



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7772/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Fortescue Metals Group Ltd

1.3. Property details

Property: Iron Ore (Hamersley Range) Agreement Act 1963, Mineral Lease 4SA (AML 70/4)
Local Government Area: Shire of Ashburton
Colloquial name: Radio Hill Exploration Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.5		Mechanical Removal	Access Track

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 2 November 2017

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation of the application area is broadly mapped as the following Beard vegetation association:

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana* (GIS Database).

A flora and vegetation survey has not been conducted over the application area.

Clearing Description Radio Hill Exploration Prospect
Fortescue Metals Group Ltd proposes to clear up to 0.5 hectares of native vegetation within a boundary of approximately 38 hectares, for the purpose of an access track. The project is located approximately 4 kilometres South of Paraburdoo, within the Shire of Ashburton.

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 The vegetation condition was determined by the assessing officer using aerial imagery.

3. Assessment of application against Clearing Principles

Comments

Fortescue Metals Group Ltd has applied to clear up to 0.5 hectares to allow for the clearing of an access track for their Radio Hill exploration prospect. Part of the permit area has previously been disturbed by previous exploration activities (GIS Database). According to available databases, there are no records of any Threatened or Priority Ecological Communities within the permit area (GIS Database). The vegetation of the permit area is common and well represented throughout the bioregion (Government of Western Australia, 2016; GIS Database).

According to available databases, there are no records of Threatened or Priority flora species within the permit area (GIS Database). There are several records of Priority flora species from the local area (20 kilometre radius) including the Threatened flora species *Aluta quadrata* and the Priority 1 species *Eremophila* sp.

Hamersley Range, *Hibiscus campanulatus* and *Sida* sp. Hamersley Range (Department of Parks and Wildlife, 2017; GIS Database). *Aluta quadrata* is generally found at the edge of creek beds, bases of cliffs, within rocky crevices and near ridge crests (Western Australian Herbarium, 2017). *Hibiscus campanulatus* is found in similar habitats such as protected areas below cliffs, rocky creeklines and breakaways (Western Australian Herbarium, 2017). *Sida* sp. Hamersley Range is restricted to the western Pilbara and is found at the bases of breakaways and cliffs, steep sloped drainage gullies or gorges in hill landforms (Western Australian Herbarium, 2017). The permit area includes drainage lines and gully habitats which may provide habitat for *Aluta quadrata*, *Hibiscus campanulatus*, and Hamersley Range species (GIS Database). Potential habitat also exists for other Priority species known to occur in the local area. Whilst there is the potential for Priority flora to occur within the permit boundary, the proposed clearing of 0.5 hectares is not likely to have a significant impact on the availability of habitat for these species in the local region.

No fauna surveys have been conducted over the permit area. The fauna habitat within the permit area has been broadly described as hillsides and stony slopes (Fortescue Metals Group, 2017). Based on known distributions and habitats present, the Northern Quoll (*Dasyurus hallucatus*), Ghost Bat (*Macroderma gigas*), Pilbara Leaf-nosed Bat (*Rhinonictis aurantia*), Western Pebble-mound Mouse (*Pseudomys chapmani*) and Long-tailed Dunnart (*Sminthopsis longicaudata*) may all utilise the permit area. Additionally, though there are no potential areas of permanent water within the permit area, the Pilbara Olive Python (*Liasis olivaceus* subsp. *barroni*) may move transiently through the application area, especially during the wet season (Fortescue Metals Group, 2017). Given that the vegetation within the permit area is well represented throughout the bioregion, it is not likely to represent significant habitat for native fauna species. The proposed clearing of 0.5 hectares for an access track is not likely to have an impact on the habitat for these species in the local area.

The permit area intersects with a number of minor ephemeral watercourse (GIS Database). Given that the proposed track avoids crossing any drainage lines (Fortescue Metals Group, 2017) the proposed clearing for an access track is not likely to have a significant impact on riparian areas in the local region. It is unlikely that the proposed clearing of 0.5 hectares will impact on the quality of surface and groundwater in the local area or cause an increase in the incidence or intensity of flooding.

The permit area is mapped as comprising the Hamersley land system which is not prone to erosion (Van Vreeswyk et al., 2004; GIS Database).

The permit area 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), (h), (i) and (j) and is not at variance to Principle (e).

Methodology Department of Parks and Wildlife (2017)
Fortescue Metals Group (2017)
Government of Western Australia (2016)
Van Vreeswyk et al. (2004)
Western Australian Herbarium (2017)

GIS Database:
- DPaW Tenure
- Hydrography, Linear
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffered
- Threatened Fauna

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

Comments

There is one native title claim over the area under application (WC 2010/016) (Department of Planning, Lands and Heritage, 2017). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. 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 within the application area (Department of Planning, Lands and Heritage, 2017). 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 application was advertised on 9 October 2017 by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety (DMIRS)), inviting submissions from the public. No submissions were received in relation to this application.

Methodology Department of Planning, Lands and Heritage (2017)

4. References

- Department of Parks and Wildlife (2017) NatureMap, Department of Parks and Wildlife (now Department of Biodiversity Conservation and Attractions) <<http://naturemap.dpaw.wa.gov.au>> Accessed 24 October 2017.
- Department of Planning, Lands and Heritage (2017) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 24 October 2017).
- Fortescue Metals Group (2017) Radio Hill Exploration Prospect. Native Vegetation Clearing Permit Application Supporting Document. Fortescue Metals Group Ltd, August 2017.
- Government of Western Australia (2016) 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. WA Department of Parks and Wildlife, 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.; Leighton, K.A.; Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia, Technical Bulletin No. 92 Department of Agriculture Western Australia, South Perth.
- Western Australian Herbarium (2017) FloraBase - The Western Australian Flora. Department of Biodiversity Conservation and Attractions. <http://florabase.dpaw.wa.gov.au/> (Accessed 24 October 2017).

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	<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
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.