Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2527/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

1.3. Property details

Property: *Iron Ore (Mt Newman) Agreement Act 1964*, Mineral Lease 244SA (AML 70/244)
Local Government Area: Shire of East Pilbara
Colloquial name: Orebody 17 Exploration Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
50		Mechanical Removal	Mineral Exploration, Construction of Access Tracks and Ammonium Nitrate Storage Facility

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 6 December 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 a useful tool to examine the vegetation extent in a regional context. Two Beard vegetation associations are located within the area proposed to be cleared (GIS Database). These vegetation associations are (Government of Western Australia., 2001):

- Beard Vegetation Association 82: Hummock grasslands, low tree steppe; Snappy Gum over *Triodia wiseana*; and
- Beard Vegetation Association 216: Low woodland; Mulga (with spinifex) on rises.

A flora and vegetation survey was conducted in the Orebody 17 area by Pilbara Flora between 21 – 22 October 2008. The survey area was approximately 950 metres long and between 200 – 400 metres wide, covering a total area of approximately 26.18 hectares. Seventeen 50 metres x 50 metres quadrats were surveyed, the standard size used for flora and vegetation surveys undertaken in the Pilbara bioregion (Pilbara Flora, 2008). Six vegetation communities were recorded within the survey area (Pilbara Flora, 2008):

Ridges and colluvial upperslopes with Spinifex open grassland :
Ridges and colluvial upperslopes with Spinifex open grassland: Open grassland of *Triodia basedowii* with scattered *Hakea chordophylla*, *Halgania solanacea* var *I Keraudrenia velutina* subsp *elliptica* and *Gompholobium karijini;*

Colluvial hillsides with open *Acacia* woodland: Open shrubland of *Acacia rhodophloia*, *Grevillea wickhamii* subsp *I* and *Hakea chordophylla* over *Gompholobium karijini* and *Halgania solanacea* var *I* over *Triodia basedowii;*

Colluvial hillsides with low mixed shrubland: Low shrubland of over *Acacia adoxa* var *adoxa*, *Eriachne mucronata*, *Mirbelia viminalis*, *Keraudrenia velutina* subsp *elliptica*, *Gompholobium karijini* and *Triodia basedowii* with emergent *Eucalyptus leucophloia* subsp *leucophloia;*

Breakaways with low open Eucalypt woodland: Low woodland of *Eucalyptus leucophloia subsp leucophloia* and *Eucalyptus kingsmillii subsp kingsmillii* over *Eriachne mucronata*, *Keraudrenia velutina subsp elliptica*,*Gompholobium karijini* and *Triodia epactia*;

Narrow valley with mixed high shrubland: High shrubland of *Grevillea wickhamii* subsp *I Acacia rhodophloia*, *Petalostylis labicheoides* and *Rulingia luteiflora* over *Gompholobium karijini*, *Eriachne lanata, Eriachne mucronata, Triodia basedowii* and *Triodia epactia;* and

Minor narrow drainage line with high shrubland: Open scrub of *Petalostylis labicheoides* over *Acacia adoxa* var *adoxa*, *Gompholobium karijini* and *Triodia basedowii.*

Clearing Description	BHP Billiton Iron Ore Pty Ltd (here after referred to as BHP Billiton) have applied to clear 50 hectares within a 612 hectare purpose permit boundary for the Orebody 17 exploration project (BHP Billiton, 2008). The project will comprise drill pads approximately 20 metres wide and 20 metres long, associated tracks which will be no wider than four metres (BHP Billiton, 2008). BHP Billiton will also be expanding the boundary of the Orebody 18 Ammonium Nitrate Storage Facility and the existing access track to and from the facility (BHP Billiton, 2012) The area applied to clear is located approximately 32 kilometres east/north-east of Newman in the Pilbara region of Western Australia (ENV Australia, 2008).
Vegetation Condition	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994); to Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
Comment	Vegetation within the application area was described as 'Very Good' to 'Degraded', with most of the survey sites rated as 'Very Good'. The main disturbances within the application area were associated with old drill pads and associated tracks (Pilbara Flora, 2008). BHP Billiton applied to the Department of Mines and Petroleum on 16 October 2012 to amend CPS 2527/1 to modify the purpose of the permit to include the construction of access tracks and an ammonium nitrate storage facility.

3. Assessment of application against clearing principles

Comments

BHP Billiton has applied to modify the purpose of the permit to include the construction of access tracks and ammonium nitrate storage facility. The area authorised to be cleared and the clearing boundary will remain unchanged.

As the amendment is only for administrative purposes, the environmental impacts will not change and the assessment of the clearing principles is consistent with the assessment in clearing permit decision report CPS 2527/1.

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

Comments

There is one native title claim in the application area (GIS Database). This claim (WC05/6) has been registered with the National Native Title Tribunal on behalf of the claimant group (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 four registered Sites of Aboriginal Significance located in the area applied to clear (Site ID 9183, 9184, 9185, and 9234) (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.

BHP Billiton (2005) has an internal process; the Project Environment and Aboriginal Heritage Review (PEAHR), which is designed to prevent the inadvertent disturbance of Aboriginal heritage sites within BHP Billiton operations as well as ensuring that all areas of proposed disturbance have been subject to adequate ethnographic and archaeological inspection and consultation. Prior to the commencement of any land disturbance activity, a PEAHR must be completed and submitted to BHP Billiton's Indigenous Affairs Department, for assessment. All land disturbance activities must be approved by BHP Billiton's Environment and Aboriginal Heritage staff prior to its commencement (BHP Billiton, 2005).

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.

The amendment was advertised on 12 November 2012 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were recieved.

Methodology

BHP Billiton (2005).
GIS Database
- Aboriginal Sites of Significance
- Native Title Claims – Registered with the NNTT

4. References

BHP Billiton (2005) Aboriginal Heritage Induction Handbook. BHP Billiton Iron Ore Pty Ltd, Western Australia.

BHP Billiton (2008) Orebody 17 Exploration. Purpose Permit Vegetation Clearing Permit Application. Supporting Documentation. 2008.

BHP Billiton (2012) Orebody 17 Exploration. Purpose Permit Vegetation Clearing Permit Amendment Application. Supporting Documentation.

ENV Australia (2008) Subject: Peregrine Falcon Nesting. Unpublished report prepared for BHP Billiton Iron Ore Pty Ltd.

Government of Western Australia (2011) 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Pilbara Flora (2008) Flora and Vegetation Survey Orebody 17. Unpublished report prepared for BHP Billiton Iron Ore.

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.