



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6600/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Rio Tinto Exploration Pty Ltd

### 1.3. Property details

Property: Mineral Lease 4SA (AML 70/4)  
Local Government Area: Shire of Ashburton  
Colloquial name: Tom Price Southern Ridge Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
9.3		Mechanical Removal	Mineral Exploration and Access Tracks

### 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	Clearing Description	Vegetation Condition	Comment
<p>Beard vegetation associations have been mapped for the whole of Western Australia. Two Beard vegetation associations are located within the application area (GIS Database):</p> <p><b>Beard vegetation association 82:</b> Hummock grasslands, low tree steppe; snappy gum over <i>Triodia wiseana</i>;</p> <p><b>Beard vegetation association 567:</b> Hummock grasslands, shrub steppe; mulga &amp; kanji over soft spinifex &amp; <i>Triodia basedowii</i>.</p> <p>A number of flora and vegetation surveys have been conducted over the application area. ENV Australia conducted a flora and vegetation survey over the application area and surrounding area and summarised the findings of previous surveys. ENV (2013) identified nine vegetation types within the application area:</p> <ol style="list-style-type: none"> <li>1) <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> low open woodland over <i>E. gamophylla</i> scattered mallees over <i>Triodia epactia</i> hummock grassland on red-brown sandy loam on the slopes of gorges and gullies and on steep slopes of high rocky hills;</li> <li>2) <i>Acacia aptaneura</i> and <i>A. pruinocarpa</i> high open shrubland over <i>Santalum lanceolatum</i> open shrubland over <i>Eriachne mucronata</i> and <i>Aristida obscura</i> very open tussock grassland on red-brown sandy loam in the base of gorges and gullies and on very steep slopes;</li> <li>3) <i>Corymbia hamersleyana</i> low open woodland over <i>Acacia hamersleyensis</i> high open shrubland over <i>Triodia brizoides</i> open hummock grassland on red-brown sandy loam on the slopes of gorges and</li> </ol>	<p>Tom Price Southern Ridge Project.</p> <p>Rio Tinto Exploration Pty Ltd proposes to clear up to 5 hectares of native vegetation within a total boundary of approximately 757 hectares, for the purpose of mineral exploration. The project is located approximately 8 kilometres south-west of Tom Price in the Shire of Ashburton.</p>	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).</p> <p>To</p> <p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).</p>	<p>Vegetation condition was derived from a flora and vegetation survey conducted by ENV (2013).</p>

gullies and on steep slopes;

- 4) *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia pruinocarpa* and *A. marramamba* open shrubland over *Triodia epactia* open hummock grassland on red-brown silty clay on hill slopes;
- 5) *Eucalyptus victrix* open woodland over *E. xerothermica* scattered low trees over *Acacia citrinoviridis* high open shrubland over *Themeda triandra* and \**Cenchrus ciliaris* tussock grassland on red-brown sandy clay in minor drainage lines;
- 6) *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia hamersleyensis* and *A. maitlandii* open shrubland over *Triodia brizoides* hummock grassland on skeletal red-brown sandy loam on high rocky hill slopes;
- 7) *Hakea chordophylla* scattered tall shrubs over *Acacia arida* open shrubland over *Triodia brizoides* hummock grassland on red-brown silty clay on upper slopes of high rocky hills;
- 8) *Corymbia hamersleyana* and/or *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia bivenosa*, *A. inaequilatera* and *Petalostylis labicheoides* scattered tall shrubs to open scrub over *Triodia wiseana* open hummock grassland over *Themeda triandra* scattered tussock grasses on red-brown sandy clay on hill tops and slopes;
- 9) *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia pruinocarpa*, *A. exilis* and *A. bivenosa* low scattered shrubs over *Triodia wiseana* very open hummock grassland on red-brown sandy loam on low hills;

Note: There are completely degraded/cleared areas including mining infrastructure and tracks.

### 3. Assessment of application against clearing principles

**Comments** The application area within falls within the Hamersley (PIL3) subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Hamersley subregion is generally described as Mulga low woodland over bunch grasses on fine textured soils in valley floors, and *Eucalyptus leucophloia* over *Triodia brizoides* on skeletal soils of the ranges (CALM, 2002).

The application area is adjacent to the Mount Tom Price mine, where the surrounding vegetation has been subject to multiple disturbances. The proposed clearing of 5 hectares will utilise existing tracks (where possible) and result in the construction of 14 drill sites to the west of major mine infrastructure. Given the location and relatively small scale of the proposed clearing, land degradation issues, impacts to conservation areas (nearest conservation area is located approximately 16 kilometres east) and impacts to surface and groundwater quality are unlikely to result.

ENV Australia conducted a flora and vegetation survey over the application area and surrounding area. This survey was designed to provide information to support clearing permit CPS 5795/2, which was granted in 2014. The application area lies within the boundary already approved under CPS 5795/2. The Threatened flora species *Lepidium catapycnon* is known from nearby locations (DPaW, 2014) but was not recorded within the application area (ENV, 2013). A number of Priority flora species are known from the local area (DPaW, 2014) and have been found within the application area (ENV, 2013).

Two areas of significance have been identified within the application area (ENV, 2013; Rio Tinto, 2013). The identified areas contain populations of, and habitat for, Priority listed flora species and provide potential habitat for fauna species of conservation significance (Rio Tinto, 2013; ENV, 2013). The following species occur or are likely to occur within these areas:

- *Sida* sp Hamersley Range (K.Newbey 10692) (P1);
- *Indigofera ixocarpa* (P2) *Geijera salicifolia* (P4);
- *Dampiera anonyma* (P3);
- *Eremophila magnifica* subsp. *magnifica* (P4);
- Northern Quoll (*Dasyurus hallucatus*- EPBC Act and WC Act Endangered);
- Pilbara Olive Python (*Liasis olivaceus barroni* – EPBC Act and WC Act Vulnerable);
- Pilbara Orange Leaf-nosed Bat (*Rhinonictes aurantia* – EPBC Act Vulnerable) and
- Ghost Bat (*Macroderma gigas* - P4).

A Significant Areas Management Plan (SAMP) has been developed by Rio Tinto (2013) and implemented for the previously granted clearing permit (CPS 5795/2), which includes the area currently under application. It is expected that the SAMP will be adopted to reduce impacts that may arise from the proposed clearing activities for CPS 6600/1. The proponent has advised that the proposed activities will not impact on identified significant areas, therefore known significant areas have been removed from the application area. Given that areas providing potential habitat for conservation significant fauna species and Priority flora species have been removed from the application area, the proposed clearing is unlikely to be at variance to Principles (a) and (b).

Twelve introduced flora species (weeds) have been recorded in the vicinity, including one declared weed *Tamarix aphylla* (ENV, 2013). The proposed clearing activities have the potential to result in the introduction or spread of weed species, which may negatively impact on the biodiversity of the local area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

No threatened ecological communities or priority ecological communities are known within the application area (GIS Database) and none were recorded during the flora and vegetation survey (ENV, 2013; Rio Tinto, 2013). The vegetation within the application area is broadly mapped as Beard vegetation associations 82 and 567; both of which retain over 99% of their Pre-European vegetation extent within the state and bioregion (Government of WA, 2013; GIS Database).

There are no major watercourses mapped as occurring, however several minor non-perennial watercourses dissect the application area (GIS Database) and vegetation has been mapped growing in association with these drainage lines (ENV, 2013). Drainage lines and associated vegetation are widespread and well represented throughout the local area and region. While the proposed clearing is considered to be at variance to Principle (f), it is considered unlikely that significant impacts to vegetation growing in association with a mapped watercourse will result. Potential impacts to minor drainage lines and associated vegetation as a result of the proposed clearing may be minimised by the implementation of a watercourse 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 not likely to be at variance to Principles (a), (b), (c), (d), (g), (h), (i), and (j), is at variance to Principle (f) and is not at variance to Principle (e).

**Methodology** CALM (2002)  
Commonwealth of Australia (2001)  
DPaW (2014)  
ENV (2013)  
Government of Western Australia (2013)

- Keighery (1994)
- Rio Tinto (2013)
- GIS Database:
  - DEC Tenure
  - Imagery
  - Groundwater Salinity
  - Hydrographic Catchments – Catchments
  - Hydrography, linear
  - IBRA WA (Regions - Sub Regions)
  - Pre-European Vegetation
  - Public Drinking Water Source Areas (PDWSAs)
  - RIWI Act, Groundwater Areas
  - Soils, statewide
  - Threatened and Priority Flora List
  - Threatened Ecological Sites Buffered
  - Threatened and Priority Ecological Communities Buffers
  - Threatened and Priority Ecological Communities Boundaries

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

### Comments

There is one Native Title Claim (WC1997/089) over the area under application (GIS Database). This claim has been filed at the Federal Court of Australia and registered with the National Native Title Tribunal on behalf of the claimant group respectively. 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 several registered Sites of Aboriginal Significance located in the area applied to clear (GIS Database; DAA, 2015). 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 29 May 2015 by the Department of Mines and Petroleum (DMP) inviting submissions from the public. No submissions were received.

- Methodology** DAA (2015)  
 GIS Database:  
 - Aboriginal Sites of Significance

## 4. References

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.
- Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra
- DAA (2015) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, < <http://maps.dia.wa.gov.au/AHIS2/>>.
- DPaW (2014) NatureMap Department of Parks and Wildlife <http://naturemap.dec.wa.gov.au>.
- ENV (2013) Tom Price Life of Mine Flora, Vegetation and Fauna Assessment Prepared for Rio Tinto Iron Ore. ENV Australia Pty Ltd, Perth, Western Australia
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- 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 (2013) Rio Tinto Significant Areas Management Plan, Tom Price Life of Mine. Prepared by Rio Tinto, 2013.

## 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 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:**  
(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.