

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2222/5

Permit type: Purpose Permit

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 (AML70/255)

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 facility

1.5. Decision on application

Decision on Permit Application: Granted

Decision Date: 2 April 2020

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. 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 ectogama* 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.

LHMS: Lateritic Hardpan Mulga Shrublands. Dominated by *Acacia aneura*, *A. quadrimarginea*, *A. linophylla* ssp. *linophylla* open low woodland/open scrub over *Eremophila spectabilis*, *E. latrobei* ssp. *latrobei*, *E. forrestii* open low scrub over *Eragrostis eriopoda* very open grasses.

WABS: Wanderrie Bank Grassy Shrublands. Occasional emergent *Acacia aneura* and *A. linophylla* ssp. *linophylla*, *A. tetragonophylla* over scattered *Eremophila spectabilis* and *Ptilotus obovatus* over a dominant layer of *Eragrostis eriopoda* and *E. desertorum*.

LMWS: Lateritic Mulga-Wanderrie Shrublands. Upper-storey of Acacia linophylla and A. aneura, over shrub layer of Eremophila spectabilis, E. forrestii over Aristida contorta, Eragrostis eriopoda and Eragrostis desertorum.

BCLS: Breakaway Chenopod Low Shrublands. Very few trees - Acacia aneura and Hakea preissii, over Ptilotus obovatus and Maireana triptera.

GRMU: Mulga Groves on Hardpan Plains. Dominated by Acacia aneura, A. craspedocarpa and A. quadrimarginea, over A. tetragonophylla, Eremophila spectabilis, Sida ectogama and Ptilotus obovatus, P. schwartzii, over Eragrostis eriopoda.

DRMS: Drainage Tract Mulga Shrubland. Upper-storey of Acacia aneura, A. craspedocarpa and A. tetragonophylla woodlands/shrublands over Eremophila latrobei, E. serrulata, Ptilotus obovatus and Sida ectogama over Aristida contorta and Eragrostis lanipes.

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

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

То

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

Clearing permit CPS 2222/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 27 March 2008 and was valid from 26 April 2008 to 31 October 2015. The permit authorised the clearing of up to 400 hectares of native vegetation, for the purposes of mineral exploration, mine maintenance and the re-activation of a tailings storage facility.

CPS 2222/2 was granted on 14 August 2008, amending the permit to include infrastructure works as an authorised purpose of clearing.

CPS 2222/3 was granted on 24 December 2008, amending the permit reporting period from 1 November to 31 October to 1 August to 31 July.

CPS 2222/4 was granted on 22 October 2015, amending the permit to include a period of authorised clearing up to 31 October 2020 and extending the permit duration to 31 October 2030.

On 13 February 2020 BHP Billiton Nickel West applied to amend CPS 2222/4 for the purpose of extending the period in which clearing is authorised from 31 October 2020 to 31 October 2025 and extending the permit expiry date from 31 October 2030 to 31 October 2035. The size of the area approved to clear (400 hectares), the permit boundaries and the permit purposes remain unchanged.

3. Assessment of application against Clearing Principles

Comments

The permit holder has applied to amend the clearing permit to extend the permit duration and the period in which clearing is authorised by five years, as the project is ongoing.

The proposed amendment 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 reports CPS 2222/1, 2222/2, 2222/3 and 2222/4.

Methodology

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Land system Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There is one native title claim (WC2011/007) over the area under application (DPLH, 2020). This claim has been determined by the Federal Court on behalf of the claimant groups. 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 (DPLH, 2020). 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 Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The amendment application was advertised on 24 February 2020 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology

DPLH (2020)

4. References

DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 03 March 2020).

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:

BoM Bureau of Meteorology, Australian Government

DAA Department of Aboriginal Affairs, Western Australia (now DPLH)
 DAFWA Department of Agriculture and Food, Western Australia (now DPIRD)
 DBCA Department of Biodiversity, Conservation and Attractions, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DBCA and DWER)

DoEEDepartment of the Environment and Energy, Australian Government**DER**Department of Environment Regulation, Western Australia (now DWER)**DMIRS**Department of Mines, Industry Regulation and Safety, Western Australia**DMP**Department of Mines and Petroleum, Western Australia (now DMIRS)

DPIRD Department of Primary Industries and Regional Development, Western Australia

DPLH Department of Planning, Lands and Heritage, Western Australia

DRF Declared Rare Flora

DoE Department of the Environment, Australian Government (now DoEE)

DoW Department of Water, Western Australia (now DWER)

DPaW Department of Parks and Wildlife, Western Australia (now DBCA)

DSEWPaC Department of Sustainability, Environment, Water, Population and Communities (now DoEE)

DWER Department of Water and Environmental Regulation, Western Australia

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

TEC Threatened Ecological Community

Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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.

CR Critically endangered species

Threatened species considered to be "facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for endangered fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for endangered flora.

VU Vulnerable species

Threatened species considered to be "facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for vulnerable flora.

Extinct Species:

EX Extinct species

Species where "there is no reasonable doubt that the last member of the species has died", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at

appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

P Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.