Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3215/2
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: South Parmelia Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
140		Mechanical Removal	Mineral exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 July 2014

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:

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

A biological survey of the project area conducted by Onshore Environmental Consultants Pty Ltd and Biologic Environmental Science (hereafter referred to as Onshore and Biologic) in January 2009 identified fourteen vegetation types classified further into six broad groups (on the basis of canopy structure) for the project area:

1. Low Forest B (associated with gorges)
1A. *Corymbia ferriticola*, *Eucalyptus leucophloia* ssp. *leucophloia*, *Acacia aneura* var. *tenuis*, *Acacia aneura* var. *major*, *Corymbia hamersleyana* Low Forest B over *Acacia hamersleyensis*, *Dodonaea viscosa* ssp. *mucronata*, *Eremophila tietkensii*, *Astrotricha hamptonii*, *Hibiscus haynaldii* Open Low Scrub A over *Ptilotus obovatus*, *Indigofera fractiflexa*, *Sida* sp. Golden calyces glabrous (H.N. Foote 32) Open Dwarf Scrub D over *Eriachne mucronata*, *Aristida burbidgeae*, *Cymbopogon ambiguus*, *Themeda triandra* open tall grass over *Triodia pungens* open hummock grass.

2. Woodland (associated with major drainage lines)
2A. *Eucalyptus camaldulensis* var. *obtusa*, *Eucalyptus victrix*, *Eucalyptus xerothermica* woodland over *Acacia coriacea* ssp. *pendens*, *Acacia citrinoviridis* Low Woodland B over *Petalostylis labicheoides*, *Stylobasium spathulatum*, *Gossypium robinsonii* Open Low Scrub B over *Tephrosia rosea* var. *glabrior*, *Stemodia grossa* Open Dwarf Scrub D over *Triodia pungens* open hummock grass over *Themeda triandra*, *Eulalia aurea* open tall grass.

3. Low Woodland A (associated with medium-sized drainage lines and stony plains)
3A. *Eucalyptus xerothermica*, *Corymbia hamersleyana*, *Acacia aneura* var. *major* Low Woodland A over *Petalostylis labicheoides* Open Scrub over *Acacia pyrifolia*, *Rulingia luteiflora*, *Stylobasium spathulatum*, *Gossypium robinsonii* Low Scrub B over *Tephrosia rosea* var. *glabrior*, *Scaevola parvifolia* ssp. *pilbarae*, *Senna notabilis* Open Dwarf andScrub D over *Themeda triandra* very open tall grass over *Triodia pungens* open hummock grass;

3B. *Acacia aneura* var. *tenuis*, *Acacia aneura* var. *major* Low Woodland A over *Acacia synchronicia*, *Acacia tetragonophylla*, *Eremophila forrestii* ssp. *forrestii* Open Low Scrub A over *Eremophila cuneifolia*, *Senna stricta* Dwarf Scrub C over *Maireana triptera* Open Dwarf Scrub D over *Triodia wiseana*, *Triodia pungens* open hummock grass over *Enneapogon caerulescens*, *Enneapogon polyphyllus*, *Aristida contorta* very open low grass;

4. Low Woodland B (associated with breakaway ridges/cliffs and minor drainage lines)
4A. *Eucalyptus leucophloia* ssp. *leucophloia*, *Acacia aneura* var. *tenuis*, *Corymbia ferriticola*, *Acacia citrinoviridis* Low Woodland B over *Dodonaea viscosa* ssp. *mucronata*, *Scaevola acacioides*, *Eremophila latrobei* ssp. *latrobei*, *Hibiscus haynaldii* Open Low Scrub B over *Ptilotus obovatus*, *Eremophila jucunda* ssp. *pulcherrima*, *Sida* sp. Shovellana Hill, *Abutilon otocarpum* Open Dwarf Scrub C over *Triodia*

pungens open hummock grass over *Themeda triandra*, *Eriachne mucronata*, *Cymbopogon ambiguus* open tall grass; and

4B. *Eucalyptus leucophloia* ssp. *leucophloia*, *Corymbia hamersleyana* Low Woodland B over *Petalostylis labicheoides*, *Acacia monticola* open scrub over *Petalostylis labicheoides*, *Rulingia luteiflora*, *Gossypium robinsonii* Open Low Scrub B over *Senna notabilis*, *Solanum phlomoides*, *Indigofera monophylla*, *Keraudrenia velutina* ssp. *elliptica* Open Dwarf Scrub D over *Triodia wiseana*, *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia pungens* open hummock grass.

5. Open Low Woodland B (associated with hill slopes, undulating low hills and floodplains)
5A. *Eucalyptus leucophloia* ssp. *leucophloia* Open Low Woodland B over *Acacia bivenosa* Open Low Scrub B over *Triodia wiseana* hummock grass;

5B. *Eucalyptus leucophloia* ssp. *leucophloia*, *Corymbia deserticola* ssp. *deserticola*, *Corymbia hamersleyana* Open Low Woodland B over *Hakea chordophylla* open scrub over *Acacia arida* Open Low Scrub B over *Corchorus lasiocarpus* ssp. *parvus*, *Indigofera monophylla*, *Halgania gustafsenii* var. *gustafsenii*, *Gompholobium karijini* Open Dwarf Scrub D over *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) open hummock grass over *Amphipogon sericeus* very open low grass;

5C. *Acacia aneura* var. *tenuis*, *Acacia aneura* var. *intermedia*, *Acacia pruinocarpa* Open Low Woodland B over *Petalostylis labicheoides*, *Stylobasium spathulatum*, *Sida* sp. spiciform panicles (E. Leyland s.n. 14/8/90), *Eremophila forrestii* ssp. *forrestii* Open Low Scrub B over *Corchorus lasiocarpus* ssp. *parvus*, *Indigofera monophylla*, *Solanum phlomoides* Open Dwarf Scrub D over *Triodia wiseana*, *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia pungens* hummock grass over *Themeda triandra* very open tall grass;

5D. *Eucalyptus leucophloia* ssp. *leucophloia*, *Eucalyptus xerothermica*, *Acacia aneura* var. *tenuis* Open Low Woodland B over *Eucalyptus gamophylla* very open tree mallee over *Acacia inaequilatera*, *Petalostylis labicheoides* open scrub over *Acacia aneura* var. *tenuis*, *Petalostylis labicheoides*, *Acacia pruinocarpa* Open Low Scrub B over *Corchorus lasiocarpus* ssp. *parvus*, *Indigofera monophylla*, *Sida arenicola* Open Dwarf Scrub D over *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia wiseana*, *Triodia pungens* hummock grass; and

5E. *Eucalyptus leucophloia* ssp. *leucophloia* Open Low Woodland B over *Dampiera candicans*, *Gompholobium karijini*, *Corchorus lasiocarpus* ssp. *parvus* Dwarf Scrub D over *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia pungens* open hummock grass over *Eriachne lanata*, *Amphipogon sericeus* very open low grass.

6. Very Open Tree Mallee (associated with hill crests, mid/lower hill slopes and calcrete plains that support mallees)

6A. *Eucalyptus leucophloia* ssp. *leucophloia*, *Corymbia hamersleyana* Open Low Woodland B over *Eucalyptus kingsmillii* ssp. *kingsmillii*, *Eucalyptus gamophylla* very open tree mallee over *Petalostylis labicheoides*, *Codonocarpos cotinifolius* Open Low Scrub B over *Corchorus lasiocarpus* ssp. *parvus*, *Sida* sp. Golden calyces glabrous (H.N. Foote 32), *Dampiera candicans* Open Dwarf Scrub D over *Triodia pungens*, *Triodia wiseana*, *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) open hummock Grass;

6B. *Eucalyptus leucophloia* ssp. *leucophloia*, *Acacia aneura* var. *tenuis*, *Acacia citrinoviridis* Open Low Woodland B over *Eucalyptus pilbarensis* very open tree mallee over *Scaevola acacioides*, *Acacia bivenosa*, *Eremophila latrobei* ssp. *latrobei* Open Low Scrub B over *Triodia* sp. Shovellana Hill hummock grass; and

6C. *Eucalyptus socialis* ssp. *eucentrica* very open tree mallee over *Acacia bivenosa*, *Petalostylis labicheoides* Open Low Scrub B over *Solanum phlomoides*, *Haloragis maierae*, *Haloragis gossei* var. *gossei* Open Dwarf Scrub D over *Triodia wiseana* hummock grass.

Clearing Description

South Parmelia Project.
BHP Billiton Iron Ore Pty Ltd proposes to clear up to 140 hectares of native vegetation within a total boundary of approximately 4,688 hectares, for the purpose of mineral production. The project is located approximately 54 kilometres north-west of Newman, in the Shire of East Pilbara.

Vegetation Condition

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive;

To:

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

Comment

The vegetation condition rating is derived from information provided by Onshore and Biologic (2009).

Vegetation clearing will be conducted using mechanical means (BHPBIO, 2009).

3. Assessment of application against clearing principles

Comments

BHP Billiton Iron Ore Pty Ltd has applied to amend CPS 3215/1 to extend the duration of the permit by 10 years from 30 November 2014 to 30 November 2024, and to amend the annual reporting date to 1 October each year. An additional 5 years has been added to the permit end date to allow for rehabilitation.

The proposed amendment is unlikely to result in any significant additional environmental impacts. The assessment of the clearing principles is consistent with the assessment in clearing permit decision report CPS 3215/1.

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

Comments

There is one native title claim (WC99/004) over the area under application. This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the tenements have 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 are several 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, 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 – Registered with the NNTT

4. References

BHPBIO (2009) Native Vegetation Clearing Permit (Purpose Permit) Application Supporting Documentation. South Parmelia. BHP Billiton Iron Ore Pty Ltd, Western Australia.

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 and Biologic (2009) Biological Survey. South Parmelia Exploration Leases. Onshore Environmental Consultants Pty Ltd and Biologic Environmental Science, Western Australia.

5. 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
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.