



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4830/3
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 East Pilbara
Colloquial name: West Angelas Deposit F Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
45		Mechanical Removal	Mineral exploration, hydrogeological drilling and access tracks

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 5 March 2015

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 have been mapped within the application area:

18: Low woodland; mulga (*Acacia aneura*); and
82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana* (GIS Database).

Biota Environmental Sciences (2006) conducted a flora survey of the application area and surrounding areas from 5 to 11 May 2004 and described five broad vegetation types within the application area;

- Hard Spinifex *Triodia wiseana* and Soft Spinifex *Triodia pungens* or *Triodia* sp. Mt. Ella hummock grasslands with a scattered to moderately dense shrub overstorey dominated by varying proportions of *Acacia maitlandii*, *A. bivenosa* and *A. hamersleyensis* on stony hills in the northern section of the study area;
- Low woodlands to tall shrublands of *Acacia catenulata* gorges;
- Hummock grasslands of *Triodia* aff. *basedowii*, with some *T. pungens*, on stony baseslopes;
- Woodlands to tall shrublands of various forms of Mulga *Acacia aneura* over open hummock grasslands, usually of *Triodia pungens*, on clayey soils of the broad valleys in the southern section of the study area; and
- Creeklines supporting tall shrublands dominated by various combinations of *Acacia maitlandii*, *Gossypium robinsonii*, *Petalostylis labicheoides* and *Rulingia luteiflora* over open hummock grassland of *Triodia pungens* (Biota Environmental Sciences, 2006).

A flora and vegetation survey of the amendment area (amendment application CPS 4830/3) conducted by ecologia (2013) during May 2014 identified four additional vegetation types:

- **EllAmTssp** - (*Eucalyptus leucophloia* subsp. *leucophloia* and *E. gamophylla* open woodland over *Acacia maitlandii*, *A. hamersleyensis* and *Keraudrenia velutina* and *Senna glutinosa* subsp. *glutinosa* open shrubland over *Triodia wiseana* and/or *T. pungens* and/or *T. basedowii* open hummock grassland);
- **SggAbTp** - (*Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* isolated trees over *Senna glutinosa* subsp. *glutinosa* and *Acacia maitlandii* sparse shrubland over *Triodia pungens* open hummock grassland);
- **SggTp** - (*Acacia pruinocarpa* and *Eucalyptus leucophloia* subsp. *leucophloia* or *Corymbia hamersleyana* isolated trees over *Senna glutinosa* subsp. *glutinosa*, *Acacia bivenosa* and *Gossypium robinsonii* open shrubland over *Triodia pungens* hummock grassland); and

- **Tp** - (*Eucalyptus leucophloia* subsp. *leucophloia* and *Acacia pruinocarpa* isolated trees over *Senna glutinosa* subsp. *glutinosa*, *A. bivenosa* and *Ptilotus rotundifolius* isolated shrubs over *Triodia pungens* or *T. basedowii* or *T. sp.* Mt Ella hummock grassland).

Clearing Description	West Angelas Deposit F Project. Robe River Limited proposes to clear up to 45 hectares of native vegetation within a total boundary of approximately 1,457 hectares for the purposes of mineral exploration, hydrogeological drilling and access tracks. The project is located approximately 90 kilometres west of Newman, in the Shire of Ashburton.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
Comment	The vegetation condition was derived from a description by Botanica Consulting (2008). Vegetation was altered due to obvious signs of disturbance such as historic tracks and exploration drilling (Botanica Consulting, 2008). Clearing permit CPS 3504/1 was granted on 21 January 2010, and is valid from 20 February 2010 to 20 February 2015. The clearing permit authorised the clearing of 100 hectares of native vegetation. An application to amend CPS 3504/1 was received by the Department of Mines and Petroleum on 12 January 2015 for the purpose of extending the duration of the permit by three years to 20 February 2018.

3. Assessment of application against clearing principles

Comments

Robe River Limited has applied to increase the amount of clearing by 9.5 hectares and increase the permit boundary by 63.6 hectares.

A flora and vegetation survey of the application area and surrounding area by ecologia (2013) identified four vegetation types within the amended permit boundary. None of these vegetation communities are considered to be of higher diversity than those assessed within clearing permit decision report CPS 4830/2 and the vegetation types are not considered to be a remnant locally or regionally.

There were two records of the Priority 3 Flora species *Triodia* sp. Mt Ella recorded within the amended permit boundary (ecologia, 2013; Rio Tinto, 2014). Rio Tinto's (2014) internal database has an additional 370 locations comprising of approximately 9,719 individuals recorded within the local and regional area, and the species is well known across its range and throughout the locality where suitable habitat occurs (Rio Tinto, 2014). The proposed clearing of the two records of *Triodia* sp. Mt Ella within the amended permit boundary is unlikely to impact the conservation significance of this species. No Threatened Flora species, Priority or Threatened Ecological Communities were identified within the amendment area (Rio Tinto, 2014; GIS Database).

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).

ecologia (2014) mapped two fauna habitat types within the amended permit boundary;

- Hilltop, hillslope, ridge or cliff (62.9 hectares); and
- Major gorge or gully habitat (1.6 hectares).

The major gorge or gully fauna habitat type occurs elsewhere within the Hamersley subregion and wider Pilbara region, but is relatively uncommon. Caves and deep rock crevices are known to form within the geomorphology associated with this habitat type representing potential roosting habitat for species such as Ghost Bat (*Macroderma gigas*) (DPaW – Priority 4) and Pilbara Leaf-nosed Bat (*Rhinioncteris aurantius*) (EPBC Act – Vulnerable, WC Act – Schedule 1). The major gorge and gully habitat is also potential shelter habitat for the Pilbara Olive Python (*Liasis olivaceus barroni*) (WC Act – Schedule 1; EPBC Act – Vulnerable) and the semi-permanent rock pools associated with this habitat represent suitable foraging habitat for all three species mentioned above. Potential impacts to the major gorge or gully habitat may be minimised by the implementation of a fauna management condition.

Biologic (2014) identified a Ghost Bat cave within the major gorge or gully habitat type during a survey in 2014 and described the cave as very large, with previous surveys identifying pregnant Ghost Bat females in this cave (Integrated Environmental Services, 1980; ecologia, 1998). The abundance of scats and feeding remains observed in the Ghost Bat cave from surveys conducted over a period of 25 years suggests long term utilisation of this cave by Ghost Bats. Biologic (2014) and ecologia (2014) consider the cave to be a Ghost Bat maternity cave and is considered to be of "considerable conservation significance". Potential impacts to this species may be minimised by the implementation of an exclusion zone.

The Hilltops, hillslopes, ridges or cliffs fauna habitat type contains potentially significant microhabitats such as extensive pebble-strewn hill slopes, rocky cracks and crevices for small ground dwelling mammals and reptiles, and rock overhangs suitable to provide shelter for larger macropods and reptiles. This habitat is widespread across the Pilbara region, but often creates geographically isolated microhabitats for a range of species. This habitat type represents 97.5 percent of the application area (GIS Database). The clearing of 45 hectares within a boundary of 763.6 hectares is unlikely to have an impact on the availability of this habitat.

Therefore, the proposed clearing may 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 4830/2.

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

Comments

There are two Native Title claims over the area under application (WC05/3 and WC10/11). These claims have been registered with the National Native Title Tribunal on behalf of the claimant groups. 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 12 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, the 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 10 November 2014 by the Department of Mines and Petroleum (DMP) inviting submissions from the public. There were no submissions 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

- Botanica Consulting (2008) Binduli Flora and Vegetation Survey, Unpublished report for Norton Gold Field Limited, Boulder, Western Australia.
- ecologia (2013) Rio Tinto Greater West Angelas Vegetation and Flora Assessment. Unpublished report prepared for Rio Tinto Iron Ore.
- ecologia (2014) Rio Tinto Iron Ore Greater West Angelas Terrestrial Fauna Assessment. Unpublished report prepared for Rio Tinto Iron Ore.
- 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 (2014) Statement Addressing the 10 Clearing Principles – RC Drilling for geotechnical appraisal at West Angelas Deposit F. Internal Report, November 2014.
- Biota Environmental Sciences (2006) Vegetation and Flora Survey of West Angelas Deposits E and F. Consultant report prepared for Robe River Iron Associates, March 2006.

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.

