



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2193/3
Permit type: Purpose

1.2. Proponent details

Proponent's name: BHP Billiton Nickel West – Leinster Nickel Operation

1.3. Property details

Property: Nickel (Agnew) Agreement Act 1974, Mineral Lease 255SA (AML 70/255)
Mining Lease M36/156
Mining Lease M36/230
Local Government Area: Shire of Leonora
Colloquial name: Leinster Nickel Operations

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
80		Mechanical	Mineral production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 31 January 2013

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. Two Beard vegetation associations are located within the application area (Government of Western Australia, 2011; GIS Database):

18: Low woodland; mulga (*Acacia aneura*). According to the Shared Land Information Platform (SLIP, 2007), Beard vegetation association 18 is a low woodland dominated by *Acacia aneura*.

39: Shrublands; mulga scrub. According to the Shared Land Information Platform (SLIP, 2007), Beard vegetation association 39 is a shrubland dominated by *Acacia aneura*, with subdominants *A. quadrimarginea*, *A. grasbyi*, *Hakea lorea* shrubland over *Senna* sp., *Eremophila* sp. shrubs over *Ptilotus obovatus*, *Clianthus formosus*, *Podolepis auriculata*, *Swainsona incei*, *Waitzia aurea*, *Ptilotus alopecuroideus*, *P. helipteroideus*.

A flora and vegetation survey conducted by Western Botanical (2007) utilised Land Systems and Habitat Units defined by Pringle et al (1994) to describe the vegetation within the application area. These are:

SIMS: Stony Ironstone Mulga Shrublands occurring on ironstone ridges and associated slopes. Dominated by *Acacia aneura* scrub over *Eremophila latrobei* ssp. *latrobei*, *Scaevola spinescens* open low scrub over *Ptilotus schwartzii* var. *schwartzii*, *P. obovatus* var. *obovatus* open dwarf scrub.

LHMS: Lateric Hardpan Mulga Shrublands occurring on footslopes and plains surrounding SIMS. Dominated by *A. aneura*, *A. ramulosa* var. *linophylla* open low woodland over *E. latrobei* ssp. *latrobei*, *E. spectabilis* ssp. *brevis*, *P. obovatus*, *P. schwartzii* var. *schwartzii* open low scrub over *Eragrostis eriopoda* very open grasses.

GRMU: Mulga Groves on Hardpan Plain occurring in drainage lines and depressions. Dominated by *A. aneura*, *Brachychiton gregorii* low forest over *E. spectabilis*, *E. serrulata*, low scrub over *Aristida contorta*, *Eragrostis eriopoda*, *Enneapogon caeruleascens* open grasses.

SAES: Scattered Acacia-Eremophila Shrublands occurring on a gentle slope of a SIMS ridge. Dominated by *A. aneura*, *A. ramulosa* var. *linophylla* scrub over *E. galeata*, *A. tetragonophylla* open low scrub over *Eriochiton sclerolaenoides*, *Maireana triptera*, *Sclerolaena fusiformis* dwarf scrub.

GRSS: Granite Rock Sclerophyll Shrublands occurring subcropping Archaean granite sheets and minor outcrops. Dominated by *A. aneura*, *A. balsamea*, *A. quadrimarginea* scrub over *Dodonaea microzyga* var. *microzyga*, *E. shonae* ssp. *shonae*, *E. latrobei* ssp. *latrobei* open dwarf scrub.

LMWS: Lateritic mulga wanderrie grassy shrublands occurring on level to very gently inclined plains. Not described by Western Botanical in their flora and vegetation assessment report (Western Botanical, 2007). Pringle et al (1994) describes this habitat unit as dominated by *A. aneura*, *A.*

linophylla, *A. ramulosa* shrubs over *E. foliosissima*, *E. forrestii*, *E. gilesii*, *E. latrobei* low shrubs over *Eragrostis eriopida*, *Eriachne mucronatua*.

Clearing Description	BHP Billiton Nickel West Pty Ltd (BHP Billiton) have applied to clear 80 hectares within two separate application areas totalling approximately 221 hectares for the purpose of construction of waste rock dumps and topsoil stockpiles. Vegetation and topsoil will be progressively removed and a waste rock landform progressively constructed.
Vegetation Condition	Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994). To Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
Comment	Vegetation condition was described by Western Botanical as moderate. During a site visit, Department of Mines and Petroleum (DMP) staff noted that there were multiple disturbances present due to proximity to the existing mine and grazing by feral goats. The vegetation condition within the application area was considered to be 'Degraded to 'Good' on the Keighery (1994) scale. CPS 2193/1 was granted by the DMP on 17 January 2008 authorising the clearing of 80 hectares of native vegetation. On 27 October 2008, BHP Billiton applied to amend their permit to alter the reporting period for the permit from 1 August to 31 July, with report due 31 October. On 16 January 2013, BHP Billiton applied to amend the expiry of CPS 2193/2 to allow the continuation of mineral production.

3. Assessment of application against clearing principles

Comments

BHP Billiton has applied to amend the expiry of CPS 2193/2 from 16 February 2013 to 16 February 2018 to allow further clearing to be undertaken. To date, 28.67 hectares of an allowable 80 hectares has been cleared.

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 2193/2.

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

Comments

There is one Native Title Claim (WC11/7) over the area under application (GIS Database). 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 two 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 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 – Registered with the NNTT

4. References

- Government of Western Australia (2011) 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). 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.
- Pringle HJR, Van Vreeswyk AME & Gilligan SA (1994). Technical Bulletin No. 87 An Inventory and condition survey of the North Eastern Goldfields, Western Australia. Department of Agriculture, Western Australia.
- SLIP (2008) Shared Land Information Platform <http://spatial.agric.wa.gov.au/slip/home.htm> Accessed 29/3/08.
- Western Botanical (2007). Flora and Vegetation of the Proposed Rocky's Reward Cutback 2 Project, July 2007. Unpublished reported prepared by Western Botanical for BHP Billiton Nickel West, Leinster Nickel Operations.

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.

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.