

# **Clearing Permit Decision Report**

# 1. Application details

| 1.1. Permit application details           |                                       |  |  |
|---|---------------------------------------|--|--|
| Permit application No.:                   | 7406/1                                |  |  |
| Permit type:                              | Area Permit                           |  |  |
| 1.2. Proponent details                    |                                       |  |  |
| Proponent's name:                         | Cliff Asia Pacific Iron Ore Pty Ltd   |  |  |
| 1.3. Property details                     |                                       |  |  |
| Property:                                 | Mining Lease 77/607                   |  |  |
| Local Government Area:                    | Shire of Yilgarn                      |  |  |
| Colloquial name:                          | Koolyanobbing Range D Deposit         |  |  |
| 1.4. Application                          |                                       |  |  |
| Clearing Area (ha) No. T                  | For the purpose of:                   |  |  |
| 2.40                                      | Mechanical Removal Mineral Production |  |  |
| 1.5. Decision on application              |                                       |  |  |
| Decision on Permit Application:           | Grant                                 |  |  |
| Decision Date:                            | 2 February 2017                       |  |  |
|   |                                       |  |  |
| 2. Site Information                       |                                       |  |  |
| 2.1. Existing environment and information |                                       |  |  |
| 2 1 1 Description of the nation           | ive vegetation under application      |  |  |

Beard vegetation associations have been mapped for the whole of Western Australia. One Beard vegetation **Vegetation Description** association has been mapped within the application area (GIS Database):

Beard vegetation association 141: Medium woodland; York gum, salmon gum and gimlet

A Level 2 flora and vegetation survey was conducted over the wider area and included the application area. Two vegetation types were identified within the application area (Cliffs, 2016; Woodman, 2014).

|                      | <ul> <li>Low open mallee woodland dominated by <i>Eucalyptus loxophleba</i> subsp. <i>lissophloia</i> over tall open<br/>to sparse shrubland of mixed species dominated by <i>Acacia</i> sp. Mt Jackson, <i>Acacia</i> sp. narrow<br/>phyllode, <i>Acacia tetragonophylla</i> and <i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i> over mid open<br/><i>Dodonaea inaequifolia</i> and <i>Philotheca brucei</i> subsp. <i>brucei over</i> low sparse shrubland dominated<br/>by <i>Dodonaea microzyga</i> var. <i>acrolobata</i>, <i>Olearia pimelioides</i>, <i>Prostanthera semiteres</i> subsp.<br/><i>semiteres</i> and <i>Olearia muelleri</i> on red, red-brown, orange-brown or brown clay or clay-loam with<br/>ironstone stones, occasionally with banded ironstone outcropping, on mid to lower slopes of<br/>ranges and low rises.</li> </ul>  |
|----------------------|--|
|                      | Low isolated trees and mallees of <i>Eucalyptus longissima</i> , <i>Banksia arborea</i> and <i>Brachychiton gregorii</i> over tall shrubland to open shrubland dominated by <i>Acacia</i> sp. Mt Jackson (B. Ryan 176) and <i>Allocasuarina eriochlamys</i> subsp. <i>eriochlamys</i> or <i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i> over mid open to sparse shrubland dominated by <i>Philotheca brucei</i> subsp. <i>brucei</i> , <i>Grevillea zygoloba</i> , <i>Eremophila clarkei</i> , <i>Scaevola spinescens</i> and <i>Leucopogon</i> sp. Clyde Hill (M.A Burgman 1207) over low sparse shrubland of mixed species including <i>Olearia humilis</i> , <i>Prostanthera althoferi</i> subsp. <i>althoferi</i> , <i>Hibbertia exasperata</i> and <i>Dianella revoluta</i> var. <i>divaricata</i> on red, red-brown or brown clay or clay-loam with ironstone stones, usually with banded ironstone outcropping, on the crests and slopes of ranges. |
| Clearing Description | Koolyanobbing Range D Deposit<br>Cliffs Asia Pacific Iron Ore Pty Ltd is proposing to clear up to 2.40 hectares of native vegetation, within a tota<br>boundary of approximately 2.40 hectares, for the purpose of mineral production and associated activities. The<br>proposed clearing is located approximately 45 kilometres north north-west of Southern Cross, in the Shire of<br>Yilgarn.   |
| Vegetation Condition | Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).   |
|                      | То   |

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

Comment

The vegetation condition was derived from a flora and vegetation survey conducted by Woodman Environmental Consulting (2014).

#### 3. Assessment of application against clearing principles

Comments

Cliffs Asia Pacific Iron Ore Pty Ltd has applied to clear 2.40 hectares of native vegetation. The clearing will allow for a pit extension. Approximately one third of the vegetation under application has already been disturbed by mining activities and is devoid of vegetation growth. The vegetation that remains, while adjacent to existing mining infrastructure and disturbance, is considered to be in a 'Very Good' condition (Keighery, 1994; GIS Database).

The application area is located within the Koolyanobbing Range (GIS Database). The Koolyanobbing Range supports one of the two major concentrations of endemic or near endemic flora in Western Australia (DPaW, 2016). The range contains a large number of specialist ironstone taxa listed as Priority flora and has been identified as a range comprising the highest level of biodiversity and landscape conservation value by the Government of Western Australia (DPaW, 2016). The Kooyanobbing Range Vegetation Complex, a Priority 1 Priority Ecological Community (PEC), is mapped on the range and the application area falls within this PEC.

Flora and vegetation surveys have been conducted over the wider area and included the application area. No Threatened flora species or Threatened Ecological Communities (TECs) were recorded (Cliffs, 2016; Woodman 2014). The vegetation remaining within the application area is not considered to represent significant habitat for local fauna species, including species of conservation significance (Cliffs, 2016; DPaW, 2017).

The Priority flora listed flora species *Stenanthemum newbeyi* (P4) has been recorded within the application area and the spider species *Aganippe castellum* (P4) is known to occur nearby (Cliffs, 2016). The impact of clearing on *Stenanthemum newbeyi* is considered minor and the loss of these plants and the associated habitat will have minimal impact on the conservation of the species (DPaW, 2016). Given that there are no known occurrences of *Aganippe castellum*, within the application area, impacts to this species are unlikely (DPaW, 2017).

The application area is not located within a conservation area, the nearest such area (an un-named nature reserve) is situated approximately 8 kilometres west. The Beard vegetation association mapped for the site (Beard associations 141) is well represented, retaining over 80% of pre-European levels within the state and bioregion (Government of Western Australia, 2015).

No watercourses or wetlands are mapped within the application area, therefore the vegetation under application is not considered to be growing in association with such features. Given the highly disturbed environment, land degradation issues and adverse impacts to water quality (surface and groundwater), the clearing of up to 2.40 hectares of native vegetation is unlikely to alter existing conditions.

A number of weed species are known to occur within the local area (Cliffs, 2016). 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 a weed management condition.

Given the small size of the proposed clearing, proximity to active mining operations and lack of linkage to other areas of the Koolyanobbing range, significant impacts (including cumulative impacts) are not anticipated to result (DPaW, 2017).

The application area has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the Environmental Protection Act 1986, and the proposed clearing 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) and (f).

#### Methodology

Cliffs (2016) DPaW (2016) DPaW (2017) Government of Western Australia (2015) Woodman (2014)

GIS Database:

- DPaW Tenure

- Groundwater Salinity, Satewide
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater Areas
- IBRA WA (Regions Sub Regions)
- Pre-European vegetation
- Threatened and Priority Flora List
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

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

#### Comments

There are no native title claims over the application area (DAA, 2017). 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 Sites of Aboriginal Significance located in the application area (DAA, 2017; GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Parks and Wildlife and the Department of Water, 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 2 January 2017 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

Methodology DAA (2017) GIS Database: - Aboriginal Sites of Significance

#### 4. References

Cliffs (2016) Koolyanobbing Range D Deposit Mine Pit Extension. Native Vegetation Clearing Permit Application Supporting Document. Cliffs Asia Pacific Iron Ore Pty Ltd, Western Australia, December 2016.

- DAA (2017) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs, Perth, Western Australia < http://maps.dia.wa.gov.au> (Accessed January 2017).
- DPaW (2017) Advice received in relation to Clearing Permit CPS 7406/1. Species and Communities Branch, Department of Parks and Wildlife, Western Australia, January 2017.
- DPaW (2016) Advice received in relation to Clearing Permit CPS 7076/1. Department of Parks and Wildlife, Western Australia, June 2016.

Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. 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.

Woodman (2014) Southern Koolyanobbing Range, Flora and Vegetation Assessment. Report prepared for Cliffs Asia Pacific Iron Ore Pty Ltd, by Woodman Environmental Consulting, February 2014.

## 5. Glossary

#### Acronyms:

| BoM      | Bureau of Meteorology, Australian Government   |
|----------|--|
| DAA      | Department of Aboriginal Affairs, Western Australia  |
| DAFWA    | Department 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                                       |
| TEC      | Threatened Ecological Community  |
|          |  |

#### **Definitions:**

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

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.

*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.

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.