

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5974/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Fortescue Metals Group Limited

1.3. Property details

Property: Exploration Licence 47/1396
Local Government Area: Shire of Ashburton
Colloquial name: Hardey Ridge Prospect

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
36		Mechanical Removal	Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 13 August 2021

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 associations:

18: Mulga (*Acacia aneura*) open shrubland;

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

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

No vegetation surveys have occurred within the application area or surrounding 20 kilometres.

Clearing Description Hardey Ridge Prospect.
Fortescue Metals Group Limited (FMG) proposes to clear up to 36 hectares of native vegetation within a boundary of approximately 710 hectares, for the purpose of mineral exploration. The project is located approximately 68 kilometres north-west of Paraburdoo, within the Shire of Ashburton.

Vegetation Condition Pristine: No obvious signs of disturbance (Keighery, 1994);
to:
Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment There have been no fauna, flora or vegetation surveys undertaken over the application area. Based on the absence of previous mining or exploration activity in the area and following a review of aerial imagery, vegetation condition is likely to be Very Good to Pristine (Keighery, 1994; GIS Database).

Clearing permit CPS 5974/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 6 March 2014 and was valid from 29 March 2014 to 29 March 2019. The permit authorised the clearing of up to 6 hectares of native vegetation within a boundary of approximately 290 hectares, for the purpose of mineral exploration.

CPS 5974/2 was granted on 28 March 2019, amending the permit to extend the duration of the permit by 5 years to 29 March 2024.

On 15 March 2021, the Permit Holder applied to amend CPS 5974/2 to increase the area authorised to clear from 6 hectares 36 hectares, increase the permit boundary from 290 hectares to 710 hectares, and amend the permit boundary to exclude areas previously on Exploration Licence 47/2378 (surrendered on 10 July 2019).

3. Assessment of application against Clearing Principles

Comments

The permit holder has applied to increase the amount of clearing authorised by 30 hectares, increase the permit boundary by approximately 420 hectares, remove the permit boundary from E 47/2378, and remove E 47/2378 from the tenure on the permit (FMG, 2021).

The application boundary is entirely within the Woongarra Gorge Area, which is listed in the Register of the National Estate and is therefore an Environmentally Sensitive Area (GIS Database). There have been no fauna, flora or vegetation field surveys conducted over the application area. Therefore, a desktop assessment has been undertaken to assess the level of biodiversity within the application boundary.

According to available databases and habitat potentially present in the application area, there is one Threatened Flora species and five Priority Flora species that may occur within the application area:

Aluta quadrata Rye & Trudgen (Threatened);
Hibiscus campanulatus (Priority 1);
Hibiscus sp. Mt Brockman (E. Thoma ET 1354) (Priority 1);
Grevillea saxicola (Priority 3);
Sida sp. Barlee Range (S. van Leeuwen 1642) (Priority 3); and
Sida sp. Hamersley Range (Priority 3) (DBCA, 2007-).

Aerial imagery suggests that potential habitat for *Aluta quadrata* Rye & Trudgen (Threatened) may occur within the application area, as this species is found on the edge of creek beds, base of cliffs, rocky crevices and near the crests of ridges within the Hamersley subregion (Western Australian Herbarium, 1998-).

Based on information from FloraBase, potential habitat may also be present within the application area for *H. campanulatus*, *H. Mt Brockman* (E. Thoma ET 1354), *G. saxicola*, *S. sp. Barlee Range* (S. van Leeuwen 1642) and *S. sp. Hamersley Range* (GIS Database). These species have been found within the Hamersley subregion, and in landscapes identified within the application area such as drainage lines, gullies, gorges, breakaways and scree slopes (Western Australian Herbarium, 1998-).

The distribution of NatureMap records within this landscape suggests that the local area has not been thoroughly surveyed (DBCA, 2007-). Potential impacts to conservation significant flora as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

There are no known Priority or Threatened Ecological Communities within the application area (GIS Database).

Clearing activities have the potential to result in an increase in the incidence of weed species, which may negatively impact on the biodiversity of the local area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of the existing weed management condition.

A review of aerial imagery indicates that there are several fauna habitats present within the application boundary, including ridge, gorge, breakaway, minor drainage line, and major drainage line habitat (GIS Database). The rocky ridge / breakaway / gorge / major drainage line habitats is usually identified as being of high conservation significance, due to their capacity to support standing water, provide shelter, contain a diversity of microhabitats and act as a dispersal pathway.

The following five conservation significant species are likely to occur within the application area based on habitat type preferences:

Northern Quoll (*Dasyurus hallucatus*, Endangered);
Ghost Bat (*Macroderma gigas*, Vulnerable);
Pilbara Leaf-nosed Bat (*Rhinonictoris aurantia*, Vulnerable);
Pilbara Olive Python (*Liasis olivaceus barroni*, Vulnerable); and
Western Pebble-mound Mouse (*Pseudomys chapmani*, Priority 4) (DBCA, 2007-).

NatureMap records show that 8 records of the Northern Quoll have been recorded in close proximity to the application area (DBCA, 2007-). FMG (2021) advise that the amendment boundary may include habitat that is suitable denning and foraging habitat for Northern Quolls. The Beasley River and the surrounding areas would provide foraging and dispersal habitat, and these areas may be utilised by the Northern Quoll whilst foraging or transiently moving through the area (FMG, 2021; GIS Database).

The Pilbara Olive Python is not highly mobile and is not known to move across extensively cleared areas (SPRAT, 2021). This species preferred habitat includes escarpments, gorges and water holes (SPRAT, 2021). The application includes escarpments and gorges, and with a natural pool occurring within close proximity to the application area, the area may be of significance for this species (GIS Database).

There is suitable habitat present for roost caves for the Pilbara Leaf-nosed Bat and Ghost Bat (GIS Database). Impacting upon roost caves may result in loss of local population of this species (TSSC, 2016a; 2016b).

Notwithstanding the presence of caves, these species are likely to utilise the application for foraging and dispersal.

Western Pebble-mound Mouse is a highly mobile species which prefers habitat consisting of gently sloping hills of rocky ranges where the ground is stony and vegetated by Spinifex (FMG, 2021). Aerial imagery suggests this habitat type is common within the local and regional area (GIS Database).

While there are areas of large uncleared tracts of similar habitat within the local and regional area, there is potential for the application area to support a higher diversity and number of species given its location adjacent to the convergence of the Beasley River and Beasley River West tributary, and the presence of a perennial pool adjacent to the application area (GIS Database).

A lack of field survey in the area creates uncertainty regarding the presence or absence of significant faunal habitats and conservation significant fauna within the application area. The amendment to increase clearing of native vegetation by 30 hectares has a greater potential to have a significant impact on conservation significant fauna species. Potential impacts to conservation significant fauna as a result of the proposed clearing may be minimised by the implementation of a fauna management condition.

The permit boundary has been amended to exclude the main tributary of the Beasley River from the application area (GIS Database). The amendment boundary still intersects Beasley River West which is classed as a minor non-perennial watercourse, and five other minor non-perennial watercourses and associated floodplains (GIS Database). Aerial imagery indicates that vegetation growing in association with these watercourses is riparian in nature, with the riparian vegetation described in decision report CPS 5974/1 (GIS Database). Impacts to riparian vegetation not required for access tracks may be minimised by the implementation of a restricted clearing condition.

The amendment area is not within or in close proximity to any conservation areas (GIS Database), and the proposed clearing is unlikely to have any impact on any conservation area.

There are no Public Drinking Water Areas in the vicinity of the amendment area (GIS Database). The proposed clearing is unlikely to result in appreciable land degradation, significantly impact surface or groundwater quality, or increase the incidence or intensity of flooding.

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

Methodology DBCA (2007-)
FMG (2021)
SPRAT (2021)
TSSC (2016a)
TSSC (2016b)
Western Australian Herbarium (1998-).

GIS Database:

- DPaW Tenure
- 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 are two native title claims over the area under application (DPLH, 2021). These claims have been registered with the National Native Title Tribunal on behalf of the claimant groups. 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 is one registered Aboriginal Site of Significance within the application area (DPLH, 2021). 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 29 March 2021 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2021)

4. References

- DBCA (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Biodiversity, Conservation and Attractions. <https://naturemap.dbca.wa.gov.au/> (Accessed 31 May 2021).
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 31 May 2021).
- FMG (2021) Native Vegetation Clearing Permit Supporting Documentation – Hardey Ridge Project. Fortescue Metals Group Limited, March 2021.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- SPRAT (2021) Species Profile and Threats Database – *Liasis olivaceus barroni* – Olive Python (Pilbara subspecies). Department of Agriculture, Water and the Environment. https://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=66699 (Accessed 3 June 2021).
- Threatened Species Scientific Committee (2016a) Conservation Advice *Macroderma gigas* (Ghost bat). Department of Agriculture, Water and the Environment. <http://www.environment.gov.au/biodiversity/threatened/species/pubs/174-conservation-advice-05052016.pdf> (Accessed 3 June 2021).
- Threatened Species Scientific Committee (2016b) *Rhinonictis aurantia* (Pilbara form) (Pilbara Leaf-nosed Bat). Department of Agriculture, Water and the Environment. <http://www.environment.gov.au/biodiversity/threatened/species/pubs/174-conservation-advice-05052016.pdf> (Accessed 3 June 2021).
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 31 May 2021).

5. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
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)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
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)
DoEE	Department of the Environment and Energy (now DAWE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, 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:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of ‘Specially Protected Fauna’ listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of ‘Rare Flora’ listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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 in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU Vulnerable species

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct Species:

EX Extinct species

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI

Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD

Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS

Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P

Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened 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 the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.