

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6961/4

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Iron Ore (Hamersley Range) Agreement Act 1963, Mineral Lease 4SA (AML 70/4)

Miscellaneous Licence 47/178 Miscellaneous Licence 47/855

Local Government Area: Shire of Ashburton
Colloquial name: Brockman Project

1.4. Application

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

Mechanical Removal Mineral Exploration, Access Road, Hydrogeological and Geotechnical Investigations and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 28 May 2020

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: Low woodland; mulga (Acacia aneura)

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

174: Short bunch grassland - savannah/grass plain (Pilbara); and

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

The application area consists of several separate areas covering a total area of approximately 9,092 hectares. Numerous vegetation surveys have been undertaken within the application area and surrounding areas (Rio Tinto, 2016a; Rio Tinto, 2016c). These surveys have been consolidated into one report, and have identified a total of 128 vegetation associations occurring within the application area (Rio Tinto, 2016b; Rio Tinto 2016c). These vegetation associations can be found in the decision reports for CPS 6961/1 and CPS 6961/2.

A flora and vegetation survey was conducted over the additional amendment area by Rio Tinto (2020) on 11 December 2019. The following four new vegetation associations were recorded within the additional area (Rio Tinto, 2020).

A'a'ApAbAeTe: Acacia 'aneura' scattered low trees to low open woodland over *A. pruinocarpa* scattered tall shrubs over *A. bivenosa* and *A. exigua* open shrubland over *Triodia epactia* hummock grassland.

ElAciAbAmoTe: Eucalyptus leucophloia low open woodland over Acacia citrinoviridis, A bivenosa and A. monticola tall shrubland over Triodia epactia open hummock grassland and Themeda triandra very open tussock grassland.

EITeTw: Eucalyptus leucophloia, (E. gamophylla, Corymbia deserticola, C. hamersleyana) scattered low tree over *Triodia epactia* and/or *T. wiseana* hummock grassland.

ElAmaTw: Eucalyptus leucophloia scattered low trees over Acacia maitlandii shrubland over Triodia wiseana open hummock grassland.

Clearing Description

Brockman Project.

Hamersley Iron Pty Ltd proposes to clear up to 601 hectares of native vegetation within a total boundary area of approximately 9,092 hectares for the purpose of mineral exploration, access road, hydrogeological and geotechnical investigations and associated activities. The proposal is located approximately 33 kilometres northwest of Tom Price in the Shire of Ashburton.

Vegetation Condition

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

То

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

Comment

The vegetation condition was derived from consolidated vegetation surveys conducted by Rio Tinto (2016c).

Clearing permit CPS 6961/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 19 May 2016 and was valid from 11 June 2016 to 31 December 2031. The permit authorised the clearing of up to 500 hectares of native vegetation within a boundary of approximately 9,035 hectares, for the purposes of mineral exploration, hydrogeological and geotechnical investigations and associated activities.

CPS 6961/2 was granted on 4 August 2016, amending the wording of the Flora Management condition on the permit, amending the annual reporting date from 31 July to 30 June each year, and amending the annual reporting period from financial year to calendar year. There was no change to the area approved to be cleared or the permit boundary.

CPS 6961/3 was granted on 27 September 2018, amending the permit to increase the amount of clearing authorised from 500 hectares to 601 hectares. There was no change to the permit boundary.

On 25 March 2020, Hamersley Iron Pty Ltd applied to amend CPS 6961/3 to increase the permit boundary from approximately 9,035 hectares to approximately 9,092 hectares, add additional tenure and to amend the authorised purpose of clearing to include 'access road'. The amount of clearing authorised remains unchanged. The amendment will allow for the construction of a 9 metre wide dual carriageway unsealed access road to allow a direct route for mining operation personnel to avoid the active pit area.

3. Assessment of application against Clearing Principles

Comments

The Permit Holder has applied to amend CPS 6961/3 to increase the permit boundary by approximately 57 hectares from approximately 9,035 hectares to approximately 9,092 hectares. The amount of clearing authorised remains unchanged.

The flora and vegetation survey identified four new vegetation associations within the amendment area (Rio Tinto, 2020). None of the vegetation within the amendment area has been identified as being a Threatened or Priority Ecological Community (Rio Tinto, 2016c; Rio Tinto, 2020; GIS Database).

There are no Threatened flora species known to occur within the amendment area and none were recorded during field surveys of the area (Rio Tinto, 2020; GIS Database). No Priority flora were recorded during the field survey, however following three Priority species have been identified as potentially occurring within the amendment area given there is suitable habitat: *Vittadinia* sp. Coondewanna Flats (S. van Leeuwen 4684) (P1), *Aristida jerichoensis* var. *subspinulifera* (P3) and *Goodenia nuda* (P4) (Rio Tinto, 2020). All of the potentially occurring Priority species have been previously recorded in the surrounding area, however none have been recorded within the amendment area (Rio Tinto, 2020). The proposed amendment is unlikely to have a significant impact on conservation significant flora species, and the vegetation communities extend beyond the application area and are not locally restricted.

No conservation significant fauna were recorded during the field survey, or in previous surveys within the amendment area (Rio Tinto, 2020). Three broad habitat types were identified during the fauna assessment, however all are considered widespread throughout the region (Rio Tinto, 2020). The only Priority fauna species identified as potentially occurring within the amendment area is *Pseudomys chapmani* (Western Pebble-mound mouse, P4) (Rio Tinto, 2020). An inactive mound was recorded 4.4 kilometres west of the amendment area in vegetation similar to vegetation type EITeTw (Rio Tinto, 2020). Vegetation type EITeTw comprises 13.54% of the amendment area and suitable habitat for this species is present in the surrounds (Rio Tinto, 2020). The proposed clearing in the amendment area is unlikely to impact the conservation status of this species.

There are no permanent watercourses or wetlands within the amendment area, however a number of seasonal drainage lines intersect the area (GIS Database). Seasonal drainage lines in the region only flow briefly following significant rainfall events (Van Vreeswyk et al., 2004). Potential impacts to drainage lines and their associated vegetation may be minimised through the existing watercourse management condition.

There are no conservation areas or DBCA (formerly DPaW) managed land in the vicinity of the application area (GIS Database).

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision reports CPS 6961/1, 6961/2 and 6961/3.

Methodology

Rio Tinto (2016c) Rio Tinto (2020)

Van Vreeswyk et al. (2004)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- 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 (WC2001/005; WC1997/089) over the area under application (DPLH, 2020). 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 are multiple registered Aboriginal Sites of Significance within the application area (DPLH, 2020). 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 27 April 2020 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 (2020)

4. References

DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 23 April 2020).

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Rio Tinto (2016a) Amendment Application for Purpose Permit CPS 6961/1 - Greater Brockman - Mineral Exploration. Prepared by Rio Tinto, June 2016.

Rio Tinto (2016b) Brockman Vegetation Complexes. Additional information received in relation to Clearing Permit Application CPS 6961/1. Prepared by Rio Tinto, April 2016.

Rio Tinto (2016c) Desktop Flora, Vegetation and Fauna Habitat Assessment at Brockman. Native Vegetation Clearing Permit – Supporting Report. Prepared by Rio Tinto, March 2016.

Rio Tinto (2020) Flora, Vegetation and Fauna Habitat Assessment at Nammuldi. Native Vegetation Clearing Permit – Supporting Report. Prepared by Rio Tinto, March 2020.

Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia. Technical Bulletin No. 92. Department of Agriculture, South Perth, 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)

DoEEDepartment of the Environment and Energy, Australian GovernmentDERDepartment of Environment Regulation, Western Australia (now DWER)DMIRSDepartment of Mines, Industry Regulation and Safety, Western AustraliaDMPDepartment 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 DoEE)

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 DoEE)

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:

{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 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.