



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 2296/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

### 1.3. Property details

Property: Iron Ore (Mount Newman) Agreement Act 1964, Mineral Lease 244 SA (AML 70/244)  
Local Government Area: Shire of East Pilbara  
Colloquial name: Mesa Gap Exploration Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 28 March 2013

## 2. Site Information

### 2.1. Existing environment and information

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

**Vegetation Description** The vegetation of the application area is broadly mapped as Beard Vegetation Associations 29: Sparse low woodland; mulga, discontinuous in scattered groups; 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*; and 216: Low woodland; mulga (with spinifex) on rises (GIS Database).

GHD Pty Ltd (GHD) conducted a flora survey of the application area, in September-October 2007 (GHD, 2007).

The following vegetation types were identified within the application area, broadly associated with topographic features (GHD, 2007):

#### 1. Rocky slopes: Found on the rocky southern hills of the survey area.

1a: Hummock grassland on top of low rocky hills: *Triodia basedowii*, with scattered *Acacia adoxa*, *Acacia hilliana*, with isolated emergent *Acacia bivenosa*, *Eucalyptus leucophloia*.

1b: Hummock grasslands with scattered low shrubs and isolated tall shrubs on slopes of low rocky hills: *Triodia basedowii*, with *Acacia hilliana*, *Acacia adoxa*, *Gompholobium polyzygum*, with scattered *Grevillea wickhamii*, *Acacia bivenosa*, *Acacia inaequilatera*, *Hakea lorea*, *Hakea chordophylla*. *Goodenia* sp. Sandy Creek occurs in disturbed areas. *Triodia pungens* occurs with *Triodia basedowii* in deeper soils at the base of low rocky hills.

1c: Hummock grasslands with scattered low shrubs and isolated tall shrubs on outcrops of low rocky hills: *Triodia basedowii*, with scattered *Acacia hilliana*, *Acacia adoxa*, *Ptilotus obovatus*, *Eremophila latrobei*, *Senna* species, *Tribulus platypterus*, with mixed bunch grasses dominated by *Aristida* species, and isolated emergent *Eucalyptus leucophloia*.

#### 2. Drainage Lines

2a: Mixed *Acacia* scrubland over mixed bunch and hummock grasses with scattered emergent tree species: *Acacia monticola*, *Acacia ancistrocarpa*, *Acacia pachyacra*, *Acacia coriacea*, *Santalum lanceolatum*, *Petalostylis labicheoides*, *Gossypium robinsonii*, with scattered emergent *Corymbia hamersleyana* over *Dodonaea coriacea*, *Senna* species, *Triodia pungens*, *Cymbopogon* sp., etc.

2b: Mulga Woodlands on major drainage lines (recently burnt and lacking in understorey species): *Acacia aneura* (two variants), *Acacia coriacea*, *Gossypium robinsonii* over bunch grasses dominated by *Cymbopogon*, *Themeda triandra*, *Eragrostis tenellula*, *Eulalia brownii*, *Aristida* sp, with *Pterocaulon*, *Polycarpaea*, *Sida* species.

3. Broad Valley Plains: Very open tree steppe, over scattered shrubs with mixed bunch and hummock grasslands: *Eucalyptus leucophloia*, *Eucalyptus gamophylla*, *Corymbia deserticola* with scattered *Acacia pruinocarpa*, *Acacia aneura*, isolated *Grevillea pyramidalis* over *Acacia ancistrocarpa*, *Acacia pachyacra*, *Eremophila fraseri*, *Solanum*, *Sida* species, *Senna* species, over mixed hummock and bunch grasslands dominated by *Triodia pungens*, *Aristida* species, *Eragrostis* species, with mixed herbs, including *Goodenia* sp. Sandy Creek. This vegetation type is considered to be the most variable, and the most diverse.



<b>Clearing Description</b>	<p>BHP Billiton Iron Ore Pty Ltd (BHP Billiton) has applied to clear up to 152 hectares of native vegetation within a total application area of approximately 2,709 hectares, for the purposes of the Mesa Gap exploration drilling project.</p> <p>Initial clearing will be for approximately 88 drill pads, and associated sumps and access tracks. Additional drilling may be undertaken subsequently, dependant upon the initial results. Each drill pad will be approximately 20 metres x 20 metres, each sump will be approximately 5 metres x 2 metres x 1 metre deep, and access tracks will be approximately 4 metres wide (BHP Billiton, 2007).</p> <p>Existing tracks and other previously disturbed areas will be utilised wherever possible. Where new tracks are required, they will be established using raised blade clearing techniques wherever practicable (BHP Billiton, 2008). Drill pads and sumps will be mechanically cleared using earth moving equipment with a lowered blade. All topsoil and vegetation will be stockpiled for later use in rehabilitation. All drill pads and sumps will be rehabilitated within twelve months.</p>
<b>Vegetation Condition</b>	<p>Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (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>The application area is roughly rectangular in shape, approximately 13 kilometres long and 2 kilometres wide. The western end of the application area is located approximately 27 kilometres east of Newman, in the Pilbara region (GIS Database).</p> <p>The vegetation condition was derived from a vegetation survey conducted by GHD Pty Ltd (2007).</p> <p>Clearing permit CPS 2296/1 was granted by the Department of Mines and Petroleum on 12 June 2008 and was valid from 12 July 2008 to 1 September 2013. An application to amend this permit was received by the Department of Mines and Petroleum on 31 January 2013. The application requested an extension to the duration of the permit to 30 June 2023 and amendment of the annual clearing permit report submission date to the 1 October. The amount of native vegetation authorised to clear and the clearing permit boundary that was approved to clear under CPS 2296/1 will remain unchanged.</p>

### 3. Assessment of application against clearing principles

#### Comments

BHP Billiton has applied to extend the duration of the clearing permit by ten years and to amend the annual clearing permit report submission date to the 1 October. There are no additional environmental impacts associated with this amendment. Therefore, the assessment against the clearing principles is consistent with the assessment in Clearing Permit Decision Report CPS 2296/1.

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

#### Comments

There is one native title claim over the area under application: WC05/6 (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. 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*.

According to available databases, there are four 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 – Registered with the NNTT

### 4. References

- BHP Billiton (2007) Exploration Environmental Management Plan, Revision 1. BHP Billiton Iron Ore Pty Ltd, Western Australia.
- BHP Billiton (2008) Mesa Gap. Purpose Permit Vegetation Clearing Permit Application. Supporting Documentation, Revision 1. BHP Billiton Iron Ore Pty Ltd, Western Australia.
- GHD (2007) Mesa Gap Flora and Fauna Survey: Mesa Gap Preliminary Assessment Outcomes. GHD Pty Ltd, 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:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	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.