



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5925/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

1.3. Property details

Property: *Iron Ore (McCamey's Monster) Agreement Authorisation Act 1972*, Mining Lease 266SA (AM70/266)
Exploration Licence 52/21
Exploration Licence 52/23
Exploration Licence 52/2876
Local Government Area: Shire of East Pilbara and Shire of Meekatharra
Colloquial name: Prairie Downs Exploration Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
150		Mechanical Removal	Mineral Exploration, Hydrogeological Investigations, Geotechnical Investigations and Associated Works

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 March 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. Three Beard vegetation association are located within the application area (GIS Database):

Beard vegetation association 18: Low woodland; mulga (*Acacia aneura*)

Beard vegetation association 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*

Beard vegetation association 175: Short bunch grassland - savanna/grass plain (Pilbara)

Beard vegetation associations 18 and 82 are mapped within the amendment area.

Onshore Environmental Pty Ltd (Onshore) conducted a one season Level 2 flora and vegetation survey over the original permit area in July 2009. Onshore (2010) identified 23 vegetation associations and these are detailed in Decision Report CPS 5925/1.

Onshore (2015) identified the following five vegetation associations within the additional area applied for under the amendment application (a 1.5 kilometre long existing track and surrounding vegetation) following a Level 1 flora and vegetation survey:

- Low Woodland of *Acacia aptaneura*, *Acacia pruinocarpa* and *Acaciacatenulata* over Open Hummock Grassland of *Triodia pungens* and *Triodia* sp. Shovelanna Hill with High Open Shrubland of *Acacia rhodophloia*, *Acacia tetragonophylla* and *Psyrax latifolia* on undulating low hillcrests;
- Hummock Grassland of *Triodia* sp. Shovelanna Hill with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia*, *Corymbia deserticola* and *Acacia catenulata* and Scattered Shrubs of *Acacia marramamba*, *Acacia sibirica* on hillcrests;
- Hummock Grassland of *Triodia pungens* with Low Woodland of *Acacia aptaneura*, *Acacia pruinocarpa* and *Acacia aneura* and Open Shrubland of *Acacia tetragonophylla*, *Eremophila fraseri* and *Eremophila latrobei* on stony Plains;
- Open Hummock Grassland of *Triodia brizoides*, *Triodia* sp. Shovelanna Hill and *Triodia wiseana* with Low Open Woodland of *Acacia aptaneura*, *Acacia pteraneura* and *Acacia pruinocarpa* and Open Shrubland of *Acacia sibirica* and *Acacia tetragonophylla* on footslopes; and
- Open Tussock Grassland of *Aristida contorta*, *Amphipogon sericeus* and *Paraneurachne muelleri* with Low Open Shrubland of *Eremophila caespitosa* and *Solanum lasiophyllum* and Very Open Hummock Grassland of *Triodia pungens* on stony plains.

Clearing Description Prairie Downs Exploration Project
BHP Billiton Iron Ore Pty Ltd (BHPBIO) proposes to clear up to 150 hectares of native vegetation within a boundary of approximately 6,837.5 hectares for the purpose of mineral exploration, hydrogeological investigations, geotechnical investigations and associated works. The project area is located within the Shire of East Pilbara and the Shire of Meekatharra

and is approximately 35 kilometres west of Newman (GIS Database).

Vegetation Condition

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

To

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

Comment

The condition of the vegetation under application was determined via a flora and vegetation survey conducted by Onshore Environmental Pty Ltd (2015).

The proposed clearing of native vegetation is for the construction and maintenance of access tracks and drill pads, exploration drilling, hydrogeological investigations, geotechnical investigations and associated works (BHPBIO, 2016). Clearing will be by mechanical means.

Clearing Permit CPS 5925/1 was granted by the Department of Mines and Petroleum on 8 May 2014 and authorised the clearing of up to 150 hectares of native vegetation within a clearing permit boundary of approximately 6,815 hectares.

The permit holder has applied to amend CPS 5925/1 to increase the permit boundary area by 18.5 hectares from 6,815 hectares to 6,837.5 hectares. The proposed amendment will not result in an increase in the amount of vegetation to be cleared.

3. Assessment of application against Clearing Principles

Comments

BHP Billiton Iron Ore Pty Ltd (BHPBIO) has applied to increase the clearing permit boundary by approximately 18.5 hectares. There will be no increase in the amount of vegetation to be cleared as a result of the proposed amendment.

The environmental values of the original clearing permit boundary were assessed during the assessment of clearing permit CPS 5925/1 and the assessment found the proposed clearing is not likely to be at variance to Principles (c), (d), (h), (i) and (j), may be at variance to Principles (a), (b) and (g), is not at variance to Principle (e) and is at variance to Principle (f).

A Level 1 flora and vegetation survey and a Level 1 fauna survey were conducted over the amendment area. Two fauna species of conservation significance have been recorded within the amendment area; the Rainbow Bee-eater (*Merops ornatus* – IA, Migratory) and the Western Pebble-mound Mouse (*Pseudomys chapmani* – P4) (BHBIO, 2016; Biologic, 2015). Only inactive Western Pebble-mound Mouse mounds were recorded during the Level 1 fauna survey (Biologic, 2015). A further four species could utilise and therefore may potentially occur within the amendment area; the Ghost bat (*Macroderma gigas* – P4), Long-tailed dunnart (*Sminthopsis longicaudata* – P1), Pilbara Flat-head Blind Snake (*Ramphotyphlops ganeii* – P1) and the Fork-tailed Swift (*Apus pacificus* - IA, Migratory).

Potential roosting sites for the Ghost Bat were not found within the amendment area (Biologic, 2015). The fauna habitats identified within the amendment area are common or extensive throughout the Pilbara region and the fauna species mentioned above are either migratory or unlikely to be dependent on the vegetation to be cleared, given the amount of suitable habitat in the local area and region (BHPBIO, 2016; Biologic, 2015).

No Threatened or Priority flora species have been recorded with the amendment area and none of the five vegetation associations recorded show any resemblance to a Threatened Ecological Community (TEC) or a Priority Ecological Community (PEC) (Onshore, 2015).

Beard vegetation associations 18 and 82 have been mapped over the amendment area (GIS Database). Over 99% of the pre-European extent of these vegetation associations remains uncleared at both the state and bioregion level (Government of Western Australia, 2014). There are no conservation areas in the vicinity of the amendment area. The closest conservation area is situated approximately 70 kilometres north west. Therefore the vegetation proposed to be cleared does not represent a significant remnant of native vegetation in an area that has been extensively cleared and does not impact any nearby or adjacent conservation areas.

Several minor drainage lines occur within the amendment area (Onshore, 2015). The proponent will implement environmental management measures to reduce potential impacts to vegetation growing in association with a watercourse (BHBIO, 2016).

The proposed amendment (increasing the clearing permit boundary by 18.5 hectares) is unlikely to result in any additional environmental impacts above those identified within the assessment for CPS 5925/1. Potential impacts as a result of the proposed amendment may be minimised by the implementation of existing permit conditions.

The assessment against the clearing principles remains consistent with the assessment contained in Decision Report CPS 5925/1.

Methodology

BHPBIO (2016)
Biologic (2015)
Government of Western Australia (2014)
Onshore (2015)

- GIS Database:
- DPaW Tenure
 - Hydrography, linear
 - Pre-European Vegetation

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

Comments

There are two native title claims over the application area (WC2005/003 and WC2005/006) (DAA, 2016). 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 information, there are no Sites of Aboriginal Significance located in the area applied to clear (DAA, 2016). However, the proponent has advised that there are a number of heritage sites located within the amendment area (BHPBIO, 2016). 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.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the 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.

The amendment application was advertised on 8 February 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

Methodology DAA (2016)
BHPBIO (2016)

4. References

- BHPBIO (2016) CPS 5925/1 Prairie Downs Exploration. CPS 5925/2 - Native Vegetation Clearing Permit Amendment Application Supporting Information. BHP Billiton Iron Ore Pty Ltd, Western Australia, January 2016
- Biologic (2015) Prairie Downs Track Level 1 Fauna Survey. Unpublished report prepared for BHP Billiton Iron Ore Pty Ltd, by Biologic Environmental Survey Pty Ltd, December 2015.
- DAA (2016) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs, Perth, Western Australia <http://maps.dia.wa.gov.au> (accessed 9 February 2016).
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. 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.
- Onshore (2010) Biological Survey Prairie Downs Exploration Leases. Unpublished report prepared for BHP Billiton Iron Ore Pty Ltd, by Onshore Environmental Consultants, July 2010.
- Onshore (2015) Prairie Downs Access Track Level 1 Flora and Vegetation Survey. Unpublished report prepared for BHP Billiton Iron Ore Pty Ltd, by Onshore Environmental Consultants, December 2015.

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	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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	<i>Rights in Water and Irrigation Act 1914</i> , 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.