Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4237/2
Permit type: Purpose

1.2. Proponent details

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

1.3. Property details

Property: Miscellaneous Licence 45/194
Local Government Area: Town of Port Hedland
Colloquial name: Bore Creek Levee Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
13.8		Mechanical Removal	Railway levee bank reinstatement and repair; and underground services corridor and associated activities.

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 19 July 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. One Beard vegetation association has been mapped within the application area (GIS Database; Shepherd, 2009).

93: Hummock grasslands, shrub steppe; kanji over soft spinifex.

A flora and vegetation survey of the application area conducted by Maia (2010) identified the following four vegetation associations within the application area:

Te.HG: Hummock grassland of *Triodia epactia* and *Triodia lanigera* with an open shrubland of *Acacia inaequilatera, Acacia ancistrocarpa* and *Acacia stellaticeps* with +/- scattered low trees of *Corymbia hamersleyana* on plains;

Ts.HG: Hummock grassland of *Triodia secunda* on low lying seasonally inundated areas;

At.SL: Low open woodland of *Corymbia candida* subsp. *lautifolia* with high shrubland of *Acaica tumida* var. *pilbarensis* and *Acacia colei* var. *coleii* with open tussock grassland of *Eulalia aurea* and *Cenchrus ciliaris* on major flow lines; and

Cc.WL: High shrubland of *Acacia tumida* var. *pilbarensis* and *Acacia colei* var. *colei*, with a low open shrubland of *Hybanthus aurantiacus* with very open hummock grassland of *Triodia epactia* on flood plains and at the base of granite domes and tors.

Clearing Description BHP Billiton Iron Ore Pty Ltd has applied to clear up to 13.8 hectares of native vegetation for the purpose of reinstating and repairing a levee bank along existing railway infrastructure.

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

To

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment Clearing Permit CPS 4237/1 was granted by the Department of Mines and Petroleum on 7 April 2011 and allowed for the clearing of 9.7 hectares of native vegetation. An application to amend this permit was received by the Department of Mines and Petroleum on 30 April 2012. The application requested a 4.1 hectare increase to the permitted amount of clearing and permit boundary; and an additional purpose of underground services corridor and associated activities be added to the permit.

3. Assessment of application against clearing principles

Comments

BHP Billiton Iron Ore Pty Ltd has applied to increase the area permitted to clear and the permit boundary by 4.1 hectares, to 13.8 hectares and to add the additional purpose of underground corridor and associated activities.

A flora survey of the application area conducted by Maia (2010) identified four additional vegetation communities within the extended permit boundary. Maia (2010) mapped the application area as being in 'completely degraded' to 'very good' condition. No Threatened or Priority Ecological Communities have been defined within the application area (Maia, 2010; GIS Database). No Threatened Flora species and no additional Priority Flora species have been recorded within the application area (Maia, 2012). The application is therefore not likely to be at variance to Principles (a), (c) and (d) and is not at variance to Principle (e).

One additional fauna habitat is present within the amended application area (BHP, 2012). This habitat is associated with Bore Creek, which is a non-perennial watercourse running through the application area. Approximately 0.06 hectares of highly degraded vegetation associated with this habitat is present within the application area. Due to the highly degraded nature of this habitat, it is considered to be of moderate conservation significance (BHP, 2012). Given the small scale of the proposed clearing within this it is considered unlikely that the proposed clearing will constitute clearing of significant fauna habitat. Therefore the proposed clearing is not likely to be at variance to Principle (b).

The additional application area intersects one minor ephemeral creek (Bore Creek) (GIS Database; BHP, 2012). BHP (2012) have assessed that approximately 0.06 hectares of degraded vegetation associated with the Bore Creek is likely to be impacted by the proposed clearing. The proposed clearing is at variance to Principle (f), however given the small scale and disturbed nature of the proposed clearing it is not likely to cause a significant impact.

The additional application area intersects the Uaroo land system, which is not generally susceptible to erosion (GIS Database; Van Vreeswyk et al., 2004). The application area still intercepts the Macroy land system, therefore the assessment of Principle (g) remains consistent with the assessment in clearing permit decision report CPS 4237/1 and the application may be at variance to this Principle.

Current environmental information has been reviewed and the assessment of clearing principles (h), (i) and (j) is consistent with the assessment in clearing permit decision report CPS 4237/1 (GIS Database).

Methodology

BHP (2012)
Maia (2010)
Van Vreeswyk et al. (2004)
GIS Database:
- DEC Tenure
- Evaporation Isopleths
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation
- Public Drinking Water Source Areas (PDWSAs)
- Rangeland Land System Mapping
- Threatened Ecological Sites Buffered
- Threatened and Priority Flora

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

Comments

There is one Native Title Claim (WC99/3) over the area under application (GID Database). This claim has been lodged 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*.

There are no 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 Signficance
- Native Title claims - Determined by the Federal Court

4. References

BHP (2012) Bore Creek Levee and Services Corridor. Application to Amend Native Vegetation Clearing (Purpose Permit) CPS 4237/1 under the *Environmental Protection Act 1986* ML45/194. Unpublished report dated April 2012.

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

Maia (2010) Level One Flora and Vegetation Assessment. Unpublished report dated December 2012.

Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

Van Vreeswyk, A.M.E., Payne, A.L., Hennig, P., and Leighton, K.A. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia, Department of Agriculture, 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.