



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6001/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: Iron Ore (Hamersley Range) Agreement Act 1972, Mineral Lease 4SA (AML 70/4)
Local Government Area: Shire of Ashburton
Colloquial name: Western Turner B26 Deposit

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
6.5		Mechanical Removal	Mineral exploration and associated activities.

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 April 2014

2. Background

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. The following Beard vegetation associations are located within the application area (GIS Database):

82: Hummock grasslands, low tree steppe; snappygum over *Triodia wiseana*; and

567: Hummock grasslands, shrub steppe; mulga and kanji over soft spinifex & *Triodia basedowii*.

Biota (2013) have undertaken a flora, vegetation and fauna assessment of the study area including a field survey which was undertaken on the 9 – 10 September 2013. Biota (2013) described five vegetation units within the application area:

Vegetation of creeks, flowlines and floodplains (Hardey River)

EcEvAci: *Eucalyptus camaldulensis* subsp. *refulgens*, *E. victrix* woodland over *Acacia citrinoviridis* tall open scrub;

EIChAciApyAmoTe: *Eucalyptus leucophloia* subsp. *leucophloia*, *Corymbia hamersleyana* low open woodland over *Acacia citrinoviridis*, *A. pyrifolia* var. *pyrifolia*, *A. monticola* tall open scrub over *Triodia epactia* open hummock grassland;

Vegetation of stony hills and slopes

EIAprTw: *Eucalyptus leucophloia* subsp. *Leucophloia* scattered low trees over *Acacia pruinocarpa* tall open shrubland over *Triodia wiseana* hummock grassland;

EIASppTe: *Eucalyptus leucophloia* subsp. *Leucophloia* scattered low trees over mixed *Acacia* spp. open shrubland over *Triodia epactia* hummock grassland; and

Vegetation of stony plains and low spurs

EITwTa: *Eucalyptus leucophloia* subsp. *Leucophloia* scattered low trees over *Triodia wiseana*, (*T. angusta*) open hummock grassland.

Clearing Description Western Turner B26 Deposit.
Hamersley Iron Pty Ltd proposes to clear up to 6.5 hectares of native vegetation within a total boundary of approximately 45 hectares for the purpose of mineral exploration and associated activities. The application area is located approximately 29 kilometres west-southwest of Tom Price in the Shire of Ashburton.

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

To:

Pristine: No obvious signs of disturbance (Keighery, 1994).

Comment

The vegetation condition was assessed by botanists from Biota (2013) with the major disturbance resulting from grazing and weeds, particularly in the Hardey River.

3. Assessment of application against Clearing Principles

Comments

The application to clear for the purpose of mineral exploration and associated activities is unlikely to have any significant environmental impacts. The vegetation within the application area ranges from degraded to pristine condition (Keighery, 1994). The degraded vegetation is largely associated with the Hardey River which has been negatively impacted by weeds and the grazing of cattle (Biota, 2013). The native vegetation within the application area is broadly mapped as Beard vegetation associations 82 and 567 of which greater than 99% remain at a state and bioregional level (Government of Western Australia, 2013).

No Threatened Flora species pursuant to subsection (2) of section 23F of the *Wildlife Conservation Act 1950* were recorded within the application area during a survey conducted by Biota (2013). One Priority Flora species has been recorded at two locations within the application area: *Indigofera sp. Bungaroo Creek (S. van Leeuwen 4301)* (P3). This taxon has previously been recorded in the local area with at least 50 other populations identified within 50 kilometres of the application area (Biota, 2013). No Threatened or Priority Ecological Communities have been recorded within the application area or the local area (Biota, 2013; GIS, Database).

There are no permanent watercourses or wetlands within the application area, however, one major ephemeral river (Hardey River) is located within the application area (GIS Database; Biota, 2013). The Hardey River is associated with the vegetation unit EcEvAci which covers 7.8 hectares of the application area. Extensive areas of vegetation unit EcEvAci have been mapped in association with the broader extent of the Hardey River in the West Turner locality (Biota 2013). This vegetation unit has also been significantly impacted by weeds and cattle (Biota, 2013). Impacts to riparian vegetation may be minimised through the implementation of a watercourse management condition and a condition which restricts clearing within vegetation unit EcEvAci to access tracks only.

Four weed species were identified within the application area. None of these weed species are listed as a declared pest under the *Biosecurity and Agriculture Management Act 2007* (Biota, 2013). Potential impacts upon biodiversity due to the spread of weeds may be minimised through the implementation of a weed management condition.

Biota (2013) identified three broad fauna habitat types within the application area: creeklines and floodplains, stony hills and slopes and stony plains. These habitat types are well represented outside of the application area and although some conservation significant species may pass through the area or utilise the area for foraging, the application area is unlikely to represent significant core habitat for conservation significant species (Biota, 2013).

The proposed clearing is for low impact exploration requiring the clearing of 6.5 hectares and is not located in close proximity to any areas of conservation significance. The closest area of conservation significance is Karijini National Park located 40 kilometres east of the application area. With an average annual rainfall of 400 millimetres and an average annual evaporation rate of 3,400 millimetres there is likely to be little surface flow during normal seasonal rains and the proposed clearing is not likely to cause deterioration in the quality of surface or underground water or increase the incidence or intensity of flooding (GIS Database). In addition the land systems associated with the application area are generally not prone to erosion (Van Vreeswyk et al., 2004) and the clearing is unlikely to result in any appreciable land degradation.

The 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), is not likely to be at variance to Principles (a), (b), (c), (d), (g), (i), and (j) and is not at variance to Principles (e) and (h).

Methodology

Biota (2013)
Government of Western Australia (2013)
Keighery (1994)
Van Vreeswyk et al (2004)
GIS Database:
- DEC Tenure
- Evaporation Isopleths
- Groundwater Salinity
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Rangeland Land System Mapping
- Rainfall, Mean Annual

- Threatened and Priority Flora
- Threatened Ecological Sites Buffered

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments There are no Native Title Claims over the area under application (GIS Database). 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 no registered Aboriginal Sites of Significance in the vicinity of 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 Regulation, 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 clearing permit application was advertised on 24 February 2014 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology GIS Database:
 - Aboriginal Sites of Significance
 - Native Title Claims - Registered with the NNTT

4. References

- Biota (2013) Western Turner B26 Deposit Native Vegetation Clearing Permit Report AR-13-11679. Prepared for Rio Tinto Pty Ltd. November 2013.
- Government of Western Australia (2013) 2013 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- Keighery, B.J (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Van Vreeswyk, A.M.E., Payne, A.L., Hennig, P., and Leighton, K.A. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia, Department of Agriculture, Western Australia.

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:
- is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
 - 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.

