



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 2104/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

### 1.3. Property details

Property: Iron Ore (Mt Goldsworthy) Agreement Act 1964, Mineral Lease 249SA  
Local Government Area: Town of Port Hedland  
Colloquial name: Ord Ridley exploration project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 21 February 2013

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

**Vegetation Description** The area applied to clear has been broadly mapped as:

Corresponding with the plateaux - Beard Vegetation Association 93: Hummock grasslands, shrub steppe; Kanji over soft Spinifex;

Corresponding with floodplain surrounding the plateaux - Beard Vegetation Association 589: Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex; and

Corresponding with main drainage lines - Beard Vegetation Association 619: Medium woodland; river gum (*Eucalyptus camaldulensis*) (GIS Database).

A flora and vegetation survey of the project area was conducted by ENV Australia between the 28 March and 3 April 2007 (ENV Australia, 2007). Data was collected from 90 quadrats, selected as being representative of the flora and vegetation within the Ord and Ridley Prospects. The vegetation of the project area was delineated into a number of broad major habitats, based predominantly on landforms.

The following vegetation types were present within the Ord Prospect:

**Upper Hill Crests (rocky)** - *Acacia acradenia*, with or without *A. inaequilatera* scattered shrubs over *Triodia epactia* hummock grassland;

**Undulating Hill Crests** - *Acacia acradenia*, with or without *A. inaequilatera* scattered shrubs over *Triodia epactia* hummock grassland OR *Triodia epactia*, with or without *Triodia schinzii* hummock grassland;

**Upper Rocky Plateau** - *Acacia tumida* var. *pilbarensis* open shrubland over *Triodia epactia* hummock grassland;

**Cliff Faces** - *Terminalia canescens*, *Ehretia saligna* var. *saligna* scattered low trees over *Sida subarticulata*, *Corchorus tectus* low scattered shrubs over *Triodia epactia* open hummock grassland over *Eriachne mucronata* very open grassland;

**Gullies and Vertical Rock Faces** - *Terminalia canescens*, *Ehretia saligna* var. *saligna*, *Atalaya hemiglauca*, *Ficus brachypoda*, *Ficus opposita* var. *indecora* low woodland over *Carissa lanceolata*, *Acacia pyrifolia* open shrubland over *Triumfetta clementii*, *Corchorus tectus*, *Hybanthus aurantiacus* low open shrubland over *Triodia epactia* hummock grassland;

**Minor Drainage Lines** - *Corymbia hamersleyana* scattered low trees over *Acacia tumida* var. *pilbarensis* high

shrubland over *Sida subarticulata* low open shrubland over *Triodia epactia* hummock grassland or *Eucalyptus odontocarpa* low open woodland (mallee) over *Acacia acradenia* open shrubland over *Triodia epactia* hummock grassland;

**Major Drainage Lines** - *Terminalia canescens* scattered low trees over *Triodia epactia* very open hummock grassland over *Cyperus pulchellus*, *Fimbristylis dichotoma*, *Bulbostylis barbata* open sedgeland;

**Foothills** - *Triodia epactia* hummock grassland; and

**Broad U-shaped Valley** - *Corymbia hamersleyana* scattered low trees over *Triodia epactia* hummock grassland.

The following vegetation types were present within the Ridley Prospect:

**Major Drainage Line** - *Eucalyptus camaldulensis* var. *obtusa*, *E. victrix* woodland over *Melaleuca argentea*, *Acacia ampliceps* low open forest over *Eriachne obtusa*, *Cynodon dactylon* open grassland over *Cyperus bifax*, *Cyperus iria*, *Cyperus bulbosus*, *Cyperus vaginatus* sedgeland;

**Levee Banks of Major Drainage Line** - *Eucalyptus victrix* scattered low trees over *Acacia pyrifolia* scattered shrubs over *Vigna lanceolata* var. *lanceolata*, *Ipomoea muelleri*, *Dentella asperata* low scattered shrubs over *Triodia longiceps* hummock grassland or *Bauhinia cunninghamii*, *Acacia pyrifolia* scattered shrubs over *Pluchea tetranthera*, *Bonamia media* var. *villosa* low scattered shrubs over *Triodia epactia* open hummock grassland over *Cenchrus ciliaris* grassland over *Bulbostylis barbata* scattered sedges;

**Low Hill** - *Triodia epactia* hummock grassland;

**Floodplain** - *Cenchrus ciliaris* grassland;

**Foothills** - *Acacia inaequilatera* scattered shrubs over *Indigofera trita*, *Triumfetta clementii*, *Mullugo molluginis*, *Boerhavia gardneri*, *Hybanthus aurantiacus* low open shrubland over *Triodia epactia* hummock grassland;

**Hill slopes** - *Triumfetta clementii*, *Boerhavia gardneri*, *Tephrosia aff supine*, *Hybanthus aurantiacus* low scattered shrubs over *Triodia epactia* hummock grassland;

**Gullies** - *Corymbia hamersleyana*, *Ficus brachypoda*, *Ficus opposita* var. *indecora*, *Atalaya hemiglauca*, *Ehretia saligna* var. *saligna* low woodland over *Acacia tumida* var. *pilbarensis*, *Acacia pyrifolia*, *Carissa lanceolata* open shrubland over *Rynchosia minima* var. *australis*, *Hybanthus aurantiacus* low shrubland over *Triodia epactia* hummock grassland over *Eriachne mucronata*, *Cymbopogon ambiguous* open grassland; and

**Hill Crest** - *Acacia inaequilatera* scattered tall shrubs over *Triodia epactia* hummock grassland.

**Clearing Description**

BHP Billiton Iron Ore Pty Ltd (BHP Billiton, 2007a) propose to clear 50 hectares of native vegetation within a total application area of approximately 182 hectares for the development of tracks and drill pads for exploration purposes within the Ord Ridley Exploration Area on Mineral Lease 249SA (AML 70/249), *Iron Ore (Mt Goldsworthy) Agreement Act 1964*. The clearing will be undertaken by bulldozer, using a raised blade wherever possible, and topsoil will be stockpiled for future use.

The BHP Billiton Iron Ore Pty Ltd (BHP Billiton, 2007a) Ord Ridley project area is located approximately 65 kilometres east of Port Hedland and approximately 4 kilometres north of the Great Northern Highway near the De Grey River (BHP Billiton, 2007a; GIS Database). Geographically, the Ord Ridley project area consists of a flat top plateau ridgeline with gullies trending to a flat, weakly incised floodplain (BHP Billiton, 2007a).

The application area consists of two main ore bodies, these being the Ridley Prospect and the Ord Prospect (BHP Billiton, 2007a). The application area is comprised of six disparate areas. The two areas in the north are part of the Ridley prospect, while the four to the south are part of the Ord Prospect (BHP Billiton, 2007a).

**Vegetation Condition**

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994)

To

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

**Comment**

The vegetation condition of the application area has been derived from the vegetation description provided by ENV Australia (2007).

Clearing Permit CPS 2104/1 was granted by the Department of Mines and Petroleum (DMP) on 29 May 2008 and authorised the clearing of up to 50 hectares of native vegetation within an area totalling approximately 182 hectares, for the purpose of mineral exploration.

### 3. Assessment of application against clearing principles

#### Comments

On 9 January 2013, BHP Billiton Iron Ore Pty Ltd applied to amend clearing permit CPS 2104/1. The amendment is to extend the duration of the permit to 30 June 2023. As the amendment is only for administrative purposes, the environmental impacts will not change and the assessment of the clearing principles is consistent with the assessment in clearing permit decision report CPS 2104/1.

**Methodology** BHP Billiton (2007a)  
ENV Australia (2007)

#### 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 (WC99/026) has been registered with the National Native Title Tribunal on behalf of the claimant group (GIS Database). However, the 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 two registered Sites of Aboriginal Significance within the area applied to clear, (Site ID: 7405, 7404) (GIS Database). BHP Billiton Iron Ore (2007b) has stated that these sites will be avoided during the proposed Ord Ridley Exploration activities and adequate buffer zones will be established around these sites to ensure their protection. 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 which are required for the proposed works.

It is the proponent's responsibility to liaise with the Department of Environment and Conservation 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.

**Methodology** BHP Billiton (2007b)  
GIS Database:  
- Aboriginal Sites of Significance  
- Native Title Claims – Registered with the NNTT

### 4. References

- BHP Billiton Iron Ore (2007a). Exploration. Ord Ridley. Purpose permit vegetation clearing permit application. Supporting documentation. BHP Billiton Iron Ore.
- BHP Billiton Iron Ore (2007b). Aboriginal Heritage Management - Ord Ridley. Unpublished report. BHP Billiton Iron Ore.
- ENV Australia (2007). Ord Ridley Exploration Lease Flora and Vegetation Assessment. Report prepared for BHP Billiton Iron Ore Pty Ltd (Job No 07.037, Report No RP 001).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

### 5. Glossary

#### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>CALM</b>	Department of Conservation and Land Management (now DEC), Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia
<b>DEH</b>	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
<b>DEP</b>	Department of Environment Protection (now DEC), Western Australia
<b>DIA</b>	Department of Indigenous Affairs
<b>DLI</b>	Department of Land Information, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DoE</b>	Department of Environment (now DEC), Western Australia
<b>DoIR</b>	Department of Industry and Resources (now DMP), Western Australia
<b>DOLA</b>	Department of Land Administration, Western Australia
<b>DoW</b>	Department of Water
<b>EP Act</b>	Environmental Protection Act 1986, Western Australia
<b>EPBC Act</b>	Environment Protection and Biodiversity Conservation Act 1999 (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>RIWI Act</b>	Rights in Water and Irrigation Act 1914, Western Australia
<b>s.17</b>	Section 17 of the Environment Protection Act 1986, Western Australia
<b>TEC</b>	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.