



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1695/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billiton Nickel West Pty Ltd

1.3. Property details

Property: Mining Lease 53/56
Mining Lease 53/57
Mining Lease 53/165
Mining Lease 53/166
Mining Lease 53/167
Mining Lease 53/489

Local Government Area: Shire of Wiluna
Colloquial name: Mt Keith Nickel Operations

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 29 June 2017

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. One Beard vegetation association has been mapped within the application area (GIS Database): **18: Low woodland; mulga (*Acacia aneura*).**

Cockerton and True (2006) conducted a flora and vegetation survey over the Mt Keith tenements, and identified the following vegetation associations within the survey area:

Area A – 48.76 hectares north east of the Mt Keith plant area:

DRMS - Drainage Line Mulga Shrublands (*Acacia aneura*, *Acacia quadrimarginea*, *Acacia tetragonophylla*, over *Eremophila* sp. over *Ptilotus obovatus*).

WABS - Wanderrrie Bank Grasslands/Shrublands (*Eragrostis eriopoda* with scattered shrubs including *Eremophila latrobei*, *Sida* sp. unisexual and *Sida platycalyx*).

Area B – a relatively large area (372.78 hectares) to the south of the Mt Keith wastedumps and pit:

DRMS - Drainage Line Mulga Shrublands (*Acacia aneura*, *Acacia quadrimarginea*, *Acacia tetragonophylla*, over *Eremophila* shrubs over *Ptilotus obovatus*).

HPMS - Hardpan Mulga Shrublands (*Acacia quadrimarginea*, *Acacia aneura*, *Acacia tetragonophylla*, over *Sida* sp. unisexual, over *Aristida contorta*).

WABS - Wanderrrie Bank Grasslands/Shrublands (*Eragrostis eriopoda* with scattered shrubs including *Eremophila latrobei*, *Sida* sp. unisexual and *Sida platycalyx*).

Area C – a moderately sized area (97.84 hectares) to the west of the Mt Keith western waste dumps and pit:

DRMS - Drainage Line Mulga Shrublands (*Acacia aneura*, *Acacia quadrimarginea*, *Acacia tetragonophylla*, over *Eremophila* shrubs over *Ptilotus obovatus*).

SAES - Stony Acacia-Eremophila Shrublands (*Acacia aneura*, over *Eremophila fraseri*, over *Ptilotus obovatus*).

SIMS - Stony Ironstone Mulga Shrublands (*Acacia aneura*, over *Ptilotus obovatus*, *Hakea preissii*, *Sida* spp. And *Ptilotus aevroides* on low hills and colluvial slopes).

Area D – a 12.81 hectares proposed road corridor from the Mt Keith village access road to the southern end of Mt Keith Pit ("Southpark"):

DRMS - Drainage Line Mulga Shrublands (*Acacia aneura*, *Acacia quadrimarginea*, *Acacia tetragonophylla*, over *Eremophila* shrubs over *Ptilotus obovatus*).

HPMS - Hardpan Mulga Shrublands (*Acacia quadrimarginea*, *Acacia aneura*, *Acacia tetragonophylla*, over *Sida* sp. unisexual, over *Aristida contorta*).

WABS - Wanderrrie Bank Grasslands/Shrublands (*Eragrostis eriopoda* with scattered shrubs including *Eremophila latrobei*, *Sida* sp. unisexual and *Sida platycalyx*).

Clearing Description	Mt Keith Operations. BHP Billiton Nickel West Pty Ltd proposes to clear up to 717.51 hectares of native vegetation within a boundary of approximately 717.58 hectares, for the purpose of mineral production. The project is located approximately 75 kilometres southeast of Wiluna, in the Shire of Wiluna.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994); To: Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
Comment	The vegetation condition was derived from a vegetation survey conducted by Cockerton and True (2006). Clearing permit CPS 1695/1 was granted by the Department of Industry and Resources (now the Department of Mines and Petroleum) on 17 May 2007 and was valid from 16 June 2007 to 16 June 2012. The permit authorised the clearing of up to 717.51 hectares of native vegetation for the purpose of mineral production. The Permit Holder subsequently applied to amend the permit to extend the duration by five years. CPS 1695/2 was granted by the Department of Mines and Petroleum on 14 June 2012, extending the permit duration to 30 June 2017. On 7 June 2017, the Permit Holder applied to amend CPS 1695/2 to extend the permit duration to 30 June 2022, as the clearing has not been completed and the project is ongoing. The area of clearing authorised and the permit boundaries remain unchanged.

3. Assessment of application against clearing principles

Comments

BHP Billiton Nickel West Pty Ltd has applied to amend the permit, to extend the permit duration by five years. The size of the area approved to clear (717.51 hectares) and the permit boundaries remain unchanged.

The amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing (GIS Database). The assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in previous versions of the decision report.

Methodology

GIS Database:
- Hydrography, linear
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities (TEC/PEC) - Boundaries
- 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 (DAA, 2017). 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 is one registered Aboriginal Site of Significance within the application area (DAA, 2017). 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, 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 (2017)

4. References

- Cockerton, G. and True, D. (2006) Review of Flora, Vegetation and Conservation Values of Portions of the Mt Keith Tenements. Report Prepared for BHP Billiton Nickel West, by Western Botanical, September 2006.
- DAA (2017) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 20 June 2017).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
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
TEC	Threatened Ecological Community

Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T	Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora). Threatened fauna is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act. Threatened flora is flora that has been declared to be ‘likely to become extinct or is rare, or otherwise in need of special protection’, pursuant to section 23F(2) of the Wildlife Conservation Act. 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. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
EN	Endangered species Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
VU	Vulnerable species Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
EX	Presumed extinct species Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

- IA Migratory birds protected under an international agreement**
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 the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- CD Conservation dependent fauna**
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- OS Other specially protected fauna**
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P Priority species**
Species which are poorly known; or
Species that are adequately known, are rare but not threatened, and 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.