



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 4831/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: BHP Billiton Pty Ltd

### 1.3. Property details

Property: Iron Ore (Mount Goldsworthy) Agreement Act 1964, Mineral Lease 281SA (AML 70/281)  
Local Government Area: Shire of East Pilbara  
Colloquial name: Mining Area C Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
38		Mechanical Removal	Mineral Production and Associated Infrastructure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 28 June 2012

## 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. The following Beard vegetation associations have been mapped within the application area (GIS Database; Government of Western Australia, 2011):

18: Low woodland; mulga (*Acacia aneura*); and

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*.

Two flora and vegetation surveys of the extended application area conducted by ENV (2010) and Onshore (2011) have identified the following six vegetation associations within the area:

**1a:** *Acacia* High Open Shrubland: High Open Shrubland of *Acacia aneura* var. *aneura*, *Acacia aneura* var. *pilbarana* and *Acacia pruinocarpa* with Very Open Tussock Grassland of *Aristida holathera* var. *holathera*, *Themeda triandra* and *Aristida contorta* on Red-Brown Loam on Plains (ENV, 2010);

**2a:** *Triodia* Open Hummock Grassland: Open Hummock Grassland of *Triodia wiseana*, *Triodia pungens* and *Triodia epactia* with Open Shrubland of *Acacia pruinocarpa*, *Acacia aneura* var. *conifera* and *Acacia maitlandii* with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia deserticola* subsp. *deserticola* on Red-Brown Loam on Rocky Hillslopes (ENV, 2010) (Mapped as Vegetation Association 13j in Onshore [2011]);

**3a:** *Themeda* Tussock Grassland: Tussock Grassland of *Themeda triandra*, *Paraneurachne muelleri* and *Cymbopogon obtus* with Low Shrubland of *Petalostylis labicheoides*, *Scaevola parvifolia* subsp. *pilbarae* and *Keraudrenia nephrosperma* with Low Open Woodland of *Eucalyptus* sp. and *Corymbia hamersleyana* on Red-Brown Clay Loam on Drainage Lines/ Floodplains (ENV, 2010) (Mapped as Vegetation Association 16e in Onshore [2011]);

**7a:** *Acacia* Low Open Woodland: Low Open Woodland of *Acacia aneura* and *Acacia pruinocarpa* over Very Open Tussock Grassland of *Aristida inaequiglumis* in orange brown clay loam on hardpan plains (Onshore, 2011).

**11a:** High Shrubland of *Petalostylis labicheoides*, *Gossypium robinsonii* and *Acacia pyrifolia* over Open Tussock Grassland of *Themeda triandra* and *Paraneurachne muelleri* with Low Open Woodland of *Eucalyptus xerothermica* and *Corymbia hamersleyana* in red brown clay (Onshore, 2011).

**14a:** Open Hummock Grassland of *Triodia wiseana* and *Triodia pungens* with Low Open Woodland

of *Acacia aneura* and *Acacia pruinocarpa* over Open Shrubland of *Eremophila jucunda* subsp. *pulcherrima*, *Acacia marramamba* and *Codonocarpus cotinifolius* in red brown loam (Onshore, 2011).

<b>Clearing Description</b>	<p>BHP Billiton Iron Ore Pty Ltd (BHP) is proposing to clear up to 38 hectares of native vegetation within a 371 hectare application area for the Mining Area C Medium Term Warehouse project. The clearing of vegetation is required for construction and maintenance of:</p> <ul style="list-style-type: none"><li>- Buildings and facilities, including warehouse, dispatch and receiving yard; yard area, undercover storage area, banded hydrocarbon storage area and offices;</li><li>- Access roads and hardstands;</li><li>- Services, including electricity, communications and water;</li><li>- A waste water treatment plant (WWTP);</li><li>- An automatic weather station (AWS) at the Area C (Coondewana) Airport (BHP Billiton, 2012a); and</li><li>- Establish and Instrument Landing System.</li></ul>
<b>Vegetation Condition</b>	<p>Completely degraded: No longer intact; completely/almost completely without native species (Keighery, 1994);</p> <p>to</p> <p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).</p>
<b>Comment</b>	<p>Clearing permit CPS 4831/1 was granted by the Department of Mines and Petroleum on 16 February 2012 and allowed for the clearing of 37 hectares of native vegetation within a 150.3 hectare permit boundary. An application to amend clearing permit CPS 4831/1 was received by the Department of Mines and Petroleum on 17 April 2012. The application requested a 1 hectare increase to the amount of clearing permitted and a 220.7 hectare increase to the permit boundary.</p>

### 3. Assessment of application against clearing principles

#### Comments

BHP Billiton Iron Ore Pty Ltd has applied to increase the permit boundary by 220.7 hectares to 371 hectares and increase the amount of clearing permitted by 1 hectare.

A review of flora surveys (ENV, 2010; Onshore, 2011), fauna surveys (ENV, 2010; Biologic, 2011) and database searches of the extended application area have revealed no further significant impacts than those identified in the decision report for CPS 4831/1. No Threatened or Priority Flora species and no Threatened or Priority Ecological Communities have been identified within the additional application area (ENV, 2010; Onshore, 2011). Therefore the assessment of clearing principles (a), (c), (d) and (e) is consistent with the assessment in clearing permit decision report CPS 4831/1.

One additional fauna habitat, Mulga, was recorded within the extended application area (BHP, 2012). This habitat is considered to be of moderate habitat value, with the potential to support the Priority 1 Blindsnake (*Ramphotyphlops ganeii*) and the Priority 3 Bush Stone-curlew (*Burhinus grallarius*) (Biologic, 2011). A small amount of this habitat is present in the western section of the amendment application area (BHP, 2012). The habitats within the application area are not considered to be locally restricted, and in the same or better condition (BHP, 2012). The proposed clearing is therefore not expected to significantly impact on the conservation of these species.

The remainder of the fauna habitat types have been assessed in clearing permit decision report CPS 4831/1 and the proposed amendment is considered to be consistent with the assessment undertaken in CPS 4831/1. Therefore the proposed clearing will remain at not likely to be at variance to Principle (b).

Current environmental information has been reviewed and the assessment of clearing principles (f), (g), (h), (i) and (j) is consistent with the assessment in clearing permit decision report CPS 4831/1 (GIS Database).

<b>Methodology</b>	<p>BHP (2012) Biologic (2011) ENV (2010) Onshore (2011) GIS Database: - DEC Tenure - Hydrographic Catchments - Catchments - Hydrography, linear - IBRA WA (Regions - Sub Regions) - Pre-European Vegetation - Public Drinking Water Source Areas (PDWSAs) - Rangeland Land System Mapping - Threatened Ecological Sites Buffered - Threatened and Priority Flora</p>
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## Planning instrument, Native Title, Previous EPA decision or other matter.

### Comments

There is one native title claim over the area under application (GIS Database). This claim (WC11/6) was determined by the Federal Court on 1 March 2007 (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 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 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

GIS Database:

- Aboriginal Sites of Significance
- Native Title claims - Determined by the Federal Court

## 4. References

- BHP (2012) Area C Mining Operations – Area C Airport Instrument Landing System Application to Amend Native Vegetation Clearing Permit CPS 4831/1 under the *Environmental Protection Act 1986*. Unpublished report dated April 2012.
- Biologic (2011) South Flank Vertebrate Fauna Study. Unpublished report for BHP Billiton.
- ENV (2010) South Flank NVCP Extension Flora, Vegetation and Fauna Assessment. Unpublished report for BHP Billiton.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Onshore (2011) Flora and Vegetation Survey Area C and Surrounds. Unpublished report for BHP Billiton.

## 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.