



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6530/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

### 1.3. Property details

Property: Iron Ore (Hamersley Range) Agreement Act 1963, Mineral Lease 4SA (AML 70/4)  
Iron Ore (Hamersley Range) Agreement Act 1963, Mineral Lease 246SA (AML 70/246)  
Iron Ore (Channar Joint Venture) Agreement Act 1987, Mining Lease 265SA (AM 70/265)  
Iron Ore (Channar Joint Venture) Agreement Act 1987, Special Lease for Mining Operations  
3116/11553, Documents I 163654 L, K859553 AN, Lot 132 on Deposited Plan 243064

Local Government Area: Shire of Ashburton

Colloquial name: Paraburdoo Haul Road

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
50		Mechanical Removal	Haul Road and Associated Activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 21 May 2015

## 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 and are useful to look at vegetation in a regional context. Two vegetation associations have been mapped within the application area (GIS Database):

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*; and  
181: Shrublands; mulga & snakewood scrub.

A biological survey of the application area and surrounding area was undertaken by Astron Environmental Services (Astron) from 17 to 19 February 2015. The following eleven vegetation communities were identified within the application area (Astron, 2015):

**D1** – Scattered trees of *Eucalyptus victrix* over low open woodland of *Acacia citrinoviridis* over tall shrubland of *A. citrinoviridis* and *A. pyriformis* var. *purifolia* over scattered low shrubs of *Tephrosia rosea* and very open tussock grassland of *\*Cenchrus ciliaris*;

**D2** – Low open woodland or tall open shrubland of *Acacia ?fuscaeneura* with *A. citrinoviridis*, *A. aptaneura* and *A. pruinocarpa* over open shrubland of *A. wanyu* and *A. tetragonophylla* over open hummock grassland of *Triodia epactia*;

**D3** – Scattered low trees of *Acacia citrinoviridis* over tall shrubland of *A. citrinoviridis*, *A. wanyu*, *A. tetragonophylla* over open hummock grassland of *Triodia epactia*;

**F1** – Low woodland of *Acacia citrinoviridis* with *A. ?fuscaeneura* over tall open shrubland of *A. wanyu*, *A. citrinoviridis* and *A. tetragonophylla* over scattered low shrubs of *Ptilotus obovatus*;

**F3** – Low open woodland or tall open shrubland of *A. ?fuscaeneura* over tall open shrubland of *A. wanyu*, and *A. tetragonophylla* over open shrubland of *Eremophila phyllophoda* subsp. *obliqua*, *Senna stricta* and *E. cuneifolia* over scattered low shrubs of *Ptilotus obovatus* var. *obovatus*;

**F4** – Tall open shrubland of *Acacia xiphophylla* with *A. synchronicia*, *A. ?fuscaeneura* and *A. tetragonophylla* over open shrubland of *Senna stricta*, *Eremophila cuneifolia* and *S. artemisioides* subsp. *oligophylla*;

**H2** – Low open woodland or scattered tall shrubs of *Acacia ?fuscaeneura*, *A. rhodophloia* and *Grevillea berryana* over scattered shrubs of *A. tetragonophylla* over low open shrubland of *Eremophila phyllophoda* subsp. *obliqua*, *E. fraseri* subsp. *fraseri*, *E. jucunda* subsp. *pulcherrima* and *Senna stricta*;

**H3** – Tall open shrubland of *Acacia bivenosa*, *A. wanyu* and *A. tetragonophylla* over low open shrubland of *Eremophila cuneifolia*, *Senna stricta* and *S. artemisioides* subsp. *oligophylla* over open hummock grassland of *Triodia wiseana* and *Triodia angusta*;

**WFD-2** – *Acacia citrinoviridis* low open woodland over *A. pyrifolia* and *A. citrinoviridis* tall open shrubland, over mixed low open shrubland over *Triodia epactia* very open hummock grassland;

**WF1** – *Acacia pyrifolia* and *A. tetragonophylla* open shrubland with scattered mixed *Eremophila* and *Senna* spp. low shrubs over *Triodia epactia* hummock grassland; and

**SWV1** – *Acacia wanyu* and *A. xiphophylla* tall open shrubland over mixed *Acacia* and *Senna* spp. Open shrubland/scattered low shrubs over *Triodia epactia* scattered hummock grasses.

<b>Clearing Description</b>	Paraburdoo Haul Road Project. Hamersley Iron Pty Ltd proposes to clear up to 50 hectares of native vegetation within a total boundary of approximately 159 hectares, for the purpose of a haul road and associated activities. The project is located approximately 10 kilometres south of Paraburdoo, in the Shire of Asburton.
<b>Vegetation Condition</b>	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).
<b>Comment</b>	Hamersley Iron Pty Ltd proposes to increase the width of the existing heavy vehicle access road between Paraburdoo and Eastern Range to create a safe two way running pavement. The access road is 23 kilometres in length and the width will be increased from 40 to 60 metres.

### 3. Assessment of application against clearing principles

#### Comments

The application area occurs within the Hamersley (PIL3) subregion of the Pilbara Interim Biogeographic Regionalisation of Australia bioregion (GIS Database). The vegetation is in a 'very good' to 'completely degraded' condition due to mining activities in the area, and approximately 80 hectares of the survey area is mapped as cleared which includes areas historically cleared and tracks/laydown areas (Keighery, 1994; Astron, 2015; GIS Database). The vegetation types within the application area are common within the local and regional area (Astron, 2015).

A total of 141 flora taxa from 70 genera and 34 families were recorded within the survey area (Astron, 2015). No species of Threatened Flora have been recorded within the application area (Astron, 2015; GIS Database). Based on habitat type there were four Priority Flora species that could potentially occur within the application area, however only *Grevillea saxicola* (Priority 3) was identified (Astron, 2015). Targeted surveys by Astron (2015) in potential habitat identified 12 individuals of *Grevillea saxicola* from a drainage line towards the eastern end of the survey corridor. Of these, three individuals were found within the application area. Suitable habitat for *Hibiscus* sp. Canga (Priority 1), *Goodenia* sp. East Pilbara (Priority 3) and *Ptilotus trichocephalus* (Priority 4) was identified within the application area, however no individuals were recorded during the survey (Astron, 2015). Whilst there was only a small amount of suitable habitat for *Goodenia* sp. East Pilbara in the eastern end of the application area, the dry conditions at the time of the survey and the annual nature of this species, may have resulted in its absence (Astron, 2015). The stony plains habitat that *Ptilotus trichocephalus* favours was common throughout the survey area, yet due to the dry seasonal conditions it may not have been present (Astron, 2015). Despite unfavourable conditions, it is considered unlikely that *Hibiscus* sp. Canga occurred within the application area, as it is easily identifiable given its large in habit and quite distinct (Astron, 2015).

No Threatened or Priority Ecological Communities have been recorded within the application area or the local area (GIS Database).

Five weed species were identified within the application area; *Aerva javanica* (Kapok Bush), *Bidens bipinnata* (Bipinnate Beggartick), *Cenchrus ciliaris* (Buffel Grass) *Cenchrus setiger* (Birdwood Grass) and *Malvastrum americanum* (Spiked Malvastrum). None of these species are listed by the Western Australian Department of Agriculture and Food as Declared Plants. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

A biological survey by Astron (2015) was conducted over the application area and surrounding area from 17 to 19 February 2015. There were three broad fauna habitat types identified during the fauna survey;

- Stony plain;
- Hillslopes/Crest; and
- Minor Drainage lines.

The fauna habitats within the application area are common and widespread in the Pilbara region, and are typical of the surrounding landscape (Astron, 2015). There were no significant or core fauna habitat types identified within the application area (Astron, 2015).

There are two conservation significant species that may potentially occur within the application area (DPaW, 2015); the Western Pebble-mound Mouse (*Pseudomys chapmanii* – Priority 4) and the Rainbow Bee-eater (*Merops ornatus* – Environment Protection and Biodiversity Conservation Act 1999, Marine; Migratory). No mounds of the Western Pebble-mound Mouse were observed in the application area (Astron, 2015). The

Rainbow Bee-eater is a transient species and the habitat within the application area is not likely to represent significant habitat for this species. Given that similar habitat are common outside the application area, the proposed clearing is not likely to significantly impact these species.

There are no permanent watercourses or water bodies mapped within the area under application (GIS Database). There are two ephemeral drainage lines that intersect the application area (GIS Database). There are three vegetation types (D1, D2 and D3) mapped in association with these ephemeral drainage lines (Astron, 2015). These riparian vegetation types are widespread in the region, however due to the linear nature of the proposed clearing it may impact the flow of the drainage lines during heavy rainfall (GIS Database). Potential impacts to riparian vegetation may be minimised through the implementation of a vegetation management condition.

The application area is not susceptible to erosion and the proposed clearing is not likely to cause deterioration in the quality of surface or underground water or increase the incidence or intensity of flooding (GIS Database).

The application area is not located within any conservation areas (GIS Database). The nearest conservation area is Karijini National Park 24 kilometres north-east of the application area (GIS Database).

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

**Methodology** Astron (2015)  
DPaW (2015)  
Keighery (1994)  
GIS Database:  
- DEC Tenure  
- Evaporation Isopleths  
- Groundwater Salinity  
- Hydrography, linear  
- IBRA WA (Regions - Sub Regions)  
- Pre-European Vegetation  
- Public Drinking Water Source Areas  
- Rangeland Land System Mapping  
- Rainfall, Mean Annual  
- Threatened and Priority Flora  
- Threatened Ecological Sites Buffered

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

##### **Comments**

There are two Native Title claims over the area under application (WC10/16 and WC10/11) (GIS Database). 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 several registered Aboriginal Sites of Significance located within the clearing permit application area (GIS Database). 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 13 April 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

**Methodology** GIS Database:  
- Aboriginal Sites of Significance  
- Native Title Claims - Registered with the NNTT  
- Native Title Claims - Filed at the Federal Court  
- Native Title Claims - Determined by the Federal Court

#### **4. References**

- Astron Environmental Services (Astron) (2015) Paraburdoo Haul Road Biological Assessment. Prepared for Rio Tinto Iron Ore, March 2015.
- DPaW (2015) NatureMap Department of Parks and Wildlife, viewed 15 May 2015 <<http://naturemap.dec.wa.gov.au>>.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of

## 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>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>DotE</b>	Department of the Environment, Australian Government
<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 DotE)
<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>s.17</b>	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

### Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

<b>T</b>	<b>Threatened species:</b> Specially protected under the <i>Wildlife Conservation Act 1950</i> , listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).  Threatened Fauna and Flora are further recognised by DPaW according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo <i>Calyptorhynchus latirostris</i> is specially protected under the <i>Wildlife Conservation Act 1950</i> as a threatened species with a ranking of Endangered.  <u>Rankings:</u> CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild. EN: Endangered - considered to be facing a very high risk of extinction in the wild. VU: Vulnerable - considered to be facing a high risk of extinction in the wild.
<b>X</b>	<b>Presumed Extinct species:</b> Specially protected under the <i>Wildlife Conservation Act 1950</i> , listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
<b>IA</b>	<b>Migratory birds protected under an international agreement:</b> Specially protected under the <i>Wildlife Conservation Act 1950</i> , listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice. Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
<b>S</b>	<b>Other specially protected fauna:</b> Specially protected under the <i>Wildlife Conservation Act 1950</i> , listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
<b>P1</b>	<b>Priority One - Poorly-known species:</b> Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
<b>P2</b>	<b>Priority Two - Poorly-known species:</b> Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature

reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

**P3 Priority Three - Poorly-known species:**

Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

**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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

**P5 Priority Five - Conservation Dependent species:**

**Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.**

**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.