



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3758/2
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 East Pilbara
Colloquial name: West Angelas Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
15		Mechanical Removal	Mineral Exploration, borrow pits and access tracks.

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 9 April 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. One Beard vegetation association has been mapped within the application area:

18: Low woodland; mulga (*Acacia aneura*).

Rio Tinto (2010) conducted a flora and vegetation survey over the application area on 23 and 24 March 2010. Nine vegetation types were identified within the application areas (Rio Tinto, 2010).

Hill Slope Vegetation

1. EIEgChAsAsAtTpTbTt:

Eucalyptus leucophloia, *Eucalyptus gamophylla*, *Corymbia hamersleyensis* low open forest over *Acacia steedmanii* high open shrubland over *Acacia sibirica*, *Acacia tenuissima* open shrubland over *Triodia pungens*, *Triodia basedowii* hummock grassland over *Themeda triandra* very open tussock grassland.

2. EgCdAaAsAbEfAtPrTpTb:

Eucalyptus gamophylla, *Corymbia deserticola*, *Acacia aneura* low woodland over *Acacia steedmanii*, *Acacia bivenosa* high shrubland over *Eremophila forrestii*, *Acacia tenuissima* open shrubland over *Ptilotus rotundifolius* low scattered shrubs over *Triodia pungens*, *Triodia basedowii* open hummock grassland.

3. HcEIAbAsTbTp:

Hakea chordophylla, *Eucalyptus leucophloia* low open woodland over *Acacia bivenosa* shrubland over *Acacia sibirica* low open shrubland over *Triodia basedowii*, *Triodia pungens* hummock grassland.

4. EIHCpArAaEsAbTp:

Eucalyptus leucophloia, *Hakea chordophylla*, *Acacia pruinocarpa* low open woodland over *Acacia rhodophloia*, *Acacia aneura* high shrubland over *Exocarpos sparteus*, *Acacia bivenosa* open shrubland over *Triodia pungens* hummock grassland.

5. EIEgAbAtPrTpTb:

Eucalyptus leucophloia, *Eucalyptus gamophylla* low open woodland over *Acacia bivenosa*, *Acacia tenuissima* shrubland over *Ptilotus rotundifolius* low open shrubland over *Triodia basedowii*, *Triodia pungens* hummock grassland.

Mulga Plain Vegetation

6. AaCdApShEfTsTp:

Acacia aneura, *Corymbia deserticola*, *Acacia pruinocarpa* low open forest over *Senna helmsii*, *Eremophila forrestii*, *Tribulus suberosus* low open shrubland over *Triodia pungens* open hummock grassland.

7. AaApCdMvTp:

Acacia aneura, *Acacia pruinocarpa*, *Corymbia deserticola* low open forest over *Maireana villosa* low scattered shrubs over *Triodia pungens* hummock grassland.

Minor Flowline Vegetation

8. ElAbApAmPoCITpTt:

Eucalyptus leucophloia low open woodland over *Acacia bivenosa*, *Acacia pyriformis*, *Acacia maitlandii* open heath over *Ptilotus obovatus*, *Corchorus lasiocarpus* low open shrubland over *Triodia pungens* hummock grassland over *Themeda triandra* open tussock grassland.

9. EgElAmApTpTbTt:

Eucalyptus gamophylla, *Eucalyptus leucophloia* low woodland over *Acacia monticola*, *Acacia pyriformis* open heath over *Triodia pungens*, *Triodia basedowii* hummock grassland over *Themeda triandra* scattered tussock grass.

Based on vegetation mapping conducted by Ecologia (2013), vegetation within the additional area applied to clear (CPS 3758/2) is described as:

SggAbTp:

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 on gravelly plains (Rio Tinto, 2014).

Clearing Description	West Angelas Project. Robe River Limited (Robe River) proposed to clear up to 15 hectares of native vegetation within a total boundary of approximately 41.7 hectares, for the purpose of mineral exploration, borrow pits and access tracks. The project is located approximately 108 kilometres east of Paraburdoo, in the Shire of East Pilbara.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994); To: Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
Comment	The vegetation condition was assessed by a botanist from Rio Tinto. The vegetation conditions were described using a scale based on Trudgen (1988) and have been converted to the corresponding conditions from the Keighery (1994) scale. Clearing Permit 3758/1 was granted by the Department of Mines and Petroleum on 15 July 2010. The clearing permit authorised the clearing of 12.25 hectares of native vegetation within a total boundary of approximately 38.2 hectares.

3. Assessment of application against clearing principles

Comments

Robe River has applied to extend the permit duration from 31 July 2015 to 31 July 2025. They have also applied to increase the clearing permit boundary from 38.2 hectares to 41.7 hectares, and the area to be cleared from 12.25 hectares to 15 hectares.

The proposed increase in permit boundary is considered likely to impact one Priority flora species. While this species (*Rhagodia* sp. Hamersley (M. Trudgen 17794); Priority 3) has not been previously recorded within or adjacent to the amended application area, a high number of records occur within 5 kilometres of the proposed clearing, and suitable habitat for this species is present (Rio Tinto, 2014). However, this species has a large distribution that spans the Gascoyne, Fortescue and Hamersley subregions of the Pilbara (Western Australian Herbarium, 2015), and the proposed clearing is unlikely to impact the conservation of this species.

An additional 10 Priority flora have been recorded within 15 kilometres of the amended application area and may have suitable habitat present, and are therefore considered to potentially occur within the proposed clearing (Rio Tinto, 2014). A majority of these species have moderate to large distributions (Western Australian Herbarium, 2015), and are not likely to be significantly impacted by the proposed clearing. However, two Priority 1 species, *Brunonia* sp. Long hairs (D.E. Symon 2440) and *Josephinia* sp. Marandoo, have restricted distributions and may occur in association with minor drainage lines within the amended application area (Rio Tinto, 2014). These species were not recorded during a flora survey of the previous permit area (Rio Tinto, 2010), and the nearest records occur 8 and 4 kilometres from the proposed clearing, respectively (Rio Tinto, 2014). Potential impacts to these species may be minimised by the implementation of a watercourse management condition.

Current environmental information has been reviewed and the assessment against the clearing principles is consistent with the assessment in clearing permit decision report CPS 3758/1.

Methodology	Rio Tinto (2010) Rio Tinto (2014) Western Australian Herbarium (2015)
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Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

There is one native title claim over the application area (GIS Database). This claim (WC97/43) has been registered with the Native Title Tribunal on behalf of the claimant group (GIS Database). 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*.

According to available databases, there are no registered Site of Aboriginal Significance located in the area applied to clear (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal 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 9 March 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology GIS Database:

- Aboriginal Sites of Significance
- Native Title Claims - Registered with the NNTT

4. References

- Ecologia (2013) Rio Tinto Greater West Angelas Vegetation and Flora Assessment. Unpublished report prepared by Ecologia Environment 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 (2010) Flora and Vegetation Survey for Proposed Exploration Drilling and Borrow Pit Construction at West Angelas. Unpublished report Prepared by Rio Tinto Iron Ore Pty Ltd.
- Rio Tinto (2014) Mt Ella East / West Angelas A boundary. NVCP Supporting Report prepared by Rio Tinto Iron Ore Pty Ltd.
- Trudgen, M.E (1988) A Report on the Flora and Vegetation of the Port Kennedy Area. Unpublished Report Prepared for Bowman Bishaw and Associates, West Perth.
- Western Australian Herbarium (2015) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed March 2015).

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}:-

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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 the Department 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:**
- 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.
 - 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.
 - 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:

- Native vegetation should not be cleared if it comprises a high level of biological diversity.
- 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.
- Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- 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.
- Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- 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.