



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4619/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

1.3. Property details

Property: Iron Ore (Mount Newman) Agreement Act 1964, Mineral Lease 244SA (AML 70/244)
Local Government Area: Shire of East Pilbara
Colloquial name: Jinidi Rail Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
50		Mechanical Removal	Geotechnical investigations

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 8 December 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 broadly mapped for the whole of Western Australia. Two Beard vegetation associations have been mapped within the application area (GIS Database):

18: Low woodland; mulga (*Acacia aneura*); and
82: Hummock grassland, low tree steppe; snappy gum over *Triodia wiseana*.

A flora and vegetation survey of the application area and its surrounds was conducted over three trips, November to December 2009, February 2010 and June 2010, by Onshore Environmental (2011). This survey identified the following 18 vegetation communities within the application area (Onshore Environmental, 2011):

***Eucalyptus* woodland to forest**

1a - Woodland to Forest of *Eucalyptus camaldulensis* var. *obtusata*, *Melaleuca argentea* and *Eucalyptus victrix* over Low Open Woodland of *Acacia citrinoviridis* and *Acacia coriacea* subsp. *pendens* over Shrubland of *Acacia bivenosa*, *Gossypium sturtianum* and *Gossypium robinsonii* in brown silty sand and clay soils along Weeli Wolli Creek.

***Eucalyptus* low open forest**

2a - Low Open Forest of *Eucalyptus xerothermica*, *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* over Tussock Grassland of *Themeda triandra* and *Cymbopogon ambiguus* with Shrubland of *Petalostylis labicheoides*, *Acacia monticola* and *Santalum lanceolatum* in brown clay loam soils on large drainage lines.

***Acacia* low open forest**

3a - Low Open Forest of *Acacia aneura* var. *tenuis* over Tussock Grassland of *Themeda triandra*, *Chrysopogon fallax* and *Aristida inaequiglumis* in red brown clay loam soils on flood plains.

***Eucalyptus/Corymbia* low woodland**

4b - Low Woodland of *Eucalyptus xerothermica* and *Corymbia hamersleyana* over Shrubland of *Acacia pyrifolia* var. *pyrifolia*, *Petalostylis labicheoides* and *Gossypium robinsonii* over Open Hummock Grassland of *Triodia pungens* in red brown loam soils along medium drainage lines.

Low shrubland

6a - Low Shrubland of *Acacia spondylophylla* over Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S.van Leeuwen 3835) with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* in red brown loam soils on middle and lower hill slopes.

***Acacia* open scrub**

7a - Open to Closed Scrub of *Acacia tumida* var. *pilbarensis*, *Petalostylis labicheoides* and *Acacia monticola* over Hummock Grassland of *Triodia pungens* (or Tussock Grassland of *Themeda triandra*) with Low Woodland of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* in red brown loam soils along minor drainage lines.

7b - Open Scrub of *Acacia bivenosa*, *Petalostylis labicheoides* and *Rulingia luteiflora* over Hummock Grassland of *Triodia angusta* and *Triodia wiseana* with Scattered Low Trees of *Eucalyptus xerothermica* in red loamy clay soils on minor drainage lines over low calcrete rises and plains.

Themeda tussock grassland

9c - Tussock Grassland of *Themeda triandra*, *Eriachne mucronata* and *Eriachne tenuiculmis* with Low Woodland of *Corymbia ferritcola*, *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* over High Shrubland of *Petalostylis labicheoides*, *Grevillea wickhamii* subsp. *hispidula* and *Acacia tumida* var. *pilbarensis* in red brown loam soils in dissected medium drainage lines with steep or vertical cliff faces.

Triodia hummock grassland

10c - Hummock Grassland of *Triodia pungens* with Very Open Mallee of *Eucalyptus gamophylla* over Open Shrubland of *Acacia bivenosa*, *Acacia pachyacra* and *Acacia pruinocarpa* in red brown loam soils on lower valley slopes.

10d - Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Corymbia deserticola* subsp. *deserticola* and *Eucalyptus leucophloia* subsp. *leucophloia* in red brown loam soils on plains, low rises, foot slopes and spur hill slopes.

10e - Hummock Grassland of *Triodia wiseana*, *Triodia brizoides* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* in red brown clay loam on steep hill slopes and U-shaped gullies.

10g - Hummock Grassland of *Triodia wiseana* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* over Low Shrubland of *Acacia hilliana*, *Acacia adoxa* var. *adoxo* and *Gompholobium* sp. Pilbara (N.F. Norris 908) in red brown loam soils on hill crests and hill slopes.

10j - Hummock Grassland of *Triodia wiseana* and *Triodia brizoides* with Open Shrubland of *Acacia bivenosa* and *Acacia inaequilatera* and Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* and *Eucalyptus gamophylla* (mallee) in skeletal red brown loam soils on rocky hill slopes.

10k - Hummock Grassland of *Triodia wiseana* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* over Open Shrubland of *Acacia bivenosa*, *Acacia aneura* var. *aneura* and *Acacia ancistrocarpa* in red brown silty loams on stony plains and low hills.

10l - Hummock Grassland of *Triodia wiseana*, *Triodia* sp. Shovelanna Hill and *Triodia angusta* with Shrubland of *Acacia bivenosa* and *Acacia ancistrocarpa* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia*, *Eucalyptus xerothermica* and *Eucalyptus gamophylla* (mallee) in red brown loam soils on flood plains.

10m - Hummock Grassland of *Triodia wiseana* with High Open Shrubland of *Acacia bivenosa* and *Acacia pyrifolia* var. *pyrifolia* and Scattered Low Mallee of *Eucalyptus socialis* subsp. *eucentrica* in light brown clay loam soils on calcrete plains and low rises.

Triodia open hummock grassland

11a - Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* in skeletal orange brown loam soils on steep south-facing hill slopes.

11b - Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* over Low Open Shrubland of *Acacia hilliana*, *Acacia adoxa* var. *adoxo* and *Indigofera monophylla* in skeletal orange brown loam soils on hill crests and upper hill slopes.

Clearing Description

Jinidi Rail Project.
BHP Billiton Iron Ore Pty Ltd proposes to clear up to 50 hectares of native vegetation within a total boundary of approximately 2,820 hectares, for the purpose of geotechnical investigations. The project is located approximately 69 kilometres north-west of Newman, in the Shire of East Pilbara.

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

Clearing permit CPS 4619/1 was granted by the Department of Mines and Petroleum on 15 December 2011 and was valid from 7 January 2012 to 30 November 2021. The permit authorised the clearing of up to 50 hectares of native vegetation within a boundary of approximately 2,820 hectares.

On 14 November 2016, the Permit Holder applied to amend CPS 4619/1 to extend the permit duration to 30 November 2026, and to extend the period within which clearing is authorised to 30 November 2021. The area of clearing authorised and the permit boundaries remain unchanged.

3. Assessment of application against clearing principles

Comments

BHP Billiton Iron Ore Pty Ltd has applied to amend the permit, to extend the permit duration to 30 November 2026. The size of the area approved to clear (50 hectares) and the permit boundaries remain unchanged.

The amendment to extend the permit duration by five years is unlikely to result in any significant change to the environmental impacts of the proposed clearing (GIS Database).

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 4619/1.

Methodology

GIS Database:

- Hydrography, linear
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities (TEC/PEC) - Boundaries
- Threatened Fauna

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

Comments

There is one Native Title Claim (WC2005/006) over the area under application (DAA, 2016). This claim has been registered 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 several registered Aboriginal Sites of Significance within the application area (DAA, 2016; 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, 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.

Methodology

DAA (2016)

GIS Database:

- Aboriginal Sites Register System

4. References

DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 28 November 2016).

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 Environmental (2011) Flora and Vegetation Survey - Area C and Surrounds. Report prepared for BHP Billiton Iron Ore Pty Ltd, by Onshore Environmental Consultants Pty Ltd, July 2011.

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)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPac	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
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	<p>Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, 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).</p> <p>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.</p> <p>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.</p> <p>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.</p>
CR	<p>Critically endangered species Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
EN	<p>Endangered species Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
VU	<p>Vulnerable species Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
EX	<p>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 <i>Wildlife Conservation Act 1950</i>, 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.</p>
IA	<p>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 <i>Wildlife Conservation Act 1950</i>, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
CD	<p>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 <i>Wildlife Conservation Act 1950</i>, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
OS	<p>Other specially protected fauna Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>

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.