



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2552/6
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 Mining Lease 248SA (AML 70/248)
Local Government Area: Shire of Ashburton
Colloquial name: Bungaroo Mineral and Hydrological Exploration

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
150		Mechanical removal	Mineral exploration, hydrological drilling, geotechnical investigations and associated activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 7 April 2016

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 and are useful to look at vegetation in a regional context. Two Beard vegetation associations are mapped within the application area (GIS Database):

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*; and

609: Mosaic: Hummock grasslands; open low tree steppe; bloodwood with sparse kanji shrubs over soft spinifexes / Hummock grasslands, open low tree steppe; snappy gum over *Triodia wiseana* on a lateritic crust.

Several vegetation and flora surveys have been carried out over the Bungaroo project area by Biota Environmental Sciences (2007). Biota Environmental Sciences reported 21 vegetation associations within the previous permit boundary which are detailed in Decision Report 2552/4.

A review of flora surveys in 2015 identified the following vegetation associations within the additional area which was added to the permit boundary for CPS 2552/5 (Rio Tinto, 2015):

Vegetation of Plains and Rises

ChAbTe: *Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* open shrubland over *Triodia epactia* hummock grassland;

ChAiApyTe: *Corymbia hamersleyana* open woodland over *Acacia inaequilatera*, *A. pyrifolia* tall open shrubland over *Triodia epactia* hummock grassland;

ChAiTe: *Corymbia hamersleyana* low open woodland over *Acacia inaequilatera* tall open shrubland over mixed scattered shrubs over *Triodia epactia* hummock grassland;

ChAiTw: *Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over mixed scattered shrubs over *Triodia wiseana* open hummock grassland;

ChAiTw/ChAiApyT: *Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over mixed scattered shrubs over *Triodia wiseana* open hummock grassland / *Corymbia hamersleyana* open woodland;

ChAiTw/ChAiTe: *Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over mixed scattered shrubs over *Triodia wiseana* open hummock grassland / *Corymbia hamersleyana* low open woodland;

Vegetation of Tall Stony Hills and Breakaways

AiT_w: *Acacia inaequilatera* tall open shrubland over *Triodia wiseana* hummock grassland;

EIAiAbT_w: *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia inaequilatera*, *A. bivenosa* scattered tall shrubs over *Triodia wiseana* hummock grassland;

EIAiAprT_w: *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia inaequilatera*, *A. pruinocarpa* scattered tall shrubs over *Triodia wiseana* (*Triodia* sp. Robe River (M.E. Trudgen et al. MET 12367)) open hummock grassland;

EIAmaT_w: *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia maitlandii* open heath over *Triodia wiseana* open hummock grassland;

Vegetation of Drainage Areas (Major Creeklines)

ChGpT_e: *Corymbia hamersleyana* scattered low trees over *Grevillea pyramidalis* scattered tall shrubs over *Tephrosia rosea* var. *glabrior* scattered low shrubs over *Triodia epactia* hummock grassland;

EvApyAtrT_e: *Eucalyptus victrix* scattered low trees over *Acacia pyrifolia*, *A. trachycarpa* open shrubland over *Tephrosia rosea* var. *glabrior* low shrubland over *Triodia epactia* very open hummock grassland;

EvCv: *Eucalyptus victrix* open forest over *Cyperus vaginatus* sedgeland;

Vegetation of Drainage Areas (Minor Flowlines)

AcT_e: *Acacia colei* var. *ileocarpa* tall open shrubland over *Triodia epactia* hummock grassland;

ApyGOaGpyT_eT_w: *Acacia pyrifolia*, *Gossypium australe*, *Grevillea pyramidalis* shrubland to tall shrubland over *Tephrosia rosea* var. *glabrior* low open shrubland over *Triodia epactia*, *T. wiseana* open hummock grassland;

ChAeGwT_e: *Corymbia hamersleyana* low open woodland over *Acacia elachantha*, *Grevillea wickhamii* tall open scrub over *Triodia epactia* hummock grassland;

ChAtuT_wT_e: *Corymbia hamersleyana*, *Eucalyptus leucophloia* scattered low trees over *Acacia tumida* var. *pilbarensis*, *Petalostylis labicheoides* tall open scrub over *Triodia wiseana* open hummock grassland;

Cleared areas

Previously cleared or disturbed areas, such as tracks.

Clearing Description

Bungaroo Mineral and Hydrological Exploration.
Robe River Ltd proposes to clear up to 150 hectares of native vegetation within a total boundary of approximately 3,086 hectares for the purpose of mineral exploration. The project is located approximately 130 kilometres east of Onslow within the Shire of Ashburton.

Vegetation Condition

Pristine: No obvious signs of disturbance (Keighery, 1994).

To

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

Comment

Clearing permit CPS 2552/1 was granted by the Department of Industry and Resources (now the Department of Mines and Petroleum) on 21 August 2008 and authorised the clearing of up to 21 hectares of native vegetation within an area totalling approximately 178 hectares.

Amended permit CPS 2552/2 was granted on 11 March 2010 to extend the timeframe to complete rehabilitation from 6 months to 12 months following clearing.

DMP initiated an amendment (CPS 2552/3) to the permit on 30 October 2012 to correct an administrative error. The clearing area and permit boundary remained unchanged.

Amended permit CPS 2552/4 was granted on 23 October 2014, increasing the permit boundary from 178 hectares to approximately 2,307 hectares. The area of clearing authorised remained unchanged.

CPS 2552/5 was granted on 9 July 2015, increasing the authorised clearing from 21 hectares to 25 hectares, increasing the permit boundary from approximately 2,307 hectares to approximately 3,086 hectares, adding hydrological drilling, geotechnical investigations and associated activities to the purpose on the permit and extending the duration of the permit by an additional five years.

On 11 February 2016 the Permit Holder applied to amend CPS 2552/5 to increase the area approved to clear from 25 hectares to 150 hectares, and to amend the annual reporting date from 31 July to 30 June each year. There is no change to the permit boundary.

3. Assessment of application against clearing principles

Comments

Robe River Limited has applied to increase the amount of clearing authorised by 125 hectares, to allow for additional exploration drilling activities within the existing clearing permit boundary. The permit holder has also applied to change the annual reporting dates.

There are no Threatened or Priority Ecological Communities recorded within the permit boundary (Rio Tinto, 2015; GIS Database). The vegetation associations, landforms and fauna habitat types found within the application area are well represented in the region (GIS Database), and an additional 125 hectares of clearing within a total permit boundary of approximately 3,086 hectares is unlikely to result in any significant additional impacts to the biodiversity of the area.

The land systems mapped over the additional areas are generally not susceptible to erosion (Van Vreeswyk et al., 2004), and the additional clearing is unlikely to result in significant land degradation.

The clearing permit area falls wholly within the Bungaroo Creek Water Reserve which is a Priority 1 Public Drinking Water Source Area (PDWSA) (GIS Database). The Department of Water has identified vegetation clearing and mineral exploration as potential risks to water quality in this PDWSA, and considers that an additional 125 hectares of clearing within the water catchment is significant (DoW, 2016). DoW advise that all activities within the water reserve should be conducted in accordance with DoW Water Quality Protection Notes and Guidelines, to minimise potential impacts to water quality (DoW, 2016). Any groundwater abstraction or taking or diversion of surface water within this area is subject to licencing by the DoW (DoW, 2016).

There is a Pilbara pool located downstream of the clearing activities (DoW, 2016). River pools of varying permanence occur along many Pilbara river systems and are often connected to and interact with the underlying alluvial aquifers (DoW, 2016). The proponent should ensure flows to this pool remain uninterrupted (DoW, 2016). The continued implementation of the existing watercourse management condition on the permit may minimise impacts to ground and surface water.

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*.

The assessment of the proposed clearing against the clearing principles remains consistent with the assessment in decision report CPS 2552/5.

Methodology

Biota (2007)
DoW (2016)
Van Vreeswyk et al (2004)

GIS Database:
- DPaW Tenure
- Hydrography, linear
- Imagery
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Flora

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

Comments

There is one Native Title Claim (WC1999/012) over the area under application (DAA, 2016). 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 multiple registered Aboriginal Sites of Significance within the application area (DAA, 2016; 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, the Department of Water, and the Department of Parks and Wildlife, 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 amendment application was advertised on 29 February 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

Methodology

DAA (2016)

GIS Database:
- Aboriginal Sites Register System

4. References

- Biota (2007) A Vegetation and Seasonal Flora Survey of the Bungaroo Trial Pit and Transport Corridor to Mesa J, and Sampling of the Broader Bungaroo Valley. Report prepared for Robe River Limited, by Biota Environmental Sciences Pty Ltd.
- DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 4 April 2016).
- DoW (2016) Advice received in relation to Clearing Permit Application CPS 2552/6. Department of Water, March 2016.
- 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 (2015) Desktop Flora, Vegetation and Fauna Habitat Assessment at Bungaroo, Robe Valley. Supporting information for clearing permit amendment CPS 2552/5.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) Technical Bulletin - An Inventory and Condition Survey of the Pilbara Region, Western Australia, No. 92. Department of Agriculture, Government of Western Australia, Perth, Western Australia.

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
TEC	Threatened Ecological Community

Definitions:

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T	Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , 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. 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. 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 <i>Wildlife Conservation Act 1950</i> , 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 <i>Wildlife Conservation Act 1950</i> , 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.