

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5639/2

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Robe River Limited

1.3. Property details

Property: Iron Ore (Robe River) Agreement Act 1964, Mineral Lease 248SA (AML 70/248)

Local Government Area: Shire of Ashburton

Colloquial name: Robe Valley Mineral Exploration

1.4. Application

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

Mechanical Removal Mineral Exploration, Hydrogeological, Geotechnical and

Environmental Investigations, Mine Support Infrastructure and Associated Works

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 10 May 2018

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 603: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* over hard spinifex; and 609: Mosaic: Hummock grasslands, open low tree steppe; bloodwood with sparse kanji shrubs over soft spinifex/Hummock grasslands, open low tree steppe; snappy gum over *Triodia wiseana* on a lateritic crust (GIS Database).

A flora and vegetation survey was conducted over the application area between 4 and 10 December 2012 by Ecologia (2012). The application area comprised the following vegetation types:

AcTspRTw: Acacia citrinoviridis shrubland over *Triodia* sp. Robe River (M.E. Trudgen et al. MET 12367) and *Triodia wiseana* hummock grassland;

AoTw: Acacia orthocarpa shrubland over Triodia wiseana hummock grassland;

Te: Triodia epactia hummock grassland; and

Tw: Triodia wiseana hummock grassland.

A flora and vegetation survey was conducted over the additional amendment area by Astron (2015a). The amendment area comprised of thirteen vegetation types;

Vegetation of hills, mesas and breakaways

AcTspRTw - Scattered low trees of Eucalyptus leucophloia subsp. leucophloia over tall open shrubland of Acacia citrinoviridis over hummock grassland of Triodia sp. Robe River (M.E. Trudgen et al. MET 12367), Triodia wiseana;

AiTw - Scattered tall shrubs of Acacia inaequilatera over hummock grassland of Triodia wiseana;

AoAatTw - Tall open shrubland of *Acacia orthocarpa*, *Acacia atkinsiana* over open hummock grassland of *Triodia wiseana*;

AoTw - Shrubland of Acacia orthocarpa over hummock grassland of Triodia wiseana;

AprTwTspR - Tall open shrubland of *Acacia pruinocarpa* over open hummock grassland of *Triodia wiseana*, *Triodia* sp. Robe River (M.E. Trudgen et al. MET 12367);

ChAiTw - Scattered low trees of *Corymbia hamersleyana* over scattered tall shrubs of *Acacia inaequilatera* over hummock grassland of *Triodia wiseana*;

EIAoTw - Scattered low trees of *Eucalyptus leucophloia* subsp. *leucophloia* over tall shrubland of *Acacia orthocarpa* over hummock grassland of *Triodia wiseana*;

ElAtuAaTw - Eucalyptus leucophloia low open woodland over Acacia tumida var. pilbarensis, Acacia atkinsiana tall shrubland over *Triodia wiseana* very open hummock grassland; and

EITw - Low open woodland of Eucalyptus leucophloia subsp. leucophloia over hummock grassland of Triodia wiseana

Vegetation of floodplains

CcTeCspp - Low open woodland of *Corymbia candida* over open hummock grassland of *Triodia epactia* and very open tussock grassland of *Cenchrus ciliaris, *Cenchrus setiger,

AiTe - Scattered shrubs of Acacia inaequilatera over open hummock grassland of Triodia epactia; and

AsyAscTe - Scattered tall shrubs of *Acacia synchronicia* and/or *Acacia sclerosperma* subsp. *sclerosperma* over hummock grassland of *Triodia epactia*.

Vegetation of plains

AatAaAbTwTe - Tall open shrubland of *Acacia atkinsiana*, *Acacia ancistrocarpa*, *Acacia bivenosa* over open hummock grassland of *Triodia wiseana*, *Triodia epactia*.

Disturbed

*denotes weed species.

Clearing Description

Robe Valley Mineral Exploration.

Robe River Limited proposes to clear up to 30 hectares of native vegetation within a boundary of approximately 570 hectares, for the purposes of mineral exploration, hydrogeological, geotechnical and environmental investigations, mine support infrastructure and associated works. The project is located approximately 4 kilometres south of Pannawonica, within the Shire of Ashburton.

Vegetation Condition

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);

to

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment

The vegetation condition was derived from vegetation surveys conducted by Ecologia (2013) and Astron (2015a).

Clearing permit CPS 5639/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 18 July 2013 and was valid from 10 August 2013 to 31 July 2023. The permit authorised the clearing of up to 10 hectares of native vegetation within a boundary of approximately 370 hectares, for the purpose of mineral exploration.

On 14 March 2018, the Permit Holder applied to amend CPS 5639/1 to increase the amount of clearing authorised to 30 hectares, increase the permit boundary to approximately 570 hectares, and to amend the purpose of clearing to include hydrogeological, geotechnical and environmental investigations, mine support infrastructure, and associated works. The Permit Holder also applied to amend the annual reporting dates, and extend the duration of the permit by four years.

3. Assessment of application against Clearing Principles

Comments

Robe River Limited has applied to increase the area permitted to clear from 10 hectares to 30 hectares, and to increase the permit boundary from 370 hectares to 570 hectares. They have also applied to amend the purpose of clearing, the duration of the permit, and the annual reporting period and reporting date.

The flora and vegetation survey within the amended permit boundary identified 13 vegetation associations, one (AcTspRTw) of which is considered to represent the Priority Ecological Community (PEC) (Priority 3) '*Triodia* sp. Robe River assemblages of the mesas of the West Pilbara'. Approximately 2.14 hectares of this PEC is mapped within the amendment area, and the PEC is likely to extend outside the amendment boundary (GIS Database). Robe River (2018) advised that Astron (2015a) recorded 42.94 hectares of this PEC in the immediate area, while databases show approximately 717.53 hectares mapped elsewhere (Robe River, 2018). The PEC within the amendment boundary represents 0.3% of the known extent of the PEC, and the proposed clearing of 2.14 hectares is unlikely to impact the conservation status of this PEC.

The vegetation association AiTw is considered to be locally significant due to its association with multiple Priority Flora species and locations (Astron, 2015a), however, only 0.27 hectares of this vegetation association was mapped within the amendment area (Astron, 2015a), therefore the proposed clearing is unlikely to significantly impact the significance of this vegetation community on a local or regional scale.

The flora and vegetation survey identified the Priority 3 Flora species *Triodia* sp. Robe River also occurring within the amendment area. This species was recorded from 65 locations totalling approximately 2,468 individuals, representing 0.68% of known individuals within the Rio Tinto Database (Astron, 2015a; Robe River, 2018).

There were three broad fauna habitats mapped within the amendment area; Stony hills and slopes, breakaways, and grassland plains. Astron (2015b) identified the breakaway fauna habitat as containing a high diversity of microhabitats, and an important site of refuge for conservation listed fauna. No species of conservation significance were identified within the breakaway habitat type, however previous surveys have recorded the Pilbara Olive Python, Northern Quoll and Ghost Bat within this habitat type (Astron, 2015a). Potential impacts to conservation significant fauna as a result of the proposed clearing may be minimised by the implementation of a permit condition, restricting clearing in this habitat to access tracks.

The proposed amendment is not likely to have a significant impact on the quality and quantity of surface or groundwater or lead to an increase in the intensity of flooding (GIS Database).

The amendment area intersects the Newman land system (GIS Database). This land system is characterised by rugged jaspilite plateaux, ridges and mountains supporting hard spinifex grasslands. This land system is not prone to erosion (Van Vreeswyk et al., 2004).

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 report CPS 5639/1.

Methodology

Astron (2015a)

Astron (2015b)

Rio Tinto (2016)

Robe River (2018)

Van Vreeswyk et al (2004)

GIS Database:

- Hydrography, Lakes
- Hydrography, Linear
- Landsystem Rangelands

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

Comments

There is one Native Title claim over the area under application (DPLH, 2018). 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 numerous registered Aboriginal Sites of Significance within the application area (DPLH, 2018). 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 26 March 2018 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 (2018)

4. References

Astron (2015a) Middle Robe and East Deepdale Level 2 Vegetation and Flora Assessment Two phase survey. Report prepared by Astron Environmental Services Pty Ltd for Rio Tinto Iron Ore, 2015.

Astron (2015b) Middle Robe and East Deepdale Level 2 Fauna Assessment Two phase survey. Report prepared by Astron Environmental Services Pty Ltd for Rio Tinto Iron Ore, 2015.

DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 27 March 2018).

Ecologia (2012) Middle Robe and East Deepdale Biological Survey. Report prepared by Ecologica Environment for Rio Tinto Iron Ore, 2012.

- 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 (2018) Statement Addressing the 10 Clearing Principle at Mesa K Native Vegetation Clearing Permit, Supporting Report. Report prepared for Robe River Pty Limited, by Rio Tinto Iron Ore, February 2018.
- Robe River (2018) Additional information received in relation to Clearing Permit Application CPS 5639/2. Robe River Limited, Western Australia.
- Van Vreeswyk, A.M., Payne, A.L., Leighton, K.A. & Hennig, P. (2004) Technical bulletin no. 92: An inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, South Perth, Western Australia.

5. Glossary

Acronyms:

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)
DBCA
Department of Biodiversity Conservation and Attractions, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DBCA and DWER)

DEE Department of the Environment and Energy, Australian Government
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)

DPIRD Department of Primary Industries and Regional Development, Western Australia

DPLH Department of Planning, Lands and Heritage, Western Australia

DRF Declared Rare Flora

DoE Department of the Environment, Australian Government (now DEE)

DoW Department of Water, Western Australia (now DWER)

DPaW Department of Parks and Wildlife, Western Australia (now DBCA)

DSEWPaC Department of Sustainability, Environment, Water, Population and Communities (now DEE)

DWER Department of Water and Environmental Regulation, Western Australia

EPA Environmental Protection Authority, Western Australia
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

PEC Priority Ecological Community, Western Australia

RIWI Act Rights in Water and Irrigation Act 1914, Western Australia

TEC Threatened Ecological Community

Definitions:

{DPaW (2017) 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 1950*.

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 1950*.

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.