van Vreeswyk et al (2004)

GIS Database:

- DEC Tenure
- Evaporation Isopleths
- Groundwater Salinity

- Hydrography, linear
- IBRA WA (Regions Sub Regions)
- Halls Creek 50cm Orthomosaic Landgate 2004
- 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 (GIS Database). The claim WC1999/014 was determined by the Federal Court on 2 May 2005. 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 (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 clearing permit application was advertised on 19 August 2013 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received to the proposed clearing.

Methodology

GIS Database:

- Aboriginal Sites of Significance
- Native Title Claims Determined by the Federal Court

4. References

Biota Environmental Sciences (Biota) (2008) A Vegetation and Flora Survey of the Rio Tinto Rail Duplication Project – Cape Lambert to Emu Siding. Prepared for Rio Tinto Iron Ore, August 2008.

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 1 (PIL1 – Chichester subregion) Department of Conservation and Land Management, Western Australia.

DEC (2013) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, viewed 2 September 2013, http://naturemap.dec.wa.gov.au.

Department of Parks and Wildlife (DPaW) (2013) Advice from Environmental Management Branch – Advice regarding CPS 5744/1. Internal document, October 2013.

Department of Water (DoW) (2013) Advice from the Pilbara Region – Advice regarding CPS 5744/1. Internal document, October 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.

Van Vreeswyk, A.M.E., Payne, A.L., Hennig, P., and Leighton, K.A. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia, Department of Agriculture, Western Australia.

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}:-

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 — 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 — 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 — 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.

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.