



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 8936/1

Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

### 1.3. Property details

Property: Iron Ore (Mount Goldsworthy) Agreement Act 1964, Mineral Lease 281SA (AML 70/281)

Local Government Area: Shire of East Pilbara

Colloquial name: South Flank Entry Upgrade

### 1.4. Application

Clearing Area (ha)

4.9581

No. Trees

Method of Clearing

Mechanical Removal

For the purpose of:

Road widening and maintenance, and associated activities

### 1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 30 July 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*); and  
82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana* (GIS Database).  
The majority of the application area is mapped as Beard vegetation association 82 (GIS Database).

Field surveys have recorded the following two vegetation associations within the application area (BHP Billiton, 2020; Onshore Environmental, 2014):

1. Open Scrub of *Acacia tumida* var. *pilbarensis*, *Petalostylis labicheoides* and *Acacia monticola* over Open Hummock Grassland of *Triodia pungens* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* on red brown sandy loam on minor drainage lines.

2. Hummock Grassland of *Triodia pungens* and *Triodia melvillei* with Low Open Woodland of *Acacia aptaneura*, *Eucalyptus xerothermica* and *Acacia catenulata* subsp. *occidentalis* and Open Shrubland of *Acacia pachyacra*, *Eremophila forrestii* subsp. *forrestii* and *Acacia adsurgens* on red brown clay loam or silty loam on stony plains and floodplains.

#### Clearing Description

South Flank Entry Upgrade.

BHP Billiton Iron Ore Pty Ltd proposes to clear up to 4.9581 hectares of native vegetation within a boundary of approximately 4.9581 hectares, for the purpose of road widening and maintenance and associated activities. The project is located approximately 100 kilometres northwest of Newman, within the Shire of East Pilbara.

#### Vegetation Condition

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

To

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

#### Comment

The vegetation condition was classified by Onshore Environmental (2014), and derived from various previous vegetation surveys conducted over the area.

The proposed clearing is to allow the widening of the access road to the Southern Flank minesite, to enable large trucks to safely turn into the site from the Great Northern Highway (BHP Billiton, 2020).

### 3. Assessment of application against Clearing Principles

#### Comments

The application area is located within the Hamersley subregion of the Pilbara Bioregion, of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). The vegetation of the Hamersley subregion has been described as Mulga low woodlands over bunch grasses on fine textured soils in valley floors and *Eucalyptus leucophloia* over *Triodia brizoides* on skeletal soils of the ranges (CALM, 2002).

The application area is broadly mapped as Beard vegetation associations 18 and 82 (GIS Database). Approximately 99% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2019). Hence, the vegetation proposed to be cleared does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

No Threatened or Priority flora, or Threatened or Priority Ecological Communities have been recorded within the application area (GIS Database), and none were found during flora and vegetation surveys conducted over the application area (Onshore Environmental, 2014; BHP Billiton, 2020). The Coolibah-Lignum Flats Priority Ecological Community (PEC) occurs approximately 100 metres from the application area, at its nearest point (GIS Database). However, the PEC is located on the opposite side of the Great Northern Highway and is unlikely to be impacted by the proposed clearing. The application area is unlikely to represent an area of higher biodiversity than the surrounding areas.

One weed species, (*Cenchrus ciliaris*, Buffel Grass), has been recorded within the application area (BHP Billiton, 2020). Weeds have the potential to out-compete native flora species and reduce the biodiversity of an area, and care should be taken to prevent the introduction or spread of weeds in the application area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The following two fauna habitat types have been identified within the application area: Sand Plain, and Minor Drainage Line (BHP Billiton, 2020; Biologic, 2014). There are no unique or restricted fauna habitats within the application area and the area is unlikely to represent significant habitat for fauna in a regional context (BHP Billiton, 2020; Biologic, 2014). Several fauna species of conservation significance have the potential to forage within the application area, based on known distributions and available habitats (BHP Billiton, 2020), however none are likely to be specifically dependant on the habitat within the application area, and there is abundant similar habitat in surrounding areas (BHP Billiton, 2020; GIS Database).

There are no Public Drinking Water Source Areas in the vicinity of the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to clear (BHP Billiton, 2020; GIS Database). Two minor ephemeral drainage lines pass through the application area (GIS Database). Minor drainage lines are common in the region, and are dry for most of the year, only flowing briefly immediately following significant rainfall.

The application area lies within the Boolgeeda and Newman land systems (GIS Database). These land systems have been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development). The Boolgeeda land system consists of stony lower slopes and plains below hill systems supporting hard and soft spinifex grasslands and mulga shrublands, and is not susceptible to erosion (Van Vreeswyk et al., 2004). The Newman land system is described as rugged jaspilite plateaux, ridges and mountains, lower slopes and stony plains, supporting hard spinifex grasslands, and is not generally prone to erosion (Van Vreeswyk et al., 2004).

The small area of proposed clearing is unlikely to result in appreciable land degradation, or have any significant impact on watercourses, surface or groundwater quality, or on the incidence or intensity of flooding.

The application 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.

The vegetation associations, landforms, and fauna habitat types occurring within the application area are well represented in the region (BHP Billiton, 2020; GIS Database). The small area of clearing for road widening and maintenance is unlikely to result in any significant environmental impacts.

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

#### Methodology

BHP Billiton (2020)  
Biologic (2014)  
CALM (2020)  
Government of Western Australia (2019)  
Onshore Environmental (2014)  
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 is one native title claim (WC2011/006) over the area under application (DPLH, 2020). This claim has been determined by the Federal Court on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (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.

This clearing permit application is related to the Southern Flank minesite development project which was formally assessed by the Environmental Protection Authority (EPA), and approved under Ministerial Statement 1072 on 20 February 2018 (EPA, 2018). The clearing permit application area immediately adjoins the area covered by Ministerial Statement 1072. However, the clearing permit application area is located wholly within the road reserve for the Great Northern Highway, which was not included in the EPA assessment (BHP Billiton, 2020).

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The application was advertised on 22 June 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** BHP Billiton (2020)  
DPLH (2020)  
EPA (2018)

## 4. References

- BHP Billiton (2020) Application for a Native Vegetation Clearing Permit – Module Entry Mining Areas C / Southern Flank. BHP Billiton Iron Ore Pty Ltd, Western Australia, June 2020.
- Biologic (2014) Consolidation of Regional Fauna Habitat Mapping, BHP Billiton Iron Ore Pilbara Tenure. Report prepared for BHP Billiton Iron Ore Pty Ltd, by Biologic Environmental Survey Pty Ltd, May 2014.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 28 July 2020).
- EPA (2018) Statement that a Revised Proposal may be Implemented (*Environmental Protection Act 1986*). Statement No. 1072. Mining Area C. Environmental Protection Authority, Western Australia, 20 February 2018.
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Onshore (2014) Consolidation of Regional Vegetation Mapping, BHP Billiton Iron Ore Pilbara Tenure. Report prepared for BHP Billiton Iron Ore Pty Ltd, by Onshore Environmental Consultants Pty Ltd, June 2014.
- 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:

|                 |   |
|-----------------|---|
| <b>BoM</b>      | Bureau of Meteorology, Australian Government  |
| <b>DAA</b>      | Department of Aboriginal Affairs, Western Australia (now DPLH)  |
| <b>DAFWA</b>    | Department of Agriculture and Food, Western Australia (now DPIRD)   |
| <b>DBCA</b>     | Department of Biodiversity, Conservation and Attractions, Western Australia   |
| <b>DEC</b>      | Department of Environment and Conservation, Western Australia (now DBCA and DWER)   |
| <b>DoEE</b>     | Department of the Environment and Energy, Australian Government   |
| <b>DER</b>      | Department of Environment Regulation, Western Australia (now DWER)  |
| <b>DMIRS</b>    | Department of Mines, Industry Regulation and Safety, Western Australia  |
| <b>DMP</b>      | Department of Mines and Petroleum, Western Australia (now DMIRS)  |
| <b>DPIRD</b>    | Department of Primary Industries and Regional Development, Western Australia  |
| <b>DPLH</b>     | Department of Planning, Lands and Heritage, Western Australia   |
| <b>DRF</b>      | Declared Rare Flora   |
| <b>DoE</b>      | Department of the Environment, Australian Government (now DoEE)   |
| <b>DoW</b>      | Department of Water, Western Australia (now DWER)   |
| <b>DPaW</b>     | Department of Parks and Wildlife, Western Australia (now DBCA)  |
| <b>DSEWPaC</b>  | Department of Sustainability, Environment, Water, Population and Communities (now DoEE)                                   |
| <b>DWER</b>     | Department of Water and Environmental Regulation, Western Australia   |
| <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:

{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.