



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1695/2
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: 14 June 2012

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation within the application area has been mapped at a 1:250,000 scale as Beard Vegetation Association 39 (Shrublands; Mulga scrub) (Shepherd et al., 2001).

The application area has been divided into four separate areas by Cockerton et al. (2006) and the vegetation types in each area described.

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

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

WABS - Wanderrie 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 anuera*, *Acacia quadrimarginea*, *Acacia tetragonophylla*, over *Eremophila* shrubs over *Ptilotus obovatus*).

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

WABS - Wanderrie 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 anuera*, *Acacia quadrimarginea*, *Acacia tetragonophylla*, over *Eremophila* shrubs over *Ptilotus obovatus*).

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

SIMS - Stony Ironstone Mulga Shrublands (*Acacia anuera*, over *Ptilotus obovatus*, *Hakea preissii*, *Sida* spp. and *Ptilotus aervoides* 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 anuera*, *Acacia quadrimarginea*, *Acacia tetragonophylla*, over *Eremophila* shrubs over *Ptilotus obovatus*).

HPMS - Hardpan Mulga Shrublands (*Acacia quadrimarginea*, *Acacia anuera*, *Acacia tetragonophylla*, over *Sida*

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

Clearing Description	BHP Billiton Nickel West Pty Ltd have applied to clear up to 717.51 hectares of vegetation at the Mt Keith Nickel Operations to extend waste landforms, construct plant and infrastructure and to create an access road.
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	<p>The vegetation condition within the application area can vary. Cockerton et al. (2006) have described the vegetation thus:</p> <ul style="list-style-type: none">* Area A is described as very poor to fair due to water starvation and saline spray drift.* Area B is described as excellent to pristine with some tracks.* Area C is described as excellent to pristine with few tracks and gridlines present.* Area D is described as moderate to good due to water starvation. <p>The site was inspected by the assessing officer, the Commissioner for Soil and Land Conservation and an officer from the Biodiversity Coordination Section at the Department of Environment and Conservation. The assessing officer concurs with the findings of the flora survey conducted by Western Botanical (Cockerton et al., 2006) in regards to vegetation condition, although tree deaths due to water starvation within vegetation type DRMS in Area D may be due to dry conditions.</p> <p>The populations of Priority Flora species <i>Hemigenia exilis</i> (P4) and <i>Goodenia modesta</i> (P3) which occur outside the application area are not likely to be impacted by the clearing activities. A small area known as 'Lake Jane' caused by ponding at the foot of the western waste dump attracts wildlife such as waterbirds, finches, white browed babblers and birds of prey. This area is not within the application area.</p> <p>Clearing permit CPS 1695/1 was granted by the Department of Industry and Resources on 17 May 2007, and was valid from 16 June 2007 to 16 June 2012. The clearing permit authorised the clearing of up to 717.51 hectares of native vegetation. An application for an amendment to clearing permit CPS 1695/1 was submitted by BHP Billiton Nickel West Pty Ltd to the Department of Mines and Petroleum on 16 May 2012 to extend the duration of the permit for an additional five years. The amount of clearing and the clearing permit boundary that was approved under clearing permit CPS 1695/1 will remain unchanged.</p>

3. Assessment of application against clearing principles

Comments

BHP Billiton Nickel West Pty Ltd has applied to extend the duration of the clearing permit by five years. There are no additional environmental impacts associated with this amendment. Therefore the assessment against the clearing principles has not changed and can be found in the Clearing Permit Decision Report CPS 1695/1.

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

Comments

There is one native title claim over the area under application (GIS Database). This claim (WC11/7) 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*.

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 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 Databases:
- Aboriginal Sites of Significance
- Native Title Claims – Registered with the NNTT

4. References

- Cockerton, G. & True, D. (2006) Review of Flora, Vegetation and Conservation Values of Portions of the Mt Keith Tenements, September 2006. Unpublished Report Prepared for BHP Billiton Nickel West Operations. Western Botanical, 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.
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

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.