Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4756/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billition Iron Ore Pty Ltd

1.3. Property details

Property: *Iron Ore (Hope Downs) Agreement Act 1992*, Mining Lease 282SA (AM 70/282)
Local Government Area: Shire of East Pilbara
Colloquial name: Jinidi Iron Ore Mine Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
45		Mechanical Removal	Drilling investigations and associated works

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 18 August 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area has been mapped as the following two Beard vegetation associations:

18: Low woodland; mulga (*Acacia aneura*) and;
82: Hummock grasslands, low tree steppe: Snappy Gum over *Triodia wiseana*.

Biota Environmental Sciences (Biota) (2011) conducted a flora and vegetation survey of the application area in October 2011. This survey identified the following 23 vegetation communities within the application area (Biota, 2011):

Vegetation of Drainage Lines

1. **EvAci** - *Eucalyptus victrix* scattered trees over *Acacia citrinoviridis* tall shrubland;
2. **ExPlGOrApyTHtEUa** - *Eucalyptus xerothermica* low open woodland over *Petalostylis labicheoides, Gossypium robinsonii, Acacia pyrifolia* tall open scrub over *Themeda triandra, Eulalia aurea* tussock grassland;
3. ***ExAciTloTp -*** *Eucalyptus xerothermica* scattered low trees over *Acacia citrinoviridis* tall shrubland over *Triodia longiceps, Triodia pungens* hummock grassland;
4. ***EcEvAci*** - *Eucalyptus camaldulensis, Eucalyptus victrix* open woodland over *Acacia citrinoviridis* tall shrubland;
5. ***ExAanAcaTp*** - *Eucalyptus xerothermica* low open woodland over *Acacia "aneura", Acacia catenulata* tall open scrub over *Triodia pungens* very open hummock grassland;
6. ***EvHlTlo*** - *Eucalyptus victrix, Hakea lorea* scattered low trees over *Triodia longiceps* hummock grassland;
7. ***EgAaTp*** - *Eucalyptus gamophylla* low open mallee woodland over *Acacia ancistrocarpa* open shrubland over *Triodia pungens* open hummock grassland;
8. ***ChAmoAtuPlTp*** - *Corymbia hamersleyana* low open woodland over *Acacia monticola, Acacia tumida* var. *pilbarensis, Petalostylis labicheoides* tall open scrub over *Triodia pungens* very open hummock grassland.

Vegetation of Hills

1. ***ElAbTbrTw -*** *Eucalyptus leucophloia* scattered low trees over *Acacia bivenosa* open shrubland over *Triodia brizoides, Triodia wiseana* hummock grassland;
2. ***AciERfTw*** - *Acacia citrinoviridis* tall open shrubland over *Eremophila fraseri open* shrubland over *Triodia wiseana* very open hummock grassland;
3. ***ElTbr*** - *Eucalyptus leucophloia* scattered low trees over *Triodia brizoides* hummock grassland;
4. ***ElTwTsps*** - *Eucalyptus leucophloia* scattered low trees over *Triodia wiseana, Triodia* sp. Shovelanna Hill hummock grassland;
5. ***ElAiTsps*** *Eucalyptus leucophloia* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over *Triodia* sp. Shovelanna Hill hummock grassland.

Vegetation of Stony Plains

1. **ChAbTw** - *Corymbia hamersleyana* scattered low trees over *Acacia bivenosa* open shrubland over *Triodia wiseana* open hummock grassland;
2. **EsAbTw -** *Eucalyptus socialis* low open mallee woodland over *Acacia bivenosa* scattered shrubs over *Triodia wiseana* open hummock grassland;

3. **AanAcaTw -** *Acacia "aneura", Acacia catenulata* over *Triodia wiseana* very open hummock grassland to hummock grassland;
4. **AanAcaTp -** *Acacia "aneura", Acacia catenulata* low open forest over *Triodia pungens* very open hummock grassland;
5. **AanAcaTsps -** *Acacia "aneura", Acacia catenulata* over *Triodia* sp. Shovelanna Hill very open hummock grassland;
6. **AcaAanTbr** - *Acacia catenulata*, (*Acacia "aneura"*) tall open scrub over *Triodia brizoides* very open hummock grassland;
7. **EgAaTsps -** *Eucalyptus gamophylla* low open mallee woodland over *Acacia ancistrocarpa* open shrubland over *Triodia* sp. Shovelanna Hill open hummock grassland;
8. **EgAaTpTsps -** *Eucalyptus gamophylla* low open mallee woodland over *Acacia ancistrocarpa* open shrubland over *Triodia pungens*, *Triodia* sp. Shovelanna Hill hummock grassland;
9. **ChAiTsps** - *Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera* scattered tall shrubs over *Triodia* sp. Shovelanna Hill hummock grassland;
10. **TwTa** - *Triodia wiseana* (*Triodia angusta*) open hummock grassland.

Clearing Description Jinidi Iron Ore Mine Project

BHP Billiton Iron Ore Pty Ltd (BHP Billiton) proposes to clear up to 45 hectares of native vegetation within an application area of approximately 2,318 hectares for the purposes of drilling investigations and associated works to determine the location of a proposed mine access road, transmission line and ancillary infrastructure. The proposal is located approximately 66 kilometres north-west of Newman within the Shire of East Pilbara.

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

Comment Clearing Permit CPS 4756/1 was granted by the Department of Mines and Petroleum (DMP) on 25 February 2012 and authorised the clearing of up to 45 hectares of native vegetation within a clearing permit boundary of approximately 2,318 hectares. The clearing was authorised for the purpose of drilling investigations and associated works.

3. Assessment of application against Clearing Principles

Comments BHP Billiton has applied to remove Condition 9 of CPS 4756/1. BHP Billiton have also applied to extend the permit duration by eight years and therefore change the period in which the clearing is authorised.

Condition 9 of CPS 4756/1 relates to the management of rare flora species. The only rare flora species recorded within the permit boundary is *Lepidium catapycnon* (Biota, 2011). *Lepidium catapycnon* has been removed from the Wildlife Conservation (Rare Flora) Notice and is now considered to be Priority 4 flora (DPaW, 2015). *Lepidium catapycnon* has a range of approximately 300 kilometres within the Pilbara region and is now known to be in sufficient numbers and secure (Western Australian Herbarium, 2016). The many flora surveys over the permit area have not recorded any other species of rare flora and the permit area is not considered likely to support any rare flora species (Biota, 2011). Given the above, the proposed clearing is not likely to be at variance to Principle (c).

The amount of clearing authorised and permit boundary remain unchanged.

The proposed amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing. 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 is at variance to Principles (a) and (f), may be at variance to Principle (g), is not likely to be at variance to Principles (b), (c), (d), (h), (i), and (j) and is not at variance to Principle (e).

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments There are two native title claims (WC2005/003 and WC2013/003) over the application area (DAA, 2016). These claims have been registered with the Native Title Tribunal 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*.

According to available databases, there is one registered Aboriginal Site of Significance within the application area (DAA, 2016). 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, 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 clearing permit application was advertised on 18 July 2016 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology DAA (2016)

4. References

Biota (2011) Jinidi Mine Access Road Infrastructure Corridor – Flora and Fauna Values. Report prepared by Biota Environmental Sciences Pty Ltd for BHP Billiton Iron Ore tPty Ltd, November, 2011.

DAA (2016) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, http://maps.dia.wa.gov.au/AHIS2/ (Accessed 4 August 2016).

DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Perth, Western Australia.

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

Western Australian Herbarium (2016) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. http://florabase.dpaw.wa.gov.au/ (Accessed 28 July 2016).

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}:-

T **Threatened species:**
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.