

# **Clearing Permit Decision Report**

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5617/3
Permit type: Purpose

## 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 244SA (AML 70/244)
Iron Ore (McCameys Monster) Agreement Act 1972, Mining Lease 266SA (AM 70/266)
Iron Ore (Mount Newman) Agreement Act 1964, Special Lease for Mining Operations
3116/3687 (Document I 154279 L), Lease Extension K846790, Lot 19 on Deposited Plan

48921

Iron Ore (Mount Newman) Agreement Act 1964, Special Lease for Mining Operations

3116/3685, (Lease K858923), Lot 17 on Deposited Plan 241430 General Purpose Leases 52/19 – 52/274, 52/276, 52/277, 52/279

Miscellaneous Licence 47/92 Miscellaneous Licence 52/99

Local Government Area: Colloquial name:

Shire of East Pilbara Mt Whaleback Project

#### 1.4. Application

Clearing Area (ha) 2,010.3

No. Trees

Method of Clearing

For the purpose of:

Mechanical Clearing Mineral production, mineral exploration, construction and maintenance of infrastructure and associated

activities.

### 1.5. Decision on application

Decision on Permit Application:
Decision Date:

Granted 7 April 2016

## 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. Two Beard vegetation associations have been mapped within the application area (GIS Database):

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

There have been numerous flora and vegetation surveys undertaken over the Mt Whaleback and surrounding areas since 1984. Based on those surveys the following 29 vegetation associations have been identified within the application area (Onshore Environmental, 2013):

- 1. Low Open Forest of Acacia aptaneura, Acacia citrinoviridis and Corymbia hamersleyana over Tussock Grassland of Themeda triandra, Aristida inaequiglumis and \*Cenchrus ciliaris with High Open Shrubland of Acacia pyrifolia, Petalostylis labicheoides and Rulingia luteiflora in brown sandy loam on tributaries of major drainage lines and adjacent floodplains;
- 2. Low Open Forest of Acacia aptaneura, Acacia pruinocarpa and Eucalyptus xerothermica (+Acacia ayersiana) over Open Hummock Grassland of Triodia pungens with Open Shrubland of Acacia bivenosa, Rhagodia eremaea and Psydrax latifolia in red loamy sand on hardpan plains;
- 3. Low Open Forest of Acacia catenulata subsp. occidentalis, Acacia aptaneura and Grevillea berryana over Open Shrubland of Eremophila latrobei, Acacia sibirica and Senna glutinosa subsp. luerssenii over Open Hummock Grassland of Triodia pungens and Triodia wiseana in red sandy loam on valley floors and along incised drainage lines;
- 4. Low Woodland of *Acacia aptaneura* and *Acacia pruinocarpa* over Open Hummock Grassland of *Triodia brizoides* with Low Open Woodland of *Eucalyptus xerothermica* and *Eucalyptus leucophloia* subsp. *leucophloia* in red brown loam on hardpan plains;
- 5. Low Woodland of Acacia catenulata subsp. occidentalis, Corymbia ferriticola and Ficus brachypoda over

Shrubland of *Eremophila tietkensii*, *Dodonaea pachyneura* and *Acacia hamersleyensis* over Open Hummock Grassland of *Triodia pungens* in red loamy sand in rocky gullies and small gorges;

- 6. Hummock Grassland of *Triodia angusta* and *Triodia wiseana* with Open Mallee of *Eucalyptus gamophylla* and/or *Eucalyptus socialis* subsp. *eucentrica* and Open *Shrubland* of *Acacia bivenosa* in light brown loamy sand on calcrete rises and plains;
- 7. Hummock Grassland of *Triodia basedowii* with High Open Shrubland of *Acacia inaequilatera*, *Acacia pruinocarpa* and *Hakea chordophylla* and Open Shrubland of *Eremophila fraseri* and *Eremophila platycalyx* subsp. *pardalota* in red loamy sand on hill slopes;
- 8. Hummock Grassland of *Triodia pungens* with Open Mallee of *Eucalyptus trivalvis* and/or *Eucalyptus gamophylla* and Shrubland of *Acacia bivenosa* and *Petalostylis labicheiodes* in red loamy sand on plains;
- 9. Hummock Grassland of *Triodia pungens*, *Triodia epactia* and *Triodia brizoides* with Open Shrubland of *Acacia bivenosa*, *Eremophila jucunda* subsp. *pulcherrima* and *Ptilotus obovatus* and Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* in red loamy sand on flood plains adjacent to tributaries of major drainage lines;
- 10. Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. Van Leeuwen 3835) with Low Open Woodland of *Acacia pruinocarpa* and *Acacia aptaneura* and High Open Shrubland of *Acacia aptaneura*, *Acacia inaequilatera* and *Senna glutinosa* subsp. *glutinosa* in red loamy sand on hill crests and upper hill slopes;
- 11. Hummock Grassland of *Triodia wiseana* and *Triodia brizoides* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and Open Shrubland of *Acacia synchronicia*, *Acacia bivenosa* and *Acacia tenuissima* in red loamy sand on lower hill slopes and plains;
- 12. Hummock Grassland of *Triodia wiseana*, *Triodia brizoides* and *Triodia pungens* with Open Shrubland of *Acacia inaequilatera*, *Acacia maitlandii* and *Senna glutinosa* subsp. *Iuerssenii* with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *Ieucophloia*, *Corymbia hamersleyana* and *Hakea lorea* subsp. *Iorea* in brown sandy loam on undulating hills;
- 13. Hummock Grassland of *Triodia wiseana*, *Triodia pungens* and *Triodia brizoides* with High Open Shrubland *Acacia dictyophleba*, *Acacia bivenosa* and *Acacia adsurgens* in red brown sand loam on hill crests and upper hill slopes;
- 14. Hummock Grassland of *Triodia wiseana*, *Triodia pungens* and *Triodia brizoides* with Open Shrubland of *Acacia bivenosa*, *Acacia inaequilatera* and *Acacia maitlandii* and Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* in red loamy sand on undulating hill slopes;
- 15. Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Acacia aptaneura* and *Acacia paraneura* and Open Shrubland of *Acacia synchronicia*, *Acacia bivenosa* and *Acacia tetragonophylla* in red loamy sand on plains;
- 16. Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with High Open Shrubland of *Acacia rhodophloia* and *Hakea chordophylla* and Open Shrubland of *Acacia acradenia*;
- 17. Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and Low Open Shrubland of *Acacia adoxa* var. *adoxa* and *Gompholobium oreophilum* in red loamy sand on hill slopes;
- 18. Tussock Grassland of *Themeda triandra* and \*Cenchrus ciliaris with Shrubland of *Acacia bivenosa, Senna glutinosa* subsp. *glutinosa* and *Eremophila longifolia* and Low Open Woodland of *Acacia aptaneura* and *Corymbia hamersleyana* in brown loamy sand on levee banks of major drainage lines;
- 19. Tussock Grassland of *Themeda triandra*, \*Cenchrus ciliaris and Eriachne tenuiculmis with Open Woodland of Eucalyptus victrix or Eucalyptus camaldulensis subsp. refulgens, Corymbia hamersleyana and Acacia citrinoviridis over High Open Shrubland of Santalum lanceolatum, Eremophila longifolia and Acacia pyrifolia var. pyrifolia in brown loamy sand on incised channels of major drainage lines;
- 20. Open Tussock Grassland of \*Cenchrus ciliaris with High Open Shrubland of Grevillea wickhamii, Acacia pruinocarpa and Acacia aptaneura in red loamy sand on rehabilitated waste dump batters;
- 21. Scattered Low trees of Eucalyptus leucophloia subsp. leucophloia over a Low Open Shrubland of Petalostylis labicheoides Acacia catenulata subsp. occidentalis and Acacia monticola over Very Open Hummock Grassland of Triodia pungens and Very Open Tussock Grassland of Themeda triandra and Eriachne mucronata;
- 22. Scattered Low Trees of Eucalyptus gamophylla over Low Open Forest of Acacia aneura var. tenuis, Acacia pruinocarpa and Hibiscus sturtii var. campylochlamys over Open Tussock Grassland of Enneapogon caerulescens and Eriachne mucronata with Very Open Hummock Grass of Triodia epactia and Triodia pungens;
- 23. Low Woodland of Acacia aneura var ?pilbarana, Acacia catenulata subsp. occidentalis and Acacia pruinocarpa over Open shrubland of Eremophila exilifolia, Eremophila forrestii subsp. forrestii, and Eremophila latrobei over Open Hummock Grassland of Triodia brizoides and Triodia pungens;
- 24. Low Woodland of Acacia pruinocarpa, Acacia aneura var ?pilbarana and Eucalyptus gamophylla over Low Scattered Shrubs of Anthobolus leptomerioides over Hummock Grassland of Triodia brizoides and Triodia pungens with Scattered Herbs of Goodenia stobbsiana;
- 25. Low Woodland of Acacia pruinocarpa and Acacia aneura var. tenuis over Scattered Shrubs of Acacia inaequilatera, Acacia bivenosa and Ptilotus calostachyus over Open Hummock Grassland of Triodia brizoides

with Very Open Tussock Grassland of Themeda sp. and Paraneurachne muelleri.

- 26. Low Open Woodland of Eucalyptus xerothermica, Corymbia ferriticola and Corymbia hamersleyana over Shrubland of Acacia aneura var. tenuis, Acacia tenuissima and Acacia tetragonophylla over Open Hummock grassland of Triodia pungens and Triodia angusta;
- 27. Low Woodland of Eucalyptus leucophloia subsp. leucophloia, Corymbia ferriticola and Corymbia hamersleyana over High Open Shrubland of Acacia catenulata subsp. occidentalis, Acacia rhodophloia and Acacia pruinocarpa over Hummock Grassland of Triodia brizoides and Triodia pungens;
- 28. Scattered Low Trees of Eucalyptus leucophloia subsp. leucophloia over Open Shrubland of Acacia ancistrocarpa, Acacia bivenosa and Acacia dictyophleba over Hummock Grassland of Triodia brizoides;
- 29. Low Open Woodland of Eucalyptus gamophylla, Eucalyptus kingsmillii subsp. kingsmillii and Eucalyptus leucophloia subsp. leucophloia over Scattered Shrubs of Acacia pruinocarpa, Senna glutinosa subsp. glutinosa and Ptilotus obovatus over Hummock Grasslands of Triodia pungens, Triodia epactia and Triodia brizoides and Very Open Tussock Grass of Eriachne mucronata and Cymbopogon ambiguous.

#### Clearing Description

Mt Whaleback Project.

BHP Billiton Iron Ore Pty Ltd (BHP Billiton) proposes to clear up to 2,010.3 hectares within an application area of approximately 8,875 hectares for the purposes of mineral production, mineral exploration, construction and maintenance of infrastructure and associated activities. The project is located in Newman within the Shire of East Pilbara

#### **Vegetation Condition**

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

to

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

#### Comment

The vegetation condition was derived from a summary of vegetation surveys undertaken over the application area prepared by Onshore Environmental (2013).

The proposed clearing is for a wide range of purposes including mineral production, mineral exploration, maintenance of infrastructure, borrow areas, laydown areas, stockpiles, tailings storage facilities, ore processing and benefaction activities (BHP Billiton, 2013). The permit area covers 13 clearing permits that were previously granted over the area. These permits were revoked on 7 August 2014.

Clearing permit CPS 5617/1 was granted by the Department of Mines and Petroleum on 31 October 2013 and authorised the clearing of 2,100 hectares within a boundary of 8,800 hectares. CPS 5617/1 was amended on 14 August 2014 to increase the permit boundary to 8,875 hectares and reduce the amount of clearing authorised to 2,010.3 hectares. BHP Billiton has applied to remove conditions 7 and 8 on the permit and extend the permit duration from 23 November 2030 to 30 November 2030.

## 3. Assessment of application against clearing principles

#### Comments

BHP Billiton has applied to remove Conditions 7 and 8 of CPS 5617/2. They have also applied to extend the duration of the permit to 30 November 2030.

Conditions 7 and 8 of CPS 5617/2 relate to the management of rare flora species. The only rare flora species recorded within the permit boundary is *Lepidium catapycnon* (Onshore Environmental, 2013). *Lepidium catapycnon* has been removed from the Wildlife Conservation (Rare Flora) Notice and is now considered to be Priority 4 (DPaW, 2015). *Lepidium catapycnon* has a range of approximately 300 kilometres within the Pilbara region and is now known to be in sufficient numbers and secure (Western Australian Herbarium, 2016). The many flora surveys over the permit area have not recorded any other species of rare flora and the permit area is not considered likely to support any rare flora species (Onshore Environmental, 2013). Given the above, the proposed clearing is not likely to be at variance to Principle (c).

The assessment of the remaining Clearing Principles remains unchanged and details can be found in decision reports 5617/2 and 5617/1.

#### Methodology

DPaW (2015)

Onshore Environmental (2013) Western Australian Herbarium (2016)

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

#### Comments

There is one native title claim (WC2005/006) over the application area (Department of Aboriginal Affairs, 2016). This claim has been registered with the National Native Title Tribunal on behalf of the claimant groups. 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 numerous registered Aboriginal sites of significance within the application area (Department of Aboriginal Affairs, 2016). 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 Regulation, 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.

It is noted that the proposed clearing may impact on a protected matter under the *Environment Protection and Biodiversity Conservation Act* 1999 (the EPBC Act). The proponent may be required to refer the project to the (Federal) Department of the Environment for environmental impact assessment under the *EPBC Act*. The proponent is advised to contact the Department of the Environment for further information regarding notification and referral responsibilities under the EPBC Act.

The clearing permit application was advertised on 29 February 2016 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology Department of Aboriginal Affairs (2016)

### 4. References

BHP Billiton (2013) Mount Whaleback Strategic NVCP - Application to Clear Native Vegetation (Purpose) Permit Under the Environmental Protection Act 1986. Supporting documentation for clearing permit application CPS 5617/1, dated May 2013.

Department of Aboriginal Affairs (2016) Aboriginal Heritage Inquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2/ (Accessed on 29 March 2016).

DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, 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.

Onshore Environmental (2013) Flora and Vegetation and Vertebrate Fauna Review - Mt Whaleback AML 7/244. Unpublished report for BHP Billiton Iron Ore Pty Ltd, dated April 2013.

Western Australian Herbarium (2016) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. http://florabase.dpaw.wa.gov.au/ (Accessed 29 March 2016).

## 5. Glossary

#### **Acronyms:**

BoM Bureau of Meteorology, Australian Government

DAA Department of Aboriginal Affairs, Western Australia

DAFWA Department of Agriculture and Food, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DPaW and DER)

DER Department of Environment Regulation, Western Australia
DMP Department of Mines and Petroleum, Western Australia

**DRF** Declared Rare Flora

**DotE** Department of the Environment, Australian Government

**DoW** Department of Water, Western Australia

**DPaW** Department of Parks and Wildlife, Western Australia

DSEWPaC Department of Sustainability, Environment, Water, Population and Communities (now DotE)

EPA Environmental Protection Authority, Western Australia
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

PEC Priority Ecological Community, Western Australia

RIWI Act Rights in Water and Irrigation Act 1914, Western Australia

TEC Threatened Ecological Community

#### **Definitions:**

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

#### T Threatened species:

Published as Specially Protected under the Wildlife Conservation Act 1950, listed under Schedules 1

to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.

**Threatened flora** is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the Wildlife Conservation Act.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

#### CR Critically endangered species

Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

#### EN Endangered species

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

### VU Vulnerable species

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

#### EX Presumed extinct species

Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

#### IA Migratory birds protected under an international agreement

Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

#### CD Conservation dependent fauna

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

## OS Other specially protected fauna

Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

#### P Priority species

Species which are poorly known; or

Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

## P1 Priority One - Poorly-known species:

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

#### P2 Priority Two - Poorly-known species:

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of

survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

### P3 Priority Three - Poorly-known species:

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations 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 locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

#### 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 are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

## 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.