



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4875/2
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 1972, Mineral Lease 244SA (AML 70/244)
Local Government Area: Shire of East Pilbara
Colloquial name: Wheelarra Hill North Drilling Program

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
90		Mechanical Removal	Mineral Exploration, Haul Roads, Hydrological and Geotechnical Investigations and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 14 May 2015

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

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*; and

216: Low woodland; mulga (with spinifex) on rises.

A Level 2 flora survey was conducted over the application area in May and October 2011 by Syrinx Environmental Pty Ltd (Syrinx). There were 23 vegetation associations recorded within the application area (Syrinx, 2012):

Acacia Low Woodland

2a: Low Woodland of *Acacia aptaneura*, *Acacia ? pteraneura* and *Acacia pruinocarpa* over Open Hummock Grassland of *Triodia epactia* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Shrubland of *Acacia wanyu*, *Acacia tetragonophylla* and *Senna stricta*;

2c: Low Woodland of *Acacia aptaneura* and *Corymbia hamersleyana* over Very Open Shrubland of *Acacia wanyu*, *Acacia ancistrocarpa* and *Eremophila forrestii* subsp. (indet) over Very Open Hummock Grassland of *Triodia epactia* and *Triodia lanigera*;

2d: Low Woodland of *Acacia ? aptaneura*, *Acacia mulganeura* and *Ficus brachypoda* over High Open Shrubland of *Acacia monticola*, *Grevillea wickhamii* subsp. (indet) and *Acacia wanyu* over Very Open Tussock Grassland of *Eragrostis cumingii*, *Amphipogon sericeus* and *Themeda triandra*;

Acacia Low Open Woodland

3a: Low Open Woodland of *Acacia aptaneura* and *Acacia pruinocarpa* over High Open Shrubland of *Acacia tetragonophylla* and *Acacia synchronicia* over Very Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835);

Acacia High Shrubland

4a: High Shrubland of *Acacia monticola*, *Rulingia luteiflora* and *Gossypium robinsonii* with Low Woodland of *Corymbia hamersleyana*, *Eucalyptus victrix* and *Eucalyptus leucophloia* subsp. *leucophloia* over Very Open Tussock Grassland of *Themeda triandra*, **Cenchrus ciliaris* and *Cymbopogon procerus*;

4b: High Shrubland of *Acacia monticola*, *Acacia hamersleyensis* and *Petalostylis labicheoides* over Open Hummock Grassland of *Triodia melvillei*, *Triodia epactia* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Corymbia ferritcola* and *Ficus brachypoda*;

Triodia Hummock Grassland

5a: Hummock Grassland of *Triodia brizoides*, *Triodia epactia* and *Triodia angusta* with Open Shrubland of *Acacia tetragonophylla* and *Acacia synchronicia* with Very Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Acacia ? pteraneura* (hybrid?);

5b: Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia epactia* and *Triodia brizoides* with Low Open Woodland of *Acacia aptaneura*, *Eucalyptus leucophloia* subsp. *leucophloia* and *Acacia pruinocarpa* over Open Shrubland of *Acacia tetragonophylla*, *Dodonaea pachyneura* and *Eremophila exilifolia*;

5c: Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Shrubland of *Acacia hilliana*, *Acacia adoxa* var. *adoxo* and *Halgania solanacea* var. Mt Doreen (G.M. Chippendale 4206) with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* and *Acacia pruinocarpa*;

5d: Hummock Grassland of *Triodia lanigera* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Open Shrubland of *Hakea lorea* subsp. *lorea*, *Acacia ancistrocarpa* and *Acacia adsurgens* with Scattered Low Trees of *Corymbia hamersleyana* and *Acacia pruinocarpa*;

5e: Hummock Grassland of *Triodia brizoides*, *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) and *Triodia epactia* with Open Shrubland of *Acacia tetragonophylla*, *Eremophila fraseri* subsp. *fraseri* and *Senna glutinosa* subsp. *Pruinosa*;

5g: Hummock Grassland of *Triodia lanigera* and *Triodia epactia* with High Open Shrubland of *Acacia bivenosa*, *Acacia ancistrocarpa* and *Acacia tenuissima* with Very Open Mallee of *Eucalyptus gamophylla*;

5h: Hummock Grassland of *Triodia epactia*, *Triodia brizoides* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), with Low Open Woodland of *Acacia aptaneura*, *Eucalyptus leucophloia* subsp. *leucophloia* and *Acacia pruinocarpa* over Scattered Shrubs of *Acacia tetragonophylla*, *Scaevola acacioides* and *Acacia wanyu*;

5i: Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia epactia* and *Triodia brizoides* with High Open Shrubland of *Acacia bivenosa* and *Acacia tetragonophylla* with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* and *Acacia aptaneura*;

5j: Hummock Grassland of *Triodia brizoides* with Open Shrubland of *Acacia wanyu*, *Scaevola acacioides* and *Acacia tetragonophylla* with Low Open Woodland of *Acacia ? pteraneura* (hybrid?) and *Acacia pruinocarpa*;

Triodia Open Hummock Grassland

6a: Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Shrubland of *Halgania solanacea* var. Mt Doreen (G.M. Chippendale 4206), *Gompholobium* sp. Pilbara (N.F. Norris 908) and *Acacia adoxa* var. *adoxo*;

6c: Open Hummock Grassland of *Triodia epactia* and *Triodia angusta* with Scattered Mallees of *Eucalyptus socialis* subsp. *eucentrica* over Scattered Shrubs of *Acacia bivenosa*;

6d: Open Hummock Grassland of *Triodia epactia* with High Shrubland of *Acacia citrinoviridis*, *Acacia ancistrocarpa* and *Acacia pyrifolia* with Low Open Woodland of *Corymbia hamersleyana*;

6e: Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia epactia* and *Triodia brizoides* with Low Open Woodland of *Acacia aptaneura*, *Acacia ? pteraneura* (hybrid?) and *Acacia rhodophloia* over Open Shrubland of *Acacia tetragonophylla*, *Acacia adsurgens* and *Senna glutinosa* subsp. *glutinosa*;

6f: Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) and *Triodia epactia* with Low Open Shrubland of *Acacia hilliana*, *Sida* sp. *excedentifolia* (J.L. Egan 1925) and *Senna glutinosa* subsp. *pruinosa* with Scattered Trees of *Eucalyptus leucophloia* subsp. *leucophloia*;

6g: Open Hummock Grassland of *Triodia brizoides* and *Triodia epactia* with Low Open Shrubland of *Eremophila fraseri* subsp. *fraseri*, *Senna artemisioides* subsp. *oligophylla* and *Senna artemisioides* subsp. *helmsii*;

Triodia Very Open Hummock Grassland

7a: Very Open Hummock Grassland of *Triodia lanigera* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Scattered Shrubs of *Grevillea wickhamii* subsp. (indet), *Acacia ancistrocarpa* and *Hakea lorea* subsp. *lorea* with Scattered Trees of *Corymbia hamersleyana*; and

Mixed Open Tussock Grassland

8a: Open Tussock Grassland of *Themeda triandra*, *Aristida inaequiglumis* and *Aristida contorta* with Open Shrubland of *Acacia monticola*, *Acacia ancistrocarpa* and *Grevillea wickhamii* subsp. *aprica* with Scattered Low Trees of *Corymbia hamersleyana*.

Clearing Description

Wheelarra Hill North Drilling Program

BHP Billiton Iron Ore Pty Ltd (BHPBIO) proposes to clear up to 90 hectares of native vegetation within a total boundary of approximately 2,034 hectares for the purpose of mineral exploration, haul roads, hydrological and geotechnical investigations and associated activities. The project is located approximately 40 kilometres east of Newman in the Shire of East Pilbara.

Vegetation Condition	Pristine: No obvious signs of disturbance (Keighery, 1994); To Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).
Comment	The vegetation condition was assessed by botanists from Syrinx (2012). Part of the application area was burnt in 2007 which resulted in altered species dominance and composition to some extent in the affected areas (Syrinx, 2012). Clearing Permit CPS 4875/1 was granted by the Department of Mines and Petroleum (DMP) on 10 May 2012 and authorised the clearing of 90 hectares of native vegetation within a total boundary of approximately 2,034 hectares. On 1 April 2015, BHPBIO applied to amend CPS 4875/1 in order to change the clearing purpose to mineral exploration, haul roads, hydrological and geotechnical investigations and associated activities, extend the permit duration to 30 November 2022 and amend the final reporting date to 30 November 2022.

3. Assessment of application against clearing principles

Comments

BHPBIO have applied to amend the clearing permit purpose to mineral exploration, haul roads, hydrological and geotechnical investigations and associated activities, extend the permit duration to 30 November 2022 and amend the final reporting date to 30 November 2022. The amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing. The size of the area approved to clear (90 hectares) and the permit boundary remain unchanged.

The assessment against the clearing principles remains consistent with the assessment contained in decision report CPS 4875/1.

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

Comments

There is one Native Title Claim (WC05/6) over the area under application (GIS Database). This claim has been determined by the Federal Court of Australia. However, the 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 proponents' responsibility to liaise with the Department of Environment Regulation, 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

GIS Database:
 - Aboriginal Sites of Significance
 - Native Title Claims - Determined by the Federal Court
 - Native Title Claims - Filed at the Federal Court
 - Native Title Claims - Registered with the NNTT

4. References

- BHPBIO (2015) Supporting documentation for a clearing permit application.
 Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
 Syrinx (2012) Wheelarra Hill North Flora and Vegetation Assessment. Unpublished report for BHP Billiton Iron Ore, dated February 2012.

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
s.17	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

- T Threatened species:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened Fauna and Flora are further recognised by DPaW according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

Rankings:
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.
EN: Endangered - considered to be facing a very high risk of extinction in the wild.
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.
- X Presumed Extinct species:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
- IA Migratory birds protected under an international agreement:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
- S Other specially protected fauna:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P1 Priority One - Poorly-known species:**
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
- P2 Priority Two - Poorly-known species:**
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.
- P3 Priority Three - Poorly-known species:**
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

P5

Priority Five - Conservation Dependent species:

Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five 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.