



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5458/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Pilbara Iron Assets Pty Ltd

1.3. Property details

Property: General Purpose Lease 47/1247
General Purpose Lease 47/1248
General Purpose Lease 47/1249
General Purpose Lease 47/1250
General Purpose Lease 47/1251

Colloquial name: Six Mile Lease Area

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
22.29		Mechanical Removal	Mineral Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 18 April 2013

1.6. Existing environment and information

1.6.1. 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 association is located within the application area (GIS Database):

589: Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex.

ENV Australia Pty Ltd (ENV) conducted a Level 2 flora and vegetation assessment over the application area including a site visit on 6 March 2012. ENV (2012) identified four vegetation communities within the application area:

1. **ExStTt**: *Eragrostis xerophila*, *Sorghum timorense* and *Themeda triandra* closed tussock grassland on red-brown clay with surface crust, on plains;
2. **AbAaTeARc*Cc**: *Acacia bivenosa* and *A. ancistrocarpa* open shrubland over *Triodia epactia* open hummock grassland over *Aristida contorta* and **Cenchrus ciliaris* open tussock grassland on red-brown clay with some surface flake on plains;
3. ***Cc**: **Cenchrus ciliaris* closed tussock grassland on disturbed areas of red-brown clay on plains; and
4. **SEc*Cc**: *Sesbania cannabina* scattered shrubs to shrubland over **Cenchrus ciliaris* closed tussock grassland on disturbed areas of redbrown clay on plains.

Clearing Description

Pilbara Iron Assets Pty Ltd has applied to clear 22.29 hectares (GIS Database). The application area is located approximately six kilometres north of Karratha town site (GIS Database).

The purpose of the application is for the development of an industrial site facility to stockpile and reprocess ore and minerals.

Vegetation Condition

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994);

to

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment

The native vegetation within the application area has been the subject of previous disturbance associated with the impacts of grazing and the construction of power line infrastructure and informal roads (ENV, 2012).

2. Assessment of application against Clearing Principles

Comments

The application area is located within the Roebourne subregion of the Pilbara Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). A flora survey conducted by ENV (2012) identified a total of 56 taxa (including species, subspecies, varieties and forms) from 45 genera and 15 families from the application area. Approximately half of the application area was mapped in degraded or completely degraded condition with the remainder found to be in good condition (Keighery, 1994, ENV, 2012). The quality of the native vegetation within the application area has been negatively impacted by historical grazing and the presence of road and power line infrastructure which has facilitated weed invasion (GIS Database; ENV, 2012).

Two of the vegetation associations identified by ENV (2012) are highly degraded and contain few native species. The remaining vegetation associations are aligned with the Beard vegetation association 589 (ENV, 2012). Approximately 99% of this vegetation association remains at a state and bioregional level (Government of Western Australia, 2011).

No Threatened Flora species pursuant to subsection (2) of section 23F of the *Wildlife Conservation Act 1950* or Priority Flora were recorded within the survey area. No plant species listed under the *Environment Protection Biodiversity Conservation Act 1999* were found within the survey area (ENV, 2012).

No Threatened Ecological Communities were identified however ENV (2012) have identified that vegetation association ExStTt is considered to be analogous with the (Priority 1) Priority Ecological Community (PEC) 'Roebourne Plains coastal grasslands with gilgai microrelief on deep cracking clays'. Vegetation association ExStTt covers 11.1 hectares (40.9%) of the application area, of which 73% is in Good condition. This represents 0.16% of the currently mapped extent of this PEC (ENV, 2012; Keighery 1994).

The application area is located within the Roebourne Plains and on the Horseflats landsystem (Van Vreeswyk et.al, 2004). This land system represents the PEC 'Horseflat land system of the Roebourne Plains' (Priority 3) (DEC, 2012). This PEC is very similar to the aforementioned Roebourne Plains Gilgai Grasslands PEC. The major difference between the two PECs being the difference in soils and the dominance of *Sorghum* spp. in the Roebourne Plains Gilgai PEC (ENV, 2012). For these two reasons ENV (2012) have identified that it is unlikely that the area proposed for clearing represents the 'Horseflat land system of the Roebourne Plains' (Priority 3) PEC.

The application area is located adjacent to and within major infrastructure including several powerline, road and rail infrastructure corridors. A large proportion of the application area is in completely degraded condition (ENV, 2012; Keighery, 1994). Considering this, the application area is not likely to provide significant habitat for fauna. There are no mapped watercourses, wetlands or conservation areas within the application area (GIS Database). The proposed clearing is not likely to negatively impact upon conservation areas; or cause or exacerbate land degradation, water quality or flooding.

Given that the proposed clearing may impact upon vegetation associated with the 'Roebourne Plains coastal grasslands with gilgai microrelief on deep cracking clays' (Priority 1) PEC, the area proposed for clearing may contain a high level of biodiversity and therefore may be at variance to Clearing Principle (a).

- Methodology
- DEC (2012)
 - ENV (2012)
 - Government of Western Australia (2011)
 - Keighery (1994)
 - Van Vreeswyk et.al (2004)
 - GIS Database
 - Dampier and Extensions 50cm Orthomosaic - Landgate 2008
 - DEC Tenure
 - Hydrography, linear
 - IBRA WA (Regions - Sub Regions)
 - Pre-European Vegetation
 - Public Drinking Water Source Areas (PDWSAs)
 - Rangeland Land System Mapping
 - Threatened Ecological Sites Buffered
 - Threatened and Priority Flora

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 application area (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 (ie. 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 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 proponents' 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.

The clearing permit application was advertised on 11 February 2013 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

Methodology

GIS Database
- Aboriginal Sites of Significance
- Native Title NNTT

3. References

- DEC (2012) Priority Ecological Communities for Western Australia Version 17. Species and Communities Branch, Department of Environment and Conservation. 13 April 2012.
- ENV Australia Pty Ltd (2012) Flora and Vegetation Assessment, Six Mile Lease, Karratha. Prepared for Northrock Pty Ltd. 30 May 2012.
- Government of Western Australia (2011) 2011 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.

4. 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.

