



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 3463/4  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: **BHP Billiton Iron Ore Pty Ltd**

### 1.3. Property details

Property: *Iron Ore (Mount Goldsworthy) Agreement Act 1964*, Special Lease for Mining Operations 3116/5999, Document I126342 L, Lot 125 on Deposited Plan 219861;  
*Iron Ore (Mount Goldsworthy) Agreement Act 1964*, Special Lease 3116/6235, Document J998591 L, Lot 47 on Deposited Plan 241374;  
*Iron Ore (Mount Goldsworthy) Agreement Act 1964*, Special Lease J998595 L, Lot 3000 on Deposited Plan 51079;  
Lot 370 on Deposited Plan 35619, Lot 372 on Deposited Plan 35620, pursuant to Section 25(2)(B) of the *Port Authorities Act 1999*;  
Miscellaneous Licence 45/129.

Local Government Area: Town of Port Hedland  
Colloquial name: Finucane Island Rail Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
21.04		Mechanical Removal	Railway construction and maintenance, and associated works

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 12 September 2013

## 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 extent in a regional context. Three Beard vegetation associations are located within the proposed clearing area (GIS Database):

Beard vegetation association 43: Thicket, mangroves;

Beard vegetation association 117: Hummock grasslands, grass steppe; soft spinifex; and

Beard vegetation association 127: Bare areas, mud flats.

ENV Australia Pty Ltd (ENV, 2009) undertook a Level One flora and vegetation assessment of the proposed clearing area in June 2009. The following two vegetation types were mapped for the proposed clearing area:

1. Mangroves - High closed shrubland of *Avicennia marina* and *Ceriops tagal* on brown-grey clay on mudflats; and

2. Samphires - Low open shrubland of *Tecticornia halocnemoides* subsp. *tenius* and *Tecticornia halocnemoides* over very open herbs of *Muellerolimon salicorniaceum* with scattered shrubs of *Avicennia marina* on light brown clay on mudflats.

CPS 3463/4:

The amendment application area is mapped as Beard Vegetation Association 43: Thicket, mangroves. A vegetation survey conducted by ENV (2011) described the vegetation of the amendment application area as mangrove community, comprising *Rhizophora stylosa* and *Avicennia marina* shrubland.

#### Clearing Description

Finucane Island Rail Project.

BHP Billiton Iron Ore Pty Ltd (BHP Billiton) proposes to clear up to 21.04 hectares of native vegetation within a boundary of approximately 157.58 hectares, for the purpose of duplicating a section of the existing Newman to Port Hedland Mainline rail formation and track between Boodarie and the rail car dumper at Finucane Island. The project is located approximately three kilometres west of Port Hedland, within the Town of Port Hedland local government area.

## Vegetation Condition

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).  
to

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

## Comment

The vegetation condition rating is derived from information provided by ENV Australia Pty Ltd (ENV, 2009; 2011).

The purposes of the proposed clearing include duplication of the railway line, installation of associated infrastructure, and general railway maintenance works. A majority of the proposed clearing will be associated with permanent infrastructure (BHP Billiton, 2009).

Clearing permit CPS 3463/1 was granted by the Department of Mines and Petroleum on 11 February 2010, and was valid from 13 March 2010 to 13 March 2015. The permit authorised the clearing of 20 hectares of native vegetation within a defined area of approximately 145.3 hectares. An application for an amendment to clearing permit CPS 3463/1 was submitted by BHP Billiton on 11 September 2010, requesting an increase in the size of the area approved to clear by 0.04 hectares, and an extension of the approval area by approximately 10 metres along part of the western boundary. The amended permit authorised the clearing of 20.04 hectares, within a defined area of approximately 147.6 hectares. An application to amend clearing permit CPS 3463/2 was submitted by BHP Billiton on 6 July 2011, requesting an increase of 1 hectare to the size of the area approved to clear, and an extension to the approval area in two places along the eastern boundary. The amended permit (CPS 3463/3) authorised the clearing of 21.04 hectares within a defined area of approximately 156.3 hectares.

An application to amend clearing permit CPS 3463/3 was submitted by BHP Billiton on 8 July 2013. The proponent requested an increase in the size of the approval area, by adding an area of approximately 1.29 hectares along the eastern boundary, just to the south of the bridge to Finucane Island. There is no change to the amount of clearing authorised. The amended area to be cleared is 21.04 hectares within a defined area of approximately 157.58 hectares.

## 3. Assessment of application against clearing principles

### Comments

BHP Billiton has applied to amend clearing permit CPS 3463/3 to increase the size of the approved permit boundary from approximately 156.29 hectares to approximately 157.58 hectares. The additional area to be included in the permit boundary is a linear area immediately adjacent to the railway line on the eastern side and just to the south of the bridge to Finucane Island. The additional area is approximately 550 metres in length, with a variable width of approximately 20-30 metres, and is approximately 1.29 hectares in area. This additional area is required to allow temporary access to the eastern side of the railway line to repair recent storm damage to the side of the railway embankment. There is no change to the amount of clearing authorised under the permit (21.04 hectares).

The amendment area consists of mangrove vegetation (GIS Database). The mangrove species found in Western Australia are common and widespread in other parts of Australia (EPA, 2001). However mangroves are considered an important part of a coastal ecosystem, providing nutrient rich habitats for fish and important habitat for other marine and terrestrial fauna including birds (EPA, 2001).

EPA Guidance Statement No. 1 - Guidance Statement for Protection of Tropical Arid Zone Mangroves along the Pilbara Coastline (EPA, 2001) classifies the Pilbara mangrove communities into four categories for the purposes of environmental management. The mangrove communities of the Port Hedland area are classified as "other mangrove areas, inside designated industrial areas and associated port areas" (EPA, 2001). This category of the Pilbara mangroves is assigned the lowest priority for protection due to the significant disturbance from existing industrial development. "Guideline 4" of EPA Guidance Statement No. 1 relates to this category and recommends that the impacts on mangroves, habitats and dependent habitats from development within these areas should be kept to a minimum practical level (EPA, 2001).

A vegetation survey conducted by ENV (2011) described the vegetation of the amendment application area as mangrove community, comprising *Rhizophora stylosa* and *Avicennia marina* shrubland. Since ENV conducted the survey in 2011 a road has been constructed on the eastern side of the railway line (BHP Billiton, 2013), leaving a narrow strip of vegetation between the railway line and the road. The amendment application area falls within this narrow strip of vegetation between the road and railway line. Part of the amendment area is not vegetated or is sparsely vegetated and the condition of the remaining vegetation is considered to be comparatively poor. Substantial areas of better quality mangrove vegetation of higher biodiversity value remain in surrounding areas (BHP Billiton, 2013; GIS Database).

BHP Billiton has advised that the clearing of vegetation will be kept to the minimum necessary to safely undertake the proposed repairs to the railway embankment (BHP Billiton, 2013). It is estimated that the actual area of clearing required will be approximately 0.5 hectares, within the 1.29 hectare amendment area (BHP Billiton, 2013). The proposed temporary clearing of mangrove vegetation to allow for repairs to the railway embankment is considered to be consistent with Guideline 4 of EPA Guidance Statement 1, as the repair works are necessary to ensure the stability of the railway embankment and to avoid potentially greater impacts to the adjacent mangrove community should the embankment be allowed to continue to erode.

The amended proposal has been assessed against the clearing principles, and is considered consistent with the assessment in Clearing Permit Decision Report CPS 3463/3.

**Methodology** BHP Billiton (2013)  
ENV (2011)  
EPA (2001)  
GIS Database:  
- Port Hedland 50cm Orthomosaic - Landgate 2004  
- Pre-European Vegetation

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

##### **Comments**

The amendment application was advertised on 22 July 2013 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over the area under application: WC1999/003 (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. 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*.

According to available databases, there are no registered Aboriginal Sites of Significance within the application area, but several in close proximity (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 throughout the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation (formerly 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  
- Native Title Claims - Filed at the Federal Court  
- Native Title Claims - Registered with the NNTT

#### **4. References**

- BHP Billiton (2009) Finucane Island Rail Project: Application to clear native vegetation (Purpose Permit) under the *Environmental Protection Act 1986*. BHP Billiton Iron Ore Pty Ltd. November 2009.
- BHP Billiton (2013) Finucane Island Rail Project: Application to amend CPS 3463/3. BHP Billiton Iron Ore Pty Ltd. July 2013.
- ENV (2009) Finucane Island Causeway Flora and Vegetation Assessment. Prepared for Calibre Engenium Joint Venture. ENV Australia Pty Ltd, Perth, Western Australia.
- ENV (2011) Port Hedland Regional Flora and Vegetation Assessment. Prepared for BHP Billiton Iron Ore Pty Ltd. ENV Australia Pty Ltd, Perth, Western Australia.
- EPA (2001) Guidance Statement No.1: Guidance for Protection of Tropical Arid Zone Mangroves along the Pilbara Coastline. Environmental Protection Authority, Western Australia.
- 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.