

Clearing Permit Decision Report

1. Application details

Permit application details Permit application No.:

Permit type: Purpose Permit

Proponent details

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

2629/3

1.3. **Property details**

Iron Ore (Mount Newman) Agreement Act 1964, Lease 3116/3687, Special Lease for Mining Property:

Operations, I154279 L (Lot 65 on Deposited Plan 48920)

Iron Ore (Mount Newman) Agreement Act 1964, Lease 3116/6297, Special Lease for Mining

Operations, I150310 L (Lot 140 on Deposited Plan 48922)

Miscellaneous Licence 45/134

Local Government Area: Town of Port Hedland Colloquial name: Bing Siding to Walla Siding

Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

261 Mechanical Removal Railway construction and maintenance and associated

activities

Decision on application

Decision on Permit Application: Grant

Decision Date: 17 October 2013

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. Four Beard vegetation associations are located within the application area (GIS Database):

Beard Vegetation Association 93 - Hummock grasslands, shrub steppe; kanji over soft spinifex;

Beard Vegetation Association 589 - Mosaic: Short bunch grassland - savanna/ grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex;

Beard Vegetation Association 619 - Medium woodland; River Gum (Eucalyptus camaldulensis); and

Beard Vegetation Association 647 - Hummock grasslands, dwarf-shrub steppe; Acacia translucens over soft

Ecologia Environment Pty Ltd (2008a) conducted a Level 1 flora and vegetation survey of the proposed rail duplication area between 6 and 8 April 2008 in order to describe finer scale vegetation types within the proposed rail duplication area than those described by Beard vegetation mapping. The flora and vegetation survey consisted of 16 quadrats, each 50 metres x 50 metres (the standard size for surveys carried out in the Pilbara) (Ecologia Environment Pty Ltd, 2008a). In addition, 10 transects were walked through different vegetation types along the length of the proposed rail duplication to ensure that a representative species list was produced for the survey area. The following seven vegetation units (associated with three distinct landforms) were described from the proposed rail duplication area:

River/Creek bank

- 1. Sparse Eucalyptus ?camaldulensis var. obtusa and Corymbia deserticola subsp. deserticola medium to low trees, with open Melaleuca argentea low trees, over numerous mixed low shrubs, dominated by Stemodia grossa, with sparse to open patches of Eulalia aurea tussock and scattered Triodia spp. hummock grasses (quadrats 2 and 10).
- 2. Open Acacia colei var. colei low trees, over sparse Cullen lachnostachys low shrubs, with sparse mixed *Cenchrus ciliaris tussock and Triodia pungens hummock grasses (quadrat 12 and transect 8);

Plain with minor channel

3. Very disturbed - Sparse dead stems, over open mixed low shrubs of Cullen lachnostachys and *Aerva javanica, over open mixed dwarf shrubs of Corchorus elachocarpus, with open Triodia angusta hummock grass (transect 7); 4. Moderately dense mixed *Acacia trachycarpa* and *A. ancistrocarpa* medium to tall shrubs, over moderately dense *Triodia pungens* hummock and open **Cenchrus ciliaris* and **Cenchrus setiger* tussock grasses (quadrat 6);

Plain

- 5. Scattered Corymbia spp. low trees, over open to moderately dense patches of mixed *Acacia bivenosa* and *A. ancistrocarpa*, sometimes with *A. colei var. colei*, *A. adsurgens* or *A. orthocarpa* medium to tall shrubs, over sparse to open *A. stellaticeps* low shrubs, with moderately dense *Triodia pungens*, patches of *T. angusta*, *T. schinzii* or *T. epactia* hummock and sparse **Cenchrus ciliaris* tussock grasses (quadrats 3, 5, 7, 8, 9, 11, 13-16, transects 1-7 and 9);
- 6. Scattered *Acacia inaequilatera* medium shrubs, over moderately dense *Triodia angusta* or *T. pungens h*ummock grassland (quadrats 1 and 4, transects 1, 2 and 10);
- 7. Very disturbed Open mixed low shrubs, with open *Cenchrus ciliaris tussock, and scattered patches of *Triodia pungens* hummock grass (along the entire length of the survey area).

Ecologia Environment Pty Ltd (2008b) undertook a Level 1 flora and vegetation survey of the Quarry 1 lease area on 8 April 2008. The flora and vegetation survey consisted of 9 quadrats, each 50 metres x 50 metres. In addition, transects were walked through different vegetation types within the lease to ensure that a representative species list was produced for the survey area. The following four vegetation units (associated with two distinct landforms) were described from the Quarry 1 lease area:

Sandy plain

- 1. Sparse to moderately dense patches of Acacia adsurgens / Acacia ancistrocarpa / Acacia bivenosa medium to tall shrubs, over sparse to moderately dense Indigofera monophylla dwarf shrubs, over moderately dense Triodia pungens or Triodia basedowii hummock grassland;
- 2. Scattered to open *Corymbia hamersleyana* low trees over open *Acacia adsurgens / Acacia ancistrocarpa / Acacia bivenosa* tall to medium shrubs over open to moderately dense *Acacia stellaticeps* low shrubs over moderately dense *Triodia pungens* or *Triodia basedowii* hummock grassland;
- 3. Open to moderately dense *Acacia bivenosa*, and sometimes *Acacia inaequilatera*, medium shrubs over open to moderately dense *Acacia stellaticeps* low to very low shrubs over moderately dense *Triodia pungens* or *Triodia basedowii* hummock grassland; and

Granite outcrop

- 4. Open Acacia colei var. colei low trees, over moderately dense *Cenchrus ciliaris tussock grass and sparse Triodia pungens hummock grass.
- * = introduced flora species

Clearing Description

Bing Siding to Walla Siding Project. BHP Billiton Iron Ore Pty Ltd proposes to clear up to 261 hectares of native vegetation within a total boundary of approximately 387.6 hectares for the purpose of railway construction and maintenance. The project is located approximately 21 to 62 kilometres south or Port Hedland, in the Town of Port Hedland.

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994);

To:

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

Comment

Clearing permit CPS 2629/1 was granted by the Department of Mines and Petroleum on 30 April 2009. The Department of Mines and Petroleum initiated an amendment to CPS 2629/1 on 29 October 2012 to correct an administrative error relating to the permit holder name.

On 6 September 2013, BHP Billiton Iron Ore Pty Ltd applied to amend CPS 2629/2 for the purpose of extending the duration of the permit from 6 December 2013 to 6 December 2023 and to amend the annual reporting date to 1 October each year.

Vegetation clearing will be undertaken by mechanical means and the vegetation and topsoil will be stockpiled for use in rehabilitation.

3. Assessment of application against Clearing Principles

Comments

BHP Billiton Iron Ore Pty Ltd has applied to amend CPS 2629/2 to extend the duration of the permit from 6 December 2013 to 6 December 2023 and to amend the annual reporting date to 1 October.

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 2629/2.

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

There is one Native Title Claim (WC99/003) over the area under application. This claim has been determined by the Federal Court of Australia. 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 several 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 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.

Methodology

GIS Database:

- Aboriginal Sites of Significance
- Native Title claims Determined by the Federal Court

4. References

Ecologia Environment Pty Ltd (2008a) Rapid Growth Project 5 (RGP5) Walla to Bing Sidings and Repeater One Flora and Vegetation Report. June 2008. Unpublished report for BHP Billiton Iron Ore Pty Ltd.

Ecologia Environment Pty Ltd (2008b) Rapid Growth Project 5 (RGP5) Quarry One Flora and Vegetation Report. June 2008. 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.

5. Hamersley Iron Pty Ltd by Pilbara Flora, Western Australia. 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

DolR 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 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 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 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.
- 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.
- **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.