



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 7566/1  
 Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Cliffs Asia Pacific Iron Ore Pty Ltd

### 1.3. Property details

Property: Mining Lease 77/606

Local Government Area: Shire of Yilgarn  
 Colloquial name: Koolyanobbing Range K Deposit

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3		Mechanical Removal	Mineral Production and Associated Activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
 Decision Date: 22 July 2017

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

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

**141:** Medium woodland; York gum, salmon gum & gimlet

**520:** Shrublands; *Acacia quadrimarginea* thicket

A flora and vegetation survey was undertaken over the application area in 2014 by Woodman Environmental Consulting (Woodman, 2014). The survey identified one vegetation community within the application area:

**10:** Tall open shrubland dominated by *Acacia* sp. Mt Jackson, *Acacia tetragonophylla* and occasionally *Santalum spicatum* over mid open shrubland dominated by *Dodonaea inaequifolia*, *Scaevola spinescens*, *Philothea brucei* subsp. *brucei* and *Eremophila clarkei* over low sparse shrubland dominated by *Ptilotus obovatus* var. *obovatus*, *Olearia pimelioides* and *Rhagodia drummondii* on red, red-brown or brown clay or clay-loam with ironstone stones, often with banded ironstone outcropping, on mid to lower slopes of ranges.

**Clearing Description** Koolyanobbing Range K Deposit. Cliffs Asia Pacific Iron Ore Pty Ltd proposes to clear up to 3 hectares of native vegetation within a total boundary of approximately 36.72 hectares, for the purpose of mineral production and associated activities. The project is located approximately one kilometre east-northeast of Koolyanobbing, in the Shire of Yilgarn.

**Vegetation Condition** Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

To:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

**Comment** Vegetation condition was derived from a flora and vegetation survey undertaken by Woodman Environmental Consulting (Woodman, 2014)

### 3. Assessment of application against clearing principles

**Comments** Cliffs Asia Pacific Iron Ore Pty Ltd has applied to clear up to three hectares of native vegetation for the purpose of extending the existing K deposit mine pit to access additional mineralisation (Cliffs, 2017).

The application area is located within the Southern Cross subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). At a broad scale, vegetation can be described as Eucalyptus woodlands rich in endemic eucalypts around chains of saline playa-lakes, *Borya constricta* with stands of *Acacia acuminata* and *Eucalyptus loxophleba* on mid-levels of granite basement outcrops with mallees and scrub heaths on the uplands (CALM, 2002).

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 Koolyanobbing Range provides critical habitat for a number of vegetation units that have extremely restricted distributions (DPaW, 2016). A flora and vegetation survey undertaken by Woodman Environmental Consulting in 2014 identified one vegetation association, unit 10, as described in the vegetation description above (Woodman, 2014). The proposed clearing (3 hectares) will impact less than 1% of unit 10 when compared against the known size of the unit within the Koolyanobbing Range (Cliffs, 2017). Given the small local impact the clearing will have on the vegetation unit, it is unlikely that the proposed clearing will have a significant impact on the biodiversity of the area or result in a significant loss of fauna habitat.

No Threatened or Priority flora was recorded within the application area during the flora survey (Woodman, 2014). No Priority or Threatened Ecological Communities are known to occur within the application area and none were recorded during the flora and vegetation survey (Woodman, 2014; GIS Database). According to available databases, the application area is not located within a conservation area or DPaW managed land (GIS Database).

Multiple fauna surveys have been undertaken over the application area (Bamford Consulting Ecologists, 2009; Biota 2012, 2014). No fauna of conservation significance or short range endemic invertebrates were recorded within the application area during these surveys. Given the size of the clearing proposed (three hectares) and its location amongst existing operations it is considered unlikely to represent significant habitat for conservation significant fauna.

According to available databases the application area is not located within a Public Drinking Water Source Area (GIS Database). There are no permanent water bodies, watercourses or drainage lines within the application area (Cliffs, 2017; GIS Database). The small scale of clearing is unlikely to have a significant impact on surface water or groundwater quality, or increase the potential of flooding at a local scale (Cliffs, 2017).

The extent of clearing proposed is limited to a small area (three hectares) therefore the likelihood of significant land degradation impacts resulting from the proposed clearing is considered low.

Weeds have the potential to occur within the application area (Cliffs, 2017). Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

**Methodology** Bamford Environmental Consulting (2009)  
Biota (2012)  
Biota (2014)  
CALM (2002)  
Cliffs (2017)  
DPaW (2016)  
Woodman (2014)

GIS Database:  
- DPaW Tenure  
- Hydrography, linear  
- Hydrographic Catchments – Catchments  
- IBRA Australia  
- Pre-European Vegetation  
- Threatened and Priority Ecological Communities Boundaries  
- Threatened and Priority Ecological Communities Buffers  
- Threatened and Priority Flora

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

**Comments:** There are no native title claims over the area under application (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 Aboriginal Sites of Significance that intersect with the application area (DAA, 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 Environment Regulation, the Department of Water, and the Department of Parks and Wildlife, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

**Methodology:** DAA (2017)

## 4. References

- Bamford Consulting Ecologists (2009) Preliminary Summary of Level 2 Fauna Survey Koolyanobbing, F Deposit. Report prepared for Cliffs Asia Pacific Iron Ore Pty Ltd, by Bamford Consulting Ecologists, March 2009.
- Biota (2012) A short Range Endemic Invertebrate Survey of the Southern Koolyanobbing Range. Report prepared for Cliffs Asia Pacific Iron Ore Pty Ltd, by Biota Environmental Sciences, March 2012.
- Biota (2014) Southern Koolyanobbing Range Vertebrate Fauna Survey. Report prepared for Cliffs Asia Pacific Iron Ore Pty Ltd, by Biota Environmental Sciences, February 2014.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia
- Cliffs (2017) Yilgarn Operations, Koolyanobbing Range K deposit. Mine Pit Extension. Cliffs Asia Pacific Iron Ore Pty Ltd, Western Australia, April 2017.
- DAA (2017) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs.< <http://maps.dia.wa.gov.au/AHIS2/>> (Accessed 20 June 2017).
- DPaW (2016) Advice received in relation to Clearing Permit CPS 7076/1. Department of Parks and Wildlife, Western Australia, 10 June 2016.
- 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 Environmental Consulting (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:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DPaW and DER)
<b>DEE</b>	Department of the Environment and Energy, Australian Government
<b>DER</b>	Department of Environment Regulation, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DoE</b>	Department of the Environment, Australian Government (now DEE)
<b>DoW</b>	Department of Water, Western Australia
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

### Definitions:

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

<b>T</b>	<b>Threatened species:</b> Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , 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).  <b>Threatened fauna</b> is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act.  <b>Threatened flora</b> 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.
<b>CR</b>	<b>Critically endangered species</b> Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
<b>EN</b>	<b>Endangered species</b> Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
<b>VU</b>	<b>Vulnerable species</b> Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
<b>EX</b>	<b>Presumed extinct species</b> 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 <i>Wildlife Conservation Act 1950</i> , 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.