Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6483/1
Permit type: Purpose

1.2. Proponent details

Proponent's name: **Robe River Ltd**

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: Western Hill Drilling Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5		Mechanical Removal	Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 26 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 vegetation associations have been mapped within the application area (GIS Database):

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

A level 1 flora survey of the application area was undertaken by Biota Environmental Sciences (Biota) on 25 and 26 March 2014. The following vegetation communities were identified within the application area (Biota, 2014):

H3: ElAprTsps - *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia pruinocarpa* tall open shrubland over *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) hummock grassland;

H4:ElTp - *Eucalyptus leucophloia* subsp. *leucophloia* low open woodland over *Triodia pungens* open hummock grassland;

H5: ElTsps - *Eucalyptus leucophloia* subsp. *leucophloia* low open woodland over *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) hummock grassland;

H6: Tsps - *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) open hummock Grassland;

P1: AanAprERIb - *Acacia "aneura"* (sens. lat.), *A. pruinocarpa* tall shrubland over *Eriachne benthamii* tussock grassland;

P2: AprAanTe - *Acacia pruinocarpa, A. "aneura"* (sens. lat.) tall open shrubland over *Triodia epactia* open hummock grassland;

C2: EvAciPToTe - *Eucalyptus victrix* scattered trees over *Acacia citrinoviridis* tall shrubland over *Ptilotus obovatus* scattered low shrubs over *Triodia epactia* open hummock grassland; and

C3: GOrTe - *Gossypium robinsonii* tall shrubland over *Triodia epactia* hummock Grassland.

Clearing Description

Western Hill Drilling Project.
Robe River Ltd proposes to clear 5 hectares of native vegetation within a boundary of 47.805 hectares for the purposes of mineral exploration. The project is located approximately 94 kilometres south-east of Tom Price in 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 a report prepared by Biota (2014). Rainfall was well above average in January 2014, however, there was little rain during February and March resulting in some annual herbs and grasses not being present at the time of the survey (Biota, 2014).

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.

3. Assessment of application against clearing principles

Comments

The vegetation survey identified eight vegetation communities within the application area (Biota, 2014). The vegetation condition ranged from 'pristine' to 'completely degraded' with the majority of the area in 'excellent' condition (Biota, 2014). None of the vegetation communities recorded were identified as a Priority or Threatened Ecological Community (Biota, 2014; GIS Database).

The flora survey recorded a total of 194 flora taxa from 83 genera and 35 families (Biota, 2014). The species recorded were considered to be typical for the area and common for the Pilbara bioregion (Biota, 2014). No species of Threatened flora have been recorded within the application area (Biota, 2014; GIS Database). There were four species of Priority flora recorded during the flora survey; *Eremophila* sp. Hamersley Range (Priority 1), *Rhagodia* sp. Hamersley (Priority 3), *Solanum kentrocaule* (Priority 3) and *Triodia* sp. Mt Ella (Priority 3) (Biota, 2014; Ecological, 2014). There was one individual of *Eremophila* sp. Hamersley Range recorded within the application area (Ecological, 2014). This species is a recently described species and is currently distributed in the southern half of the Hamersley Range (Western Australian Herbarium, 2015). The removal of one individual is not likely to have a significant impact on this species. *Rhagodia* sp. Hamersley was recorded from two locations within the application area with one individual recorded at each location (Biota, 2014; Ecological, 2014). There were four individuals of *Solanum kentrocaule* recorded from one location within the application area (Biota, 2014). *Triodia* sp. Mt Ella was recorded from two locations within the application area with 75 individuals recorded in total (Biota, 2014; Ecological 2014). A flora survey of the adjacent area recorded in excess of 1,400 *Triodia* sp. Mt Ella individuals indicating that it is common in the local area (Ecological, 2014). The proposed clearing is not expected to have a significant impact on these Priority flora species in the local area.

Based on observations during the flora survey the following fauna habitats were identified within the application area; stony hillslopes and crests, plains and creeklines (Biota, 2014). The majority of the application area is comprised of the stony hillslopes and crests habitat. The habitats within the application area are widespread throughout the Hamersley subregion. There was one inactive Western Pebble-mound Mouse mound (*Pseudomys chapmanii* - Priority 4) recorded within the application area (Biota, 2014). Suitable habitat for this species is widespread throughout the region. The proposed clearing of 5 hectares is not likely to have a significant impact on native fauna species in the local area.

There are numerous ephemeral drainage lines that pass through the application area (GIS Database). Vegetation communities C2 and C3 were identified as being associated with creeklines (Biota, 2014). Vegetation community C2 is associated with Turee Creek East in the south-west of the application area (Biota, 2014). The proposed clearing will impact fringing vegetation and will not disturb Turee Creek East itself.

The application area is less than one kilometre from Karijini National Park at its western most point (GIS Database). The proposed clearing will not impact any linkages into the National Park, however, care should be taken to reduce the risk of spreading weeds into the area. This may be minimised by the implementation of a weed management condition.

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 Principle (f), is not likely to be at variance to Principles (a), (b), (c), (d), (g), (h), (i), and (j), and is not at variance to Principle (e).

Methodology

Biota (2014)
Ecological (2014)
GIS Database
Western Australian Herbarium (2015)

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

Comments

There are two Native Title claims (WC2010/011; WC2010/016) over the area under application (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*.

There are no registered Aboriginal Sites of Significance located within the clearing permit 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, 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 2 March 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology GIS Database

4. References

Biota (2014) Western Hill Native Vegetation Clearing Permit Report. Unpublished report for Rio Tinto Pty Ltd. Biota Environmental Sciences, July 2014.

Ecological (2014) West Angelas 2 (AR-14-12516) Biological Assessment. Unpublished report for Rio Tinto Pty Ltd, dated October 2014.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

GIS Database: Data Layers (DPaW Tenure, Hydrography, linear, Pre-European Vegetation, Threatened and Priority Ecological Communities (TEC/PEC – Boundaries).

Trudgen, M.E. (1998) A Report on 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 18 March 2014.

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} :-

P1	**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 **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 **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 **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.

P3 **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.