



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6527/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Rio Tinto Exploration Pty Ltd

### 1.3. Property details

Property: Mineral Lease 252SA (AML 70/252)  
Local Government Area: Shire of Ashburton  
Colloquial name: Mount Windells South Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 07 May 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. Two Beard vegetation association is located within the application area (GIS Database):

**Beard vegetation association 18:** Low woodland; mulga (*Acacia aneura*)

**Beard vegetation association 82:** Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*

**Note:** Ninety eight percent of the application area is mapped as Beard vegetation association 18

**Clearing Description** Mount Windells South Project  
Rio Tinto Exploration Pty Ltd proposes to clear up to 5 hectares of native vegetation within a total boundary of approximately 21.352 hectares, for the purpose of mineral exploration and access tracks. The project is located approximately 85 kilometres east of Tom Price in the Shire Ashburton.

**Vegetation Condition** Very good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

**Comment** Vegetation condition was derived from a the use of aerial imagery.

## 3. Assessment of application against clearing principles

### Comments

The application area is located within the Hamersley subregion of the Pilbara Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). At a broad scale, vegetation of the Hamersley subregion can be described as Mulga low woodlands 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 situated approximately two kilometres east of Karijini National Park (GIS Database). Given the application areas proximity to a National Park, the introduction and/or spread of weeds should be managed. Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. This can in turn lead to greater rates of infestation and further loss of biodiversity if the area is subject to repeated fires. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

No flora surveys have been undertaken over the application area. According to available databases, one Threatened Flora species is known from the local area (20 kilometre radius). *Lepidium catapycnon* was recorded approximately 13 kilometres from the application area (GIS Database; DPaW 2014). Beard vegetation association 82 (which is mapped as occurring over approximately 2% of the application area) is a known habitat for *Lepidium catapycnon*, however this species prefers skeletal soils on hillsides (DPaW, 2015). Given the small amount of potential available habitat impacted by the proposed clearing and that the nearest recorded occurrences are at some distance from the application area, impacts to Threatened flora species are

unlikely.

Several Priority listed flora species are known from the local area. Three Priority 1, three Priority 2 and seven Priority 3 listed flora species have been recorded. (DPaW, 2014). No Priority flora have been recorded within 10 kilometres of the application area (GIS Database; DPaW, 2014).

There are no known threatened or priority ecological communities mapped as occurring within the application area (GIS Database).

No fauna surveys have taken place within the application area, however, based on fauna records for the local area, the following species of conservation significance listed as either threatened species under the *Environment Protection and Biodiversity Conservation Act (EPBC) 1999* or protected under Western Australian legislation (*Wildlife Conservation Act 1950 (WC)*) and may occur within the application area (DPaW 2014, 2014):

- Peregrine Falcon (*Falco peregrinus* – WC Act Schedule 4);
- Grey Falcon (*Falco hypoleucos* – WC Act Vulnerable);and
- Rainbow Bee-eater (*Merops ornatus* – Migratory);

The Peregrine Falcon is wide ranging species that has adapted to a wide variety of landscapes and vegetation types but prefers to roost on cliffs or structures (DEHP, 2015). The Grey Falcon is endemic to Australia and occurs sparsely in the interior and north of the Australian mainland. This species nests in the abandoned nests of other birds (mainly raptors and crows), usually in tall trees and often adjacent to watercourses and prefers timbered lowland plains, especially acacia dominated areas (AWC, 2015a). Given that both falcon species have a large range/distribution and that extensive amounts of suitable habitat remain within the local area and region, the proposed clearing is not likely to adversely impact these species.

The Rainbow Bee-eater is a common migrant that moves southwards during summer to breed. It breeds in burrows dug into sandy banks, including sand pushed up along tracks. However, given that this species is widespread and is expected to be an irregular visitor to the application area (due to its migratory nature), impacts to this species from the proposed clearing are likely to be negligible.

There are also a number of Priority listed fauna species, recognised by the Department of Parks and Wildlife as being of conservation significance that are known from the local area (DPaW, 2014) such as the:

- Ghost Bat (*Macroderma gigas* – Priority 4);
- Western Pebble-mound Mouse, Ngadji (*Pseudomys chapmani* – Priority 4);and
- Fortescue Grunter (*Leiopotherapon aheneus* – Priority 4)

The only species known to occur within 10 km of the application area is the Western Pebble-mound Mouse. Given the small size of the proposed clearing, and that suitable habitat is known throughout the wider area and region (DPaW, 2014), impacts to this species are likely to be negligible.

No caves or large rock crevices will be impacted by the proposed clearing and the Ghost bat is carnivorous and does not rely on vegetation as a food source (AWC, 2015b). The Fortescue Grunter is not likely to occur within the application area, as this species is endemic to the Fortescue river system and relies on permanent river pools for refuge in times of aridity (DEC, 2009).

There are no major watercourses within the application area; however several minor non-perennial watercourses do occur (GIS Database). While potential impacts to drainage lines are likely to be minimal, it is important to maintain natural water flow throughout the area following rain events. Potential impacts to watercourses within the application area as a result of the proposed clearing may be minimised by the implementation of a watercourse management condition.

There are two Beard vegetation associations mapped over the area under application; Beard vegetation association 18 and 82. Both are well represented and retain at least 99% of pre-European levels of vegetation within the state and bioregion (Government of Western Australia, 2013).

Land degradation issues are unlikely given that the dominant soil type mapped over the application area (deep earthy loams) has low wind erosion and water erosion risk (Van Vreeswyk *et al.* 2004).

The application to clear 5 hectares of native vegetation for the purpose of a mineral exploration and access tracks, (that will result in twenty nine new drill holes and drill pads) is unlikely to have any significant environmental impacts.

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), may be at variance to Principle (f) and is not at variance to Principle (e).

- CALM (2002)
- DEC (2009)
- DEHP (2015)
- DPaW (2014)
- DPaW (2015)
- Government of Western Australia (2013)
- Keighery (1994)
- Van Vreeswyk *et al.* (2004)
- GIS Database:
  - Clearing Regulations – Schedule One Areas
  - DEC Tenure
  - EPA Red Book 1976-91
  - 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 are no native title claims over the application area (GIS Database; DAA, 2014). 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 Sites of Aboriginal Significance located in the area applied to clear (GIS Database; DAA, 2014). 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 first advertised on 13 April 2015 by the Department of Mines and Petroleum (DMP) inviting submissions from the public. One submission was received that opposed the proposed clearing, the issue raised within the submission related to the cumulative impacts of all clearing in the local area. This issue has been addressed within the assessment when considering Principle (e).

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

#### 4. References

- AWC (2015a) Grey Falcon Species Profile. Australian Wildlife Conservancy, Western Australia, viewed 24 April 2015 <<http://www.australianwildlife.org/wildlife/grey-falcon.aspx>>
- AWC (2015b) Ghost Bat Species Profile. Australian Wildlife Conservancy, Western Australia, viewed 24 April 2015 <<http://www.australianwildlife.org/wildlife/ghost-bat.aspx>>
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management
- DAA (2015) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, viewed 4 March 2015 <<http://maps.dia.wa.gov.au/AHIS2/>>.
- DEC (2009) *Resource Condition Report for Significant Western Australian Wetland: Fortescue Marshes*. Department of Environment and Conservation. Perth, Australia.
- DEHP (2015) Living with Wildlife, Peregrine falcon (*Falco peregrinus*), Department of Environment and Heritage Protection, Queensland Government, viewed 24 April 2015 <[https://www.ehp.qld.gov.au/wildlife/livingwith/peregrine\\_falcon.html](https://www.ehp.qld.gov.au/wildlife/livingwith/peregrine_falcon.html)>
- DPaW (2014) NatureMap Department of Parks and Wildlife, viewed 24 April 2015 <<http://naturemap.dec.wa.gov.au>>
- DPaW (2015) FloraBase, Department of Parks and Wildlife, viewed 24 April 2015 <<https://florabase.dpaw.wa.gov.au/>>
- 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

## 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.