



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 2843/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

### 1.3. Property details

Property: Mining Lease 47/283  
Mining Lease 47/284  
Mining Lease 47/289  
Mining Lease 47/290  
Mining Lease 47/291  
Mining Lease 47/292  
*Iron Ore (Mount Newman) Agreement Act 1964, Lease K843924, Lot 146 on Deposited Plan 243202 and 243203, Lot 147 on Deposited Plan 243202*  
*Iron Ore (Mount Newman) Agreement Act 1964, Lease K843925, Lot 148 on Deposited Plan 93544*

Local Government Area: Shire Of Ashburton and Shire Of East Pilbara  
Colloquial name: Kurrajura Siding to Yandi Wye Rail Duplication Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 28 August 2014

## 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 a useful tool to examine the vegetation extent in a regional context. Two Beard vegetation associations are located within the application area (GIS Database):

- 18:** Low woodland; mulga (*Acacia aneura*); and  
**82:** Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*.

Ecologia Environment (Ecologia) have conducted two flora surveys within the application area:

- 1) Level 1 flora and vegetation survey of Yandi Spur alignment and Yandi Rail Repeater Station 1 (between Kurrajura Siding and Yandi Wye) (Ecologia, 2008a); and
- 2) Floristic survey targeting Declared Rare and Priority flora within Mining Tenements M47/283, M47/284, M47/289, M47/290, M47/291 and M47/292 (Ecologia, 2008b).

From these surveys the following vegetation associations were identified:

#### Yandi Spur

Creek Bed/Bank

1. Open to moderately dense *Eucalyptus camaldulensis* var. *obtusa* medium to high trees, over sparse *Acacia tumida* var. *pilbarensis*, *A. maitlandii* and *Petalostylis labicheoides* high shrubs, over moderately dense mixed *Themeda* sp. Mt Barricade (M.E. Trudgen 2471), *Cymbopogon procerus*, *Eulalia aurea* and *Chrysopogon fallax* tussock grasses.

2. Very scattered *Eucalyptus tephrodes* medium trees, over sparse *Corymbia hamersleyana* low trees, sometimes with *Eucalyptus gamophylla* low mallee trees, over moderately dense mixed high shrubs of *Acacia elachantha*, *A. tumida* var. *pilbarensis* and *A. inaequilatera*, over open mixed medium to low shrubs of *Gossypium robinsonii*, *Indigofera monophylla*, *Tephrosia rosea* var. *glabrior*, *Senna notabilis* and *Goodenia stobbsiana*, over sparse to moderately dense patches of *Cenchrus ciliaris* (weed), *Cymbopogon obtectus* and *Themeda* sp. Mt Barricade (M.E. Trudgen 2471) tussock grasses, with scattered *Triodia epactia* hummock grass.

#### Rocky Hill Slopes

3. Scattered *Eucalyptus leucophloia* subsp. *leucophloia* low trees, sometimes with *Corymbia hamersleyana*, over scattered varying high shrubs of *Grevillea wickhamii*, *Petalostylis labicheoides*, *Acacia bivenosa*, *Acacia monticola*, over scattered mixed low shrubs of *Acacia hillianiana* and *Acacia adoxa* var. *adoxo*, with moderately dense *Triodia basedowii* hummock grass.
4. Scattered *Grevillea wickhamii* and *Acacia inaequilatera* high shrubs, over open *Grevillea wickhamii* medium to low shrubs, over sparse *Acacia spondylophylla* low shrubs, over open to moderately dense mixed *Triodia basedowii*, *Triodia epactia* and *Triodia wiseana* hummock grass, with scattered *Eriachne mucronata* tussock grass.

#### Minor Channel on Midslope

5. Sparse *Eucalyptus leucophloia* subsp. *leucophloia* medium to low trees, with scattered *Corymbia hamersleyana* and *Corymbia ferritcola* low trees, over scattered *Acacia inaequilatera* high shrubs, over open mixed low shrubs of *Gossypium robinsonii*, *Senna artemisioides* subsp. *oligophylla* and *Dodonaea pachyneura*, over sparse *Acacia adoxa* var. *adoxo* low shrubs, over sparse mixed *Cymbopogon obtectus*, *Themeda* sp. Mt Barricade (M.E. Trudgen 2471) tussock grass and *Triodia epactia* and *Triodia basedowii* hummock grasses.
6. Scattered *Eucalyptus leucophloia* subsp. *leucophloia* medium to low trees, over sparse medium seedlings of *Eucalyptus leucophloia* subsp. *leucophloia*, over open low shrubs of *Mirbelia viminalis*, *Acacia adoxa* var. *adoxo* and *Goodenia stobbsiana*, over open *Triodia epactia* hummock grass.

#### Floodplain

7. Scattered *Corymbia hamersleyana* low trees, over sparse to open *Acacia inaequilatera* and *Grevillea wickhamii* high shrubs, over sparse *Corchorus laniflorus*, *Tephrosia rosea* var. *glabrior* and *Indigofera monophylla* low shrubs, over moderately dense *Triodia epactia* hummock grass, with sparse to moderately dense patches of *Cenchrus ciliaris* (weed) tussock grass.

#### Rail Repeater Station One

##### Rocky Hillslopes

1. Scattered *Eucalyptus leucophloia* subsp. *leucophloia* low trees, over scattered *Senna glutinosa* subsp. *pruinosa* medium shrubs, over sparse *Goodenia stobbsiana* low shrubs, over open to moderately dense *Triodia basedowii* hummock grass.
2. Scattered *Corymbia hamersleyana* low trees, over sparse low *Eucalyptus gamophylla* mallee trees, over sparse *Grevillea wickhamii* high shrubs, over open mixed low shrubs of *Acacia adoxa* var. *adoxo*, *Goodenia stobbsiana* and *Acacia hillianiana*, over open *Triodia basedowii* hummock grass, with scattered *Eriachne lanata* and *Amphipogon caricinus* var. *caricinus* tussock grasses.

##### Drainage Channel

3. Moderately dense mixed *Grevillea wickhamii*, *Acacia tumida* var. *pilbarensis* and *A. inaequilatera* high shrubs, over sparse to open *Cleome viscosa* and *Acacia hillianiana* low shrubs, over moderately dense *Triodia epactia* hummock grass.

#### Borrow Areas

##### Rocky Plain Vegetation

1. Open *Acacia inaequilatera* high shrubs, with sparse *Eucalyptus gamophylla* low mallee trees, over varying mixed low regrowth shrubs, with open mixed *Aristida holathera* var. *holathera* tussock and open *Triodia pungens* hummock grasses - Recently burnt.
2. Sparse *Gossypium robinsonii* high shrubs, over open mixed low to medium shrubs, dominated by *Corchorus lasiocarpus* subsp. *parvus* and *Ptilotus exaltatus* var. *exaltatus*, with open mixed *Triodia pungens* hummock and *Aristida holathera* var. *holathera* tussock grasses – Recently burnt.
3. Open *Grevillea wickhamii* subsp. *hispidula* medium to high shrubs, over sparse mixed *Ptilotus obovatus* and *Tephrosia* aff. *densa* low shrubs, with open mixed *Cenchrus ciliaris* (weed) tussock and sparse *Triodia pungens* hummock grasses.
4. Open *Corymbia hamersleyana* medium trees, over moderately dense *Acacia tumida* var. *pilbarensis* and *Grevillea wickhamii* subsp. *hispidula* medium to high shrubs, over open *Cenchrus ciliaris* (weed) and *Themeda triandra* tussock grasses.
5. Sparse *Corymbia hamersleyana*, *Eucalyptus leucophloia* subsp. *leucophloia* and *Eucalyptus xerothermica* low trees, over open *Grevillea wickhamii* subsp. *hispidula* high shrubs, over moderately dense *Triodia pungens* hummock grass.
6. Scattered *Corymbia hamersleyana* - *semiclara* (intergrade) low to medium trees, over open *Acacia inaequilatera* high shrubs, over sparse *Senna artemisioides* subsp. *oligophylla* x *helmsii* low shrubs, with open *Trichodesma zeylanicum* and *Cleome viscosa* herbs and mixed open *Eriachne aristidea* and *Enneapogon lindleyanus* tussock grasses.

##### Plain Near Gully Base Vegetation

7. Scattered *Ficus brachypoda* low trees, over open *Grevillea wickhamii* subsp. *hispidula* and *Acacia tumida* var. *pilbarensis* medium to high shrubs, over mixed low shrubs, with open *Cymbopogon ambiguus* tussock grass.

Rocky Footslope vegetation

8. Open *Eucalyptus xerothermica* and *Corymbia hamersleyana* low trees, over open herbs and *Triodia pungens* hummock grass seedlings.

9. Sparse mixed *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia deserticola* subsp. *deserticola* low trees, over open *Grevillea wickhamii* subsp. *hispidula* medium to high shrubs, over open *Acacia hilliana* and *Goodenia stobbsiana* low shrubs, over moderately dense *Triodia basedowii* hummock grass.

**Clearing Description**

Kurrajura Siding to Yandi Wye Rail Duplication Project.

BHP Billiton Iron Ore Pty Ltd (BHP) proposes to clear up to 189 hectares of native vegetation within a total boundary of approximately 221 hectares for the purpose of railway construction and maintenance and associated works. The project is located approximately 95 kilometres north-west of Newman, in the Shire of East Pilbara and the Shire of Ashburton.

**Vegetation Condition**

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

to:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

**Comment**

Associated works will include the installation of communications cabling, upgrade of Rail Repeater Station One and signalling infrastructure, improvement of access roads and the establishment of borrow pits and laydown areas.

Vegetation condition was determined following a flora and vegetation survey of the application area conducted by Ecologia (2008). Factors taken into consideration when determining the vegetation condition were weeds, grazing, litter and ground disturbance (tracks and other cleared areas).

Clearing Permit CPS 2843/1 was granted by the Department of Mines and Petroleum on 19 February 2009. The clearing permit authorised the clearing of 189 hectares within a total boundary of 221 hectares. On 18 June 2014, BHP Billiton Iron Ore Pty Ltd applied to extend the permit expiry date to 30 November 2024 and amend the annual reporting date to 1 October.

### 3. Assessment of application against clearing principles

**Comments**

The amendment to extend the permit duration and change the annual reporting date is unlikely to result in any additional environmental impacts. The size of the area approved to clear and the permit boundaries remain unchanged.

The assessment against the clearing principles remains consistent with the assessment in decision report CPS 2843/1.

### 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 (WC11/006) has been registered with the National Native Title Tribunal on behalf of the claimant groups (GIS Database). However, the mining tenements have 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 numerous registered Sites of Aboriginal 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 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.

**Methodology**

GIS Databases:

- Aboriginal Sites of Significance
- Native Title Claims - Registered with the NNTT
- Native Title Claims - Filed at the Federal Court

### 4. References

- Ecologia (2008a) Rapid Growth Project 5 (RPG5) Borrow Areas (Kurrajura Siding to Yandi) Targeted Rare and Priority Flora, unpublished report for BHP Billiton Iron Ore Pty Ltd, Perth, Western Australia.
- Ecologia (2008b) Rapid Growth Project 5 (RPG5) Yandi Wye to Kurrajura Siding and Yandi Wye Rail Repeater Station One Flora and Vegetation Report, unpublished report for BHP Billiton Iron Ore Pty Ltd, Perth, Western Australia.

## 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}:-

<b>T</b>	<b>Threatened species:</b> Specially protected under the <i>Wildlife Conservation Act 1950</i> , 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 <i>Calyptorhynchus latirostris</i> is specially protected under the <i>Wildlife Conservation Act 1950</i> as a threatened species with a ranking of Endangered.  <u>Rankings:</u> 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.
<b>X</b>	<b>Presumed Extinct species:</b> Specially protected under the <i>Wildlife Conservation Act 1950</i> , 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).
<b>IA</b>	<b>Migratory birds protected under an international agreement:</b> Specially protected under the <i>Wildlife Conservation Act 1950</i> , 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.
<b>S</b>	<b>Other specially protected fauna:</b> Specially protected under the <i>Wildlife Conservation Act 1950</i> , listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
<b>P1</b>	<b>Priority One - Poorly-known species:</b> 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.
<b>P2</b>	<b>Priority Two - Poorly-known species:</b>

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.