

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4594/2

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 1968, Mineral Lease 246SA (AML 70/246)

Local Government Area: Shire of Ashburton
Colloquial name: Western Range Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

220 Mechanical Removal Mineral Exploration and Geotechnical Investigations

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 12 February 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. Four Beard vegetation associations have been mapped within the application area (GIS Database; Government of Western Australia, 2013):

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

163: Shrublands; eremophila and cassia dwarf scrub;

181: Shrublands; mulga & snakewood scrub; and

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

A flora and vegetaiton survey of the application area was conducted by Biota (2009) in June, September and October 2009 and Astron in August 2013. These surveys identified the following 17 vegetation communities within the application area (Biota, 2009; Astron, 2013):

AanAprAteTe: Acacia aneura, Acacia pruinocarpa tall open shrubland to low woodland over Acacia tetragonophylla scattered shrubs over Triodia epactia hummock grassland;

AprGbERsppTe: Acacia pruinocarpa, Grevillea berryana tall open shrubland over Eremophila fraseri subsp. fraseri, Eremophila canaliculata, Eremophila cuneifolia scattered over Triodia epactia hummock grassland;

DpERcrTe: Dodonaea pachyneura, Eremophila cryptothrix tall shrubland over Triodia epactia hummock grassland;

AteAsyERcTe: Acacia tetragonophylla, Acacia synchronica scattered tall shrubs over Eremophila cuneifolia scattered shrubs over Triodia epactia hummock grassland;

AteERfTw: Acacia tetragonophylla scattered tall shrubs over Eremophila fraseri subsp. fraseri scattered shrubs over Triodia wiseana hummock grassland;

AteTw: Acacia tetragonophylla tall open shrubland over Triodia wiseana hummock grassland;

AanCAoERsppARc: Acacia aneura tall open scrub over Senna artemisioides subsp. oligophylla, Eremophila spp. open heath over Aristida contorta open bunch grassland;

AxAteERcCAspp: Acacia xiphophylla tall open shrubland over Acacia tetragonophylla open shrubland over Eremophila cuneifolia, Senna spp. scattered low shrubs;

AanAteCAspp: Acacia aneura, Acacia tetragonophylla tall open shrubland over Senna spp. scattered low shrubs;

AanAteTe: Acacia aneura, Acacia tetragonophylla tall shrubland over Triodia epactia open hummock grassland;

AanAxAteERcTa: Acacia aneura, Acacia xiphophylla tall open shrubland over Acacia tetragonophylla, Eremophila cuneifolia shrubland over Triodia angusta hummock grassland;

EcEvAamMgCYPv: Eucalyptus camaldulensis, Eucalyptus victrix open forest over Acacia ampliceps, Melaleuca glomerata tall shrubland over Cyperus vaginatus open sedgeland to sedgeland;

EvAcMgCE: Eucalyptus victrix woodland to scattered trees over Acacia coriacea subsp. pendens, Melaleuca glomerata tall shrubland over *Cenchrus spp. open tussock grassland;

EvTEr: Eucalyptus victrix scattered trees over Tephrosia rosea var. glabrior scattered low shrubs;

AciAanCE: Acacia citrinoviridis, Acacia aneura tall shrubland to low open forest over *Cenchrus species open tussock grassland to tussock grassland;

AanAxTe: Acacia aneura, Acacia xiphophylla tall open scrub over mixed open shrubland over Triodia epactia open hummock grassland; and

CfAciDpERcrTe: Corymbia ferriticola low open woodland over Acacia citrinoviridis, Dodonaea pachyneura, Eremophila cryptothrix tall shrubland over Triodia epactia open hummock grassland.

Clearing Description

Western Range Project

Hamersley Iron Pty Ltd is proposing to clear up to 220 hectares of native vegetation within a total boundary of approximately 5,570 hectares for the purpose of mineral exploration, geotechnical investigations, hydrogeological drilling and access tracks. The project is located approximately 8 kilometres west of Paraburdoo in the Shire of Ashburton.

Vegetation Condition

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment.

Vegetation condition was derived from the flora and vegetation survey conducted by Biota (2009) and Astron (2013).

Clearing Permit CPS 4594/1 was granted by the Department of Mines and Petroleum (DMP) for mineral exploration, geotechnical investigations, hydrogeological drilling and access tracks on 15 December 2011 and authorised the clearing of 202 hectares of native vegetation within a total boundary of approximately 5.018 hectares.

On 19 December 2014, Hamersley Iron Pty Ltd applied to amend CPS 4594/1 to increase the total clearing area by approximately 18 hectares and to increase the total boundary by approximately 488 hectares. The additional 18 hectares of clearing is for mineral exploration and geotechnical investigations.

3. Assessment of application against clearing principles

Comments

Hamersley Iron Pty Ltd has applied to increase the clearing area by approximately 18 hectares and to also increase the total clearing boundary by approximately 488 hectares.

A vegetation and flora survey covering the amended application area was conducted by Astron in August 2013 (Astron, 2013). The vegetation types found in the amended application area are consistent with those found in the original application area. None of the vegetation associations within the amended application area represent a threatened or priority ecological community and no threatened or priority flora species were recorded within the amended application area (Astron, 2013).

Two introduced flora species were recorded within the amended application area; *Cenchrus ciliaris* (buffel grass) and *Portulaca oleracea* (common purslane) (Astron, 2013). None of these species are listed as a Declared pest or a Weed of National Significance (Astron, 2013).

Three broad fauna habitats (stony plains, ridge tops and slopes and rocky breakaways), were indentified within the amended application area during the fauna survey (Astron, 2013). These habitat types are common and widely represented throughout the Pilbara region and are not restricted to the application area. Therefore the clearing of an additional 18 hectares is unlikely to have a significant impact on fauna habitat availability at a local or regional scale.

There are no permanent wetlands or watercourses within the amended application area (GIS Database). There are several ephemeral drainage lines that intersect the application area however the flora and vegetation survey survey did not identify any riparian vegetation growing in association with these drainage lines (Astron, 2013).

The soil types within the amended application area are consistent with the soils of the original application area and the proposed additional clearing is not likely to impact on surface water quality nor increase the incidence or intensity of flooding (GIS Database).

The assessment against the clearing principles for the proposed additional clearing of 18 hectares is consistent with the assessment contained in the Decsion Report for CPS 4594/1.

Methodology

Astron (2013)

GIS Database

- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)
- Threatened Ecoloical Sites Bufferd
- Threatened and Priority Flora

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

Comments

There are two Native Title Claims (WC10/11 and WC 10/16) over the area under application (GIS Database). These claims have been registered with the 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*.

There are several 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 proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Water, and the Department of Parks and Wildlife, 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 amendment was advertised on 12 January 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to the proposed clearing.

Methodology

GIS Database:

- Aboriginal Sites of Significance
- Native Title Claims Determined by the Federal Court
- Native Title Claims Filed at the Federal Court
- Native Title Claims Registered with the NNTT

4. References

Astron, (2013) Western Ranges Level 1 Vegetation, Flora and Fauna Survey. Report prepared for Rio Tinto Iron Ore Ltd by Astron Environmental Services, Perth, Western Australia.

Biota, (2009) Western Range Phase 1: Vegetation and Flora Summary Report. Unpublished report prepared for Rio Tinto Iron Ore Ltd by Biota, Perth, Western Australia.

Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. 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.

5. Glossary

Acronyms:

BoMBureau of Meteorology, Australian GovernmentDAADepartment of Aboriginal Affairs, Western AustraliaDAFWADepartment 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 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

PEC Priority Ecological Community, Western Australia

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:

{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 DPaW according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorynchus 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:

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.

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.

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.