

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4594/4

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:

221.4 Mechanical Removal Mineral Exploration, Geotechnical Investigations,

Hydrogeological Investigations and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 5 July 2018

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):

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 vegetation survey of the permit 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 permit area (Astron, 2013; Biota, 2009):

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 synchronicia 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.

* denotes a weed species

Clearing Description

Western Range Project

Hamersley Iron Pty Ltd is proposing to clear up to 221.4 hectares of native vegetation within a total boundary of approximately 5,572.3 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

The vegetation condition was derived from a vegetation survey conducted by Biota (2009) and Astron (2013)..

Clearing Permit CPS 4594/1 was granted by the Department of Mines and Petroleum (DMP) (now Department of Mines, Industry Regulation and Safety (DMIRS)) 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 12 February 2015 CPS 4594/1 was amended to increase the total clearing area by approximately 18 hectares and to increase the total boundary by approximately 488 hectares. On 21 April 2017 CPS 4594/2 was amended to increase the duration of the clearing by four years and amend the annual reporting date.

Hamersley Iron Pty Ltd has applied to amend CPS 4594/3 to update the purpose of clearing to 'mineral exploration, geotechnical investigations, hydrogeological investigations and associated activities,' increase the permit boundary by 2.3 hectares and the amount of approved clearing by 1.4 hectares.

3. Assessment of application against Clearing Principles

Comments

Hamersley Iron Pty Ltd has applied to amend clearing permit CPS 4594/3 to update the purpose of clearing, and increasing the amount of approved clearing (1.4 hectares) and the permit boundary (2.3 hectares).

The amended application boundary does not intersect any additional vegetation communities to those present within the previous permit area (Hamersley Iron, 2018; GIS Database).

No Threatened flora, Threatened Ecological Communities, Priority flora, Priority Ecological Communities or significant fauna have been identified within the amended boundary area (Hamersley Iron, 2018; GIS Database). The landforms and habitat found within the amended application area are considered as being well represented in the local region (Hamersley Iron, 2018).

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 1.4 hectares is consistent with the assessment contained in the Decsion Reports for CPS 4594/1, 4594/2, and 4594/3.

Methodology

Astron (2013)

Hamersley Iron (2018)

GIS Database:

- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There is one Native Title Claim (WC2010/016) over the area under application (DPLH, 2018). 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 (DPLH, 2018). 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 Water and Environmental Regulation and the Department of Biodiversity Conservation and Attractions, 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 May 2018 by the the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2018)

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.

DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 18 June 2018).

Hamersley Iron (2018) Application for Amendment to Purpose Permit CPS 4593/3 – Western Range Mineral Exploration and Geotechnical Investigation Activities – Tenement ML/246SA. Unpublished letter with supporting information prepared by Hamersley Iron Pty Ltd, 26 April 2018.

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 (now DPLH)
 DAFWA
 Department of Agriculture and Food, Western Australia (now DPIRD)
 DBCA
 Department of Biodiversity Conservation and Attractions, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DBCA and DWER)

DEE Department of the Environment and Energy, Australian Government
DER Department of Environment Regulation, Western Australia (now DWER)
DMIRS Department of Mines, Industry Regulation and Safety, Western Australia
DMP Department of Mines and Petroleum, Western Australia (now DMIRS)

DPIRD Department of Primary Industries and Regional Development, Western Australia

DPLH Department of Planning, Lands and Heritage, Western Australia

DRF Declared Rare Flora

DoE Department of the Environment, Australian Government (now DEE)

DoW Department of Water, Western Australia (now DWER)

DPaW Department of Parks and Wildlife, Western Australia (now DBCA)

DSEWPaC Department of Sustainability, Environment, Water, Population and Communities (now DEE)

DWER Department of Water and Environmental Regulation, Western Australia

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

TEC Threatened Ecological Community

Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T Threatened species:

Published as Specially Protected under the *Wildlife Conservation Act 1950*, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the *Wildlife Conservation Act 1950*.

Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the *Wildlife Conservation Act 1950*.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR Critically endangered species

Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN Endangered species

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU Vulnerable species

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EX Presumed extinct species

Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

IA Migratory birds protected under an international agreement

Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD Conservation dependent fauna

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS Other specially protected fauna

Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P Priority species

Species which are poorly known; or

Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

P1 Priority One - Poorly-known species:

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

P2 Priority Two - Poorly-known species:

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3 Priority Three - Poorly-known species:

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations 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 locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

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 are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

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.

