



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 2552/5  
Permit type: Purpose

### 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:
25		Mechanical removal	Mineral exploration, hydrological drilling, geotechnical investigations and associated activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 9 July 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 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), which includes the previous permit boundary. Biota Environmental Sciences reported 21 vegetation associations within the previous permit boundary which are detailed in Decision Report 2554/4.

A review of flora surveys over the additional permit boundary identified the following vegetation associations (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<sub>w</sub>: *Acacia inaequilatera* tall open shrubland over *Triodia wiseana* hummock grassland;

EIAiAbT<sub>w</sub>: *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia inaequilatera*, *A. bivenosa* scattered tall shrubs over *Triodia wiseana* hummock grassland;

EIAiAprT<sub>w</sub>: *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<sub>w</sub>: *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<sub>e</sub>: *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<sub>e</sub>: *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<sub>e</sub>: *Acacia colei* var. *ileocarpa* tall open shrubland over *Triodia epactia* hummock grassland;

ApyGOaGpyTeT<sub>w</sub>: *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<sub>e</sub>: *Corymbia hamersleyana* low open woodland over *Acacia elachantha*, *Grevillea wickhamii* tall open scrub over *Triodia epactia* hummock grassland;

ChAtuT<sub>w</sub>T<sub>e</sub>: *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 25 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. CPS 2552/1 was amended on 11 March 2010 to extend the timeframe to complete rehabilitation from 6 months to 12 months following clearing. DMP initiated an amendment to CPS 2552/2 on 30 October 2012 to correct an administrative error. The clearing area and permit boundary remained unchanged. CPS 2552/3 was amended on 23 October 2014 to increase the permit boundary from 178 hectares to 2,307 hectares.

### 3. Assessment of application against clearing principles

#### Comments

Robe River Limited has applied to amend Clearing permit CPS 2552/4 for the purpose of increasing the amount of clearing authorised 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.

Flora and vegetation surveys over the additional area have identified 17 vegetation associations within these areas (Rio Tinto, 2015). None of the vegetation communities recorded were identified as a Threatened or Priority Ecological Community (GIS Database; Rio Tinto, 2015). The majority of the vegetation within the

additional areas is in 'very good' condition with some areas in 'completely degraded' condition due to previous exploration activities (Rio Tinto, 2015).

The dominant plant groups within the additional areas are consistent with other surveys of the Bungaroo locality (Rio Tinto, 2015). Comparisons with other flora surveys suggest the Bungaroo Valley area is relatively more diverse than other areas within the Robe Valley area (Rio Tinto, 2015). The high species diversity recorded is likely a reflection of the drainage channels and floodplains that dominate the area (Rio Tinto, 2015).

None of the flora species recorded within the additional areas has been identified as a threatened flora species (GIS Database; Rio Tinto, 2015). There has been two species of priority flora species recorded within the additional areas; *Triodia* sp. Robe River (Priority 3) and *Rhynchosia bungarensis* (Priority 4) (Rio Tinto, 2015). *Triodia* sp. Robe River was recorded at two locations within the additional area (Rio Tinto, 2015). Regional studies have recorded this species in large numbers across the West Pilbara (Astron, 2010). There were seven *Rhynchosia bungarensis* individuals recorded at seven locations within the additional areas (Rio Tinto, 2015). This species has a large occupancy across the Pilbara (Western Australian Herbarium, 2015) and is not likely to be significantly impacted by the proposed clearing.

There are three broad fauna habitats mapped within the additional areas; drainage lines, undulating plains and rocky hills and slopes (Rio Tinto, 2015). The drainage line habitat is the most common, covering just over half of the additional areas (Rio Tinto, 2015). This habitat includes riparian vegetation, semi-permanent and ephemeral waterways which provide good cover and microhabitats such as tree hollows and sandy soils for burrowing (Rio Tinto, 2015). This habitat has the potential to be utilised by the Northern Quoll (*Dasyurus hallucatus* - Schedule 1; Endangered), Pilbara Olive Python (*Liasis olivaceus barroni* - Schedule 1; Vulnerable), Pilbara Leaf-nosed Bat (*Rhinoicteris aurantius* - Schedule 1; Vulnerable), Rainbow Bee-eater (*Merops ornatus* - Schedule 3; Migratory) and the Lined Soil-crevice Skink (*Notoscincus butleri* - Priority 4). The additional areas are not likely to represent critical habitat for these species. The drainage line habitat was also the most widespread habitat in the previous permit boundary and the proposed clearing will only impact a small proportion of the available habitat.

The additional areas are within the upper reaches of the Bungaroo Creek which lies within the Bungaroo Valley (GIS Database). Bungaroo Creek is subject to seasonal inundation; however no permanent waterholes or wetlands have been observed within the amended application area (Biota, 2007). Vegetation associations ChGpTe, EvApyAtrTe, EvCv were all identified as being associated with major creeklines (Rio Tinto, 2015). Combined, these vegetation associations comprise over half of the additional areas (Rio Tinto, 2015). Potential impacts on the Bungaroo Creek may be minimised by the implementation of a watercourse management condition.

The additional areas are located within the Bungaroo Creek Water Reserve which is a P1 Public Drinking Water Source Area (PDWSA) (GIS Database). The Department of Water has identified mineral exploration as a risk to this PDWSA (Department of Water, 2015). Advice from the Department of Water (2015) is that proposed activities are permissible provided all relevant water protection guidelines are adhered to.

The land systems mapped over the additional areas are generally not susceptible to erosion or degradation (Van Vreeswyk et al., 2004). The nearest conservation area is the Cane River Conservation Park located approximately 60 kilometres west of the application area (GIS Database). At this distance the proposed clearing will not have any impacts on the Conservation Park.

The assessment of the clearing principles is consistent with the assessment contained in decision report CPS 2552/2.

**Methodology** Astron (2010)  
Biota (2007)  
Department of Water (2015)  
Rio Tinto (2015)  
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 (Department of Aboriginal Affairs, 2015). 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 (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 application was advertised on 27 April 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions have been received in relation to the application.

**Methodology** Department of Aboriginal Affairs (2015)  
GIS Database:  
- Aboriginal Sites Register System

#### 4. References

- Astron (2010) West Pilbara Iron Ore Project, Triodia sp. Robe River Mapping and Targeted Search. July 2010. Unpublished report prepared for API Management Pty Ltd, dated October 2010.
- 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. Unpublished report prepared for Robe River Limited.
- Department of Aboriginal Affairs (2015) Aboriginal Heritage Inquiry System. Accessed on 18 June 2015.
- Department of Water (2015) Advice to assessing officer, received 25 June 2015.
- 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:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DPaW and DER)
<b>DER</b>	Department of Environment Regulation, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DotE</b>	Department of the Environment, Australian Government
<b>DoW</b>	Department of Water, Western Australia
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>s.17</b>	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
<b>TEC</b>	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.