



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4112/2
Permit type: Purpose

1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 45/190
Local Government Area: Town of Port Hedland
Colloquial name: Mooka Marshalling Yards

1.4. Application

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| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
| 221 | | Mechanical Removal | Construction and Maintenance of Rail Infrastructure, Roads and Associated Activities |

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 15 August 2013

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

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

647: Hummock grasslands, dwarf-shrub steppe; *Acacia translucens* over soft spinifex.

A Level 1 flora and vegetation survey of the application area was conducted by Maia Environmental Consultancy in August 2010. The following three vegetation communities were identified within the application area (Maia Environmental Consultancy (2010):

1. Hummock Grassland of *Triodia epactia* and *Triodia lanigera* with an Open Shrubland of *Acacia inaequilatera*, *Acacia ancistrocarpa* and *Acacia stellaticeps* and +/- Scattered Low Trees of *Corymbia hamersleyana* on Plains;

2. Hummock Grassland of *Triodia secunda* on Low Lying Seasonally Inundated Areas; and

3. 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.

There were also areas that were mapped as being 'cleared for infrastructure'.

A Level 2 flora and vegetation survey was undertaken by ENV over the Port Hedland area in April and May 2011. This survey identified the additional area as (ENV, 2011):

4. Sandplain Q – Low open *Corymbia zygomphylla* woodland over open *Acacia ancistrocarpa*, *Acacia inaequilatera*, *Acacia tumida* var. *pilbarensis* and *Acacia sericophylla* shrubland over *Acacia stellaticeps* low open shrubland over *Triodia epactia* and *Triodia lanigera* hummock grassland.

Clearing Description BHP Billiton Iron Ore Pty Ltd (BHPBIO) has applied to clear up to 221 hectares within an application area of 587.6 hectares (GIS Database). The application area is located approximately 22 kilometres south of Port Hedland (GIS Database).

The proposed clearing is for the construction of the Mooka marshalling yards. The proposed work includes the construction of rail infrastructure, borrow pits, drainage construction, geotechnical investigations, laydown areas and access tracks.

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

The vegetation condition was assessed by botanists from Maia Environmental Consultancy and ENV.

Parts of the application area have been previously cleared for rail infrastructure and a quarry.

Clearing permit CPS 4112/1 was granted on 10 February 2011 and authorised the clearing of 221 hectares within a boundary of 568 hectares. BHPBIO applied for an amendment on 28 June 2013 to increase the permit boundary to 587.6 hectares. This increase is to allow the modification of an existing access road. They have also applied to change the purpose of the clearing from 'construction of rail infrastructure and associated activities' to 'construction and maintenance of rail infrastructure, roads and associated activities'. The amount of clearing authorised will remain at 221 hectares.

3. Assessment of application against clearing principles

Comments

This amendment is to increase the clearing permit boundary from 568 hectares to 587.6 hectares and amend the purpose to 'construction and maintenance of rail infrastructure, roads and associated activities'. The amount of clearing authorised under the permit will remain at 221 hectares.

The additional 19.6 hectares is located 3 kilometres north of the original permit boundary. This area was mapped by ENV (2011) as 'Low open *Corymbia zygophylla* woodland over open *Acacia ancistrocarpa*, *Acacia inaequilatera*, *Acacia tumida* var. *pilbarensis* and *Acacia sericophylla* shrubland over *Acacia stelaticeps* low open shrubland over *Triodia epactia* and *Triodia lanigera* hummock grassland'. This vegetation type was also mapped by ENV (2011) over most of the original permit boundary. Therefore, the vegetation present within the amended area is similar to that of the original permit area.

The Priority 1 flora species *Heliotropium muticum* was recorded within the original permit boundary. This species was not recorded within the additional area (ENV, 2011). No additional Threatened or Priority Flora species were recorded within the amended permit boundary (ENV, 2011).

The fauna habitat present within the additional area is sandplain habitat (BHPBIO, 2013). This habitat covered the majority of the original permit area and was not identified as being significant for local fauna species (Biologic, 2010). There is no significant habitat for Northern Quolls (*Dasyurus hallucatus*) or Short Range Endemic species within the additional area.

The additional area is located on the Uaroo land system which is generally not susceptible to erosion (Van Vreeswyk et al., 2004; GIS Database). There are no watercourses within the additional area (GIS Database).

The assessment of the clearing principles is consistent with that in the decision report for CPS 4112/1, where the proposed clearing may be at variance to Principles (a) and (b), is not likely to be at variance to Principles (c), (d), (f), (g), (h), (i), and (j) and is not at variance to Principle (e).

Methodology

BHPBIO (2013)
Biologic (2010)
ENV (2011)
Van Vreeswyk et al. (2004)
GIS Database:
- Hydrography, linear
- Rangeland Land System Mapping

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

Comments

There is one native title claim over the area under application (GIS Database). This claim (WC99/3) 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*.

According to available databases, there is one registered Aboriginal Site 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 Regulation (formerly 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.

It is noted that the proposed clearing may impact on a protected matter under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The proponent may be required to refer the project to the

(Federal) Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) for environmental impact assessment under the EPBC Act. The proponent is advised to contact the SEWPAC for further information regarding notification and referral responsibilities under the EPBC Act.

The amendment application was advertised on 15 July 2013 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims – Registered with the NNTT

4. References

- BHPBIO (2013) Supporting information for an amendment to CPS 4112/1.
Biologic (2010) Mooka Siding, Level 1/Targeted Fauna Survey. Unpublished document prepared for FAST JV, December 2010.
ENV (2011) Port Hedland Regional Flora and Vegetation Assessment. Unpublished report for BHP Billiton Iron Ore Pty Ltd.
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 Environmental Consultancy (2010) BHPBIO Mooka Siding, Level One Flora and Vegetation Assessment. Unpublished report for BHP Billiton Iron Ore Pty Ltd, December 2010.
Van Vreeswyk, A.M, Payne, A.L, Leighton, K.A & Hennig, P (2004) Technical Bulletin No. 92: An inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, South Perth, Western Australia.

5. Glossary

Acronyms:

| | |
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| 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.

