

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2222/4
Permit type: Purpose

1.2. Proponent details

Proponent's name: BHP Billiton Nickel West Pty Ltd

1.3. Property details

Property: Nickel (Agnew) Agreement Act 1974, Mineral Lease 255SA (AML70/225)

Mining Lease 36/243

Miscellaneous Licence 36/53

Local Government Area: Shire of Leonora

Colloquial name: Leinster Nickel Operation

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

400 Mechanical removal Mineral Exploration, Mine Maintenance, Infrastructure

Works and the Re-activation of a Tailings Storage

Facilit

1.5. Decision on application

Decision on Permit Application: Granted

Decision Date: 22 October 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 map

Beard vegetation associations have been mapped for the whole of Western Australia. The following Beard vegetation associations are located within the application area (GIS Database):

18: Low woodland; mulga (Acacia aneura).

39: Shrublands; mulga scrub.

A flora and vegetation survey was conducted over the application area by Western Botanical (2007). The following vegetation types were identified;

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

GRSS: Granite Rock Sclerophyll Shrublands. Upper-storey of *Acacia aneura*, *A. quadrimarginea*, *A. burkittii* over *Frankenia spp. Asteraceae spp.* and *Aristida contorta*.

GRMS: Granite Rock Mulga and Chenopod Shrublands. Upper-storey of *Acacia aneura*, *A. quadrimarginea*, *A. craspedocarpa*, *A. tetragonophylla* over *Maireana carnosa*, *M. georgei*, *M. triptera*, *Sclerolaena fusiformis*, *Sida sp.* unisexual and *Scaevola spinescens*.

BRX: Breakaways. Dominated by *Acacia quadrimarginea*, *A. aneura* and *A. balsamea* (P4), over shrub layer of *Calytrix uncinata* (P1), *Dodonaea microzyga*, *Dodonaea viscosa*, *Ptilotus obovatus*, *Eremophila* and *Thryptomene spp*.

SAES: Scattered *Acacia-Eremophila* Shrublands. Dominated by *Eremophila ramiflora*, *E. galeata* and *E. forrestii* and *Acacia tetragonophylla* open low scrub over *Ptilotus obovatus*, *Ptilotus schwartzii* dwarf scrub.

HPMS: Hardpan Mulga Shrubland: Dominated by scattered *Acacia aneura*, *A. linophylla* over shrub layer of *Eremophila spectabilis*, *E. galeata* and *E. homoplastica*, over herbaceous layer of *Ptilotus schwartzii*, *Eragrostis eriopoda*, *E. desertorum*.

PLMS: Plain, Loamy Mulga Shrublands. Dominated by Acacia aneura, A. craspedocarpa, A. linophylla

and A. xanthocarpa, over shrub layer of Eremophila serrulata, E. fraseri, Ptilotus obovatus, Rhagodia eremaea and Atriplex codonocarpa, over herb layer of Helipterum craspedioides and Rhodanthe charsleyae in non-saline areas.

SACS: Sandplain Acacia Shrublands: Dominated by Acacia linophylla, A. aneura, Eucalyptus leptopoda and Eucalyptus kingsmillii over shrub layer of Eremophila spectabilis, E. latrobei, E. forrestii and Senna spp, over Eragrostis eriopoda and E. desertorum tussock grasses.

Clearing Description

Leinster Nickel Operation.

BHP Billiton Nickel West Pty Ltd (BHPB Nickel West) proposes to clear up to 400 hectares of native vegetation within a total boundary of approximately 2,720 hectares, for the purpose of Mineral Exploration, Mine maintenance, Infrastructure Works and the re-activation of a Tailings Storage Facility. The project is located approximately 13 kilometres north of Leinster, in the Shire of Leonora.

Vegetation Condition

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

To

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

Comment

Vegetation condition was described by Western Botanical as moderate (Western Botanical, 2007). The previous assessing officer visited the site and noted that there were multiple disturbances present due to proximity of the vegetation to the existing mine, as well as impacts from grazing by feral goats. The previous assessing officer considered the vegetation condition within the application area to be 'Degraded' to 'Good' on the Keighery (1994)

CPS 2222/1 was granted on 31 March 2008, it has since gone through multiple amendments which have included altering the purpose, reporting date, and permit boundary.

3. Assessment of application against clearing principles

Comments

BHPB Nickel West has applied to amend CPS 2222/3 for the purpose of extending the permit expiry date from 31 October 2015 to 31 October 2020.

The size of the area approved to clear (400 hectares) and the permit boundaries remain unchanged.

Through this amendment (CPS 2222/4) conditon 9 of the permit (rehabilitation) has been updated to the new wording. This will extend the permit expiry to 2030.

The proposed amendment is unlikely to result in any significant additional environmental impacts. The assessment of the proposed clearing against the clearing principles remains consistent with the assessment in Decision Report CPS 2222/3.

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

Comments:

There is a native title claim (WC2011/007) over the entire application area (DAA, 2015). 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 multiple registered Sites of Aboriginal Significance located in the area applied to clear (DAA 2015). 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.

Methodology: DAA (2015)

4. References

DAA (2015) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs, Perth, viewed 6 March 2015 http://maps.dia.wa.gov.au/AHIS2/.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Western Botanical (2007). Flora and Vegetation Assessment of Clearing Permit Application Area at Leinster Nickel Operation, October 2007. Unpublished report prepared for BHP Billiton Nickel West by Western Botanical.

5. Glossary

Acronyms:

BoMBureau of Meteorology, Australian GovernmentDAADepartment of Aboriginal Affairs, Western AustraliaDAFWADepartment 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
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 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

PEC Priority Ecological Community, Western Australia

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:

{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 *Calyptorynchus 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.