



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4615/5
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Hamersley Iron Pty Ltd**

1.3. Property details

Property: *Iron Ore (Mount Bruce) Agreement Act 1972, Mineral Lease 252SA*
Local Government Area: Shire of East Pilbara
Colloquial name: Koodaideri Mine

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
265		Mechanical Removal	Geotechnical Investigations, mineral exploration and construction camp

1.5. Decision on application

Decision on Permit Application: Grant
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 mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. One Beard vegetation association was mapped within the amendment area (GIS Database):

Beard Vegetation Association 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*;

The amendment area was surveyed during September 2014 by Eco logical Australia. Two broad vegetation communities were identified (Eco logical, 2014):

- 1) *Eucalyptus leucophloia* subsp. *leucophloia* open woodland to scattered trees with occasional *Eucalyptus gamophylla* and *Corymbia deserticola* subsp. *deserticola* over *Grevillea wickhamii* subsp. *aprica* and *Hakea chordophylla* high open shrubland over *Acacia spondylophylla* and *Tephrosia arenicola* low open shrubland over *Triodia wiseana* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) hummock grassland on high rocky hills and slopes; and
- 2) *Eucalyptus gamophylla* and *Corymbia hamersleyana* open woodland to scattered trees over *Acacia tumida* var. *pilbarensis*, *Grevillea wickhamii* subsp. *aprica* and *Acacia inaequilatera* high shrubland over *Triodia pungens* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) hummock grassland and *Themeda triandra* open tussock grassland on plains and minor drainage lines.

Clearing Description Koodaideri Mine
Hamersley Iron Pty Ltd is proposing to clear up to 265 hectares of native vegetation, within a total boundary of approximately 7,150 hectares, for the purpose of geotechnical investigations, mineral exploration and construction camp. The proposed clearing is located approximately 70 kilometres south east of Wittenoom, in the Shire of East Pilbara.

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

Clearing Permit CPS 4615/1 was granted by the Department of Mines and Petroleum (DMP) on 8 December 2011 and authorised the clearing of up to 167 hectares of native vegetation within a boundary of approximately 6,941 hectares. This permit was amended on 4 April 2013 to increase the amount of clearing approved to 244 hectares, and increase the boundary to 6,945 hectares to allow for additional exploration drilling, geotechnical investigation activities and camp construction. This permit was amended again on 23 May 2013 to correct an error on Plan 4615/2.

Clearing Permit CPS 4615/3 was amended on 31 May 2013. The purpose of this amendment was to increase the clearing permit boundary from 6,945 hectares to 7,070 hectares. The amount of clearing authorised remained the same.

An application for an amendment to clearing permit 4615/4 was received on 19 August 2015 to extend the period in which clearing is authorised, extend the duration of the permit to 31 July 2026, increase the amount of clearing from 244 to 265 hectares and increase the clearing permit boundary from 7,070 to 7,150 hectares. The proposed amendment will allow for additional exploration drilling and associated activities.

3. Assessment of application against clearing principles

Comments

Hamersley Iron Pty Ltd has applied to increase the amount of clearing by 21 hectares, increase the clearing permit boundary by 73 hectares, extend the period in which clearing is authorised and extend the duration of the permit by five years.

A Level 1 flora and fauna survey (biological assessment) of the amendment area was conducted by Eco logical Australia during September 2014. The flora component of the survey identified the presence of two dominant vegetation communities, none of which are listed as, or representative of, a Threatened Ecological Community (TEC) or a Priority Ecological Community (PEC) and no Threatened or Priority flora species were recorded within the amendment area (Eco logical, 2014).

The amendment area is located within the buffer to the Priority 1 Priority Ecological Community (PEC) 'Fortescue Marsh' which is listed on the Directory of Important Wetlands in Australia (DotE, 2015). The PEC itself is situated approximately 8 kilometres from the amendment area and is unlikely to be impacted by the proposed clearing.

A number of weed species have been identified throughout the amendment area. Clearing activities have the potential to result in an increase in the incidence of weed species, which may negatively impact on the biodiversity of the local area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of existing weed management conditions.

During the fauna component of the survey, two broad fauna habitat types were identified within the amendment area; low shrubland plains and rocky hills. The low shrubland plains habitat included minor drainage lines and depressions (Eco logical, 2014). Both habitat types identified are considered common and widespread within the Hamersley subregion (Eco logical, 2014). Potential impacts to minor drainage lines (watercourses) and vegetation growing in association with these systems, as a result of the proposed clearing may be minimised by the implementation of a watercourse/vegetation management condition.

Twenty six fauna species were recorded within the amendment area, including the Western Pebble-mound Mouse (*Pseudomys chapmani*), a Priority 4 listed fauna species, recognised by the Department of Parks and Wildlife (DPaW) as being of conservation significance. In addition to this, the Rainbow bee-eater (*Merops ornatus*) was identified as being likely to occur. The Northern Quoll (*Dasyurus hallucatus*) also potentially occurs within the amendment area, although based on local records and the location of the amendment area, it is likely to occur on an infrequent or occasional basis (Eco logical, 2014).

While the amendment area is likely to provide foraging habitat for local fauna species, given that caves, gorges and steep rocky gullies were not observed (Eco logical, 2014), the majority of the conservation significant fauna species known from the Hamersley subregion, such as the Pilbara Olive Python (*Liasis olivaceus barroni*), Pilbara Leaf-nosed Bat (*Rhinonictis aurantius*) and Ghost Bat (*Macroderma gigas*) (Ecological, 2014), are unlikely to be significantly impacted by the proposed clearing.

Given the location, local climate and relatively small size of the amendment area, land degradation issues, increased risk of flooding and impacts to the quality of surface and groundwater are unlikely to result.

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*, and the proposed clearing is at variance to Principle (f), may be at variance to Principle (b), is not likely to be at variance to Principles (a), (c), (d), (g), (h), (i) and (j) and is not at variance to Principle (e).

Methodology

DotE (2015)
Eco logical (2014)
GIS Database:
- DPaW Tenure
- Groundwater Salinity, Satewide
- Hydrography, linear

- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater Areas
- IBRA WA (Regions - Sub Regions)
- Pre-European vegetation
- Threatened and Priority Flora List
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

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

Comments

There is one Native Title Claim (WC2011/006) over the area under application (GIS Database; DAA, 2015). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the 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 no registered Sites of Aboriginal Significance located in the amendment area (GIS Database; 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.

The amendment application was advertised on 14 September 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

Methodology DAA (2015)
GIS Database:
- Aboriginal Sites of Significance

4. References

- DAA (2015) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, < <http://maps.dia.wa.gov.au/AHIS2/>>.
- DotE (2015) Directory of Important Wetlands. Department of the Environment. Australian Government. Canberra, ACT.
- Eco logical (2014) Koodaideri Biological Assessment. *Supporting information for CPS 4615/5*. Eco Logical Australia Pty Ltd, West Perth, 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.

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)
DER	Department of Environment Regulation, Western Australia
DMP	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	<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
s.17	Section 17 of <i>the Environment Protection Act 1986</i> , 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 the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus 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.