



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5090/4  
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 246SA (AML 70/246); Iron Ore (Hamersley Range) Agreement Act 1963, General Purpose Leases 4SA (AG70/4), 14SA (AG 70/14)  
Local Government Area: Shire of Ashburton  
Colloquial name: Paraburdoo Mine Project

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of:   |
|--------------------|-----------|--------------------|---|
| 655                |           | Mechanical Removal | Mineral Production, Mineral Exploration and Associated Infrastructure |

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 9 September 2021

## 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. Four Beard vegetation associations have been mapped within the application area:

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*;

163: Shrublands; *Eremophila* and *Cassia* dwarf scrub;

181: Shrublands; mulga and snakewood scrub; and

567: Hummock grasslands, shrub steppe; mulga and kanji over soft spinifex and *Triodia basedowii* (GIS Database).

Botanists from Ecologia conducted a flora and vegetation survey over the original permit area for clearing permit CPS 5090/1 in July and August 2011. Astron Environmental Services (Astron, 2018) conducted a Detailed Flora and Vegetation Survey in July 2017. The following sixteen vegetation types were identified within the application area:

**AanAwTe:** *Acacia aneura* sens. lat., *A. wanyu* tall shrubland over *Triodia epactia* open hummock grassland;

**AciAanAwTe:** *Acacia citrinoviridis*, *A. aneura* sens. lat., *A. wanyu* tall shrubland over *Triodia epactia* open hummock grassland;

**EcEvAamMgCYPv:** *Eucalyptus camaldulensis*, *E. victrix* open forest over *Acacia ampliceps*, *Melaleuca glomerata* tall shrubland over *Cyperus vaginatus* open sedgeland;

**EvAcMgCEspp:** *Eucalyptus victrix* woodland over *Acacia coriacea* subsp. *pendens*, *Melaleuca glomerata* tall shrubland over \**Cenchrus* spp. Open tussock grassland;

**AciAanCEspp:** *Acacia citrinoviridis*, *A. aneura* sens. lat. tall shrubland over \**Cenchrus* spp. tussock grassland;

**AanAxTe:** *Acacia aneura* sens. lat., *A. xiphophylla* tall shrubland over mixed open shrubland over *Triodia epactia* open hummock grassland;

**AciAscCEspp:** *Acacia citrinoviridis*, *A. sclerosperma* subsp. *sclerosperma* tall open shrubland over \**Cenchrus* spp. open tussock grassland;

**AanAprAteTe:** *Acacia aneura* sens. lat., *A. pruinocarpa* tall open shrubland over *A. tetragonophylla* scattered shrubs over *Triodia epactia* hummock grassland;

**AprGbERsppTe:** *Acacia pruinocarpa*, *Grevillea berryana* tall open shrubland over *Eremophila fraseri* subsp. *fraseri*, *E. canaliculata*, *E. cuneifolia* scattered low shrubs over *Triodia epactia* hummock grassland;

**AteAsyERcTe:** *Acacia tetragonophylla*, *A. synchronicia* scattered tall shrubs over *Eremophila cuneifolia* scattered shrubs over *Triodia epactia* hummock grassland;

**AanSaoERsppARc:** *Acacia aneura* sens. lat. tall open scrub over *Senna artemisioides* subsp. *oligophylla*, *Eremophila* spp. open heath over *Aristida contorta* open bunch grassland;

**ArAanERpoERIp:** *Acacia rhodophloia*, *A. aneura* sens. lat. tall open shrubland over *Eremophila phyllopoda* subsp. *obliqua* scattered shrubs over *Eriachne pulchella* open bunch grassland;

**AanAxAteERcSspp:** *Acacia aneura* sens. lat., *A. xiphophylla* tall open shrubland over *A. tetragonophylla* open shrubland over *Eremophila cuneifolia*, *Senna* spp. scattered low shrubs;

**AanAteSspp:** *Acacia aneura* sens. lat., *A. tetragonophylla* tall open shrubland over *Senna* spp. scattered low shrubs;

**AanAxAteERcTa:** *Acacia aneura* sens. lat., *A. xiphophylla* tall open shrubland over *A. tetragonophylla*, *Eremophila cuneifolia* shrubland over *Triodia angusta* hummock grassland;

**Disturbed:** Area cleared of vegetation.

\* denotes weed species

**Clearing Description**

Paraburdoo Mine Project.  
Hammersley Iron Pty Ltd proposes to clear up to 655 hectares of native vegetation, within a total boundary of approximately 5,695 hectares, for the purposes of mineral production, mineral exploration and associated infrastructure. The project is located approximately 4 kilometres south-west of Paraburdoo townsite within the Shire of Ashburton.

**Vegetation Condition**

Pristine: No obvious signs of disturbance (Keighery, 1994).  
To  
Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

**Comment**

The clearing is to enable on-going operational mining activities at the Paraburdoo mine site and the permit area represents the boundary of the Paraburdoo mine site.

The vegetation condition was assessed by botanists from Ecologia. The vegetation conditions were described using a scale based on Trudgen (1988) and have been converted to the corresponding conditions from the Keighery (1994) scale.

Vegetation will be cleared by dozers. Topsoil and vegetative material will be stockpiled for use in rehabilitation.

Clearing permit CPS 5090/1 was granted by the Department of Mines and Petroleum on 1 November 2012 and was valid from 24 November 2012 to 31 July 2027. The clearing permit authorised the clearing of up to 595 hectares of native vegetation within a boundary of approximately 5,655 hectares.

CPS 5090/1 was amended on 3 July 2014 to increase the permit boundary to approximately 5,695 hectares and amend the definition of local provenance in the clearing permit. The amount of clearing authorised remained the same.

CPS 5090/2 was amended on 17 November 2016 to change the annual reporting date and period and extend the duration of the permit to 31 December 2027.

Hammersley Iron Pty Ltd has applied to amend CPS 5090/3 for the purposes of increasing the amount of approved clearing, extending the period in which clearing is authorised and amending the purpose of clearing to include 'supporting infrastructure.'

### 3. Assessment of application against Clearing Principles

**Comments**

The permit holder has applied to increase the amount of clearing authorised by 60 hectares, extend the period in which clearing is authorised and include 'supporting infrastructure' in the purpose (Rio Tinto, 2021). The permit boundary remains unchanged.

The additional clearing is required to support existing mining operations and construction of a multi-purpose camp required to support existing operations as well as construction activities associated with the proposed Western Range development (Rio Tinto, 2021).

Astron Environmental Services (Astron, 2018) conducted a Detailed Flora and Vegetation Survey in July 2017. A total of 300 confirmed vascular flora taxa, from 50 families and 132 genera were recorded by Astron (2018). Three conservation significant flora have been recorded within the amendment area: *Hibiscus campanulatus* (Priority 1), *Goodenia* sp. East Pilbara (A.A. Mitchell PRP 727) (Priority 3) and *Ptilotus trichocephalus* (Priority 4). *Goodenia* sp. East Pilbara and *Ptilotus trichocephalus* have been identified in previous surveys of the area and their impacts addressed in previous decision reports.

*Hibiscus campanulatus* is known from 418 points representing a population size of 1,746 individuals within the application area. A further 390 individuals have also been excised from the application area (Astron, 2018). Rio Tinto have identified a further 18,052 individuals from 1,919 populations in the Rio Tinto database (Astron, 2018). Astron (2018) has identified that systematic searches were not conducted for this species and the population numbers presented are not a comprehensive assessment of the numbers occurring in the survey area, which would likely support many thousands more individuals than recorded to date. There are 22 records of *H. campanulatus* P1 listed with the WA Herbarium, with a range of approximately 180 km (Western Australian Herbarium, 1998-). A conservative estimate would double the number of individuals recorded during previous and current surveys (Astron, 2018). The maximum potential impact to the local population based on current records would be approximately 9% (Astron, 2018). As such, it is not expected that the proposed clearing would have a significant impact on the local or regional population of *Hibiscus campanulatus*. The permit holder has committed to avoiding *Hibiscus campanulatus* where possible (Astron, 2018).

Twenty-nine introduced flora have been previously recorded within the application area (Astron, 2018). This is likely due to the impacts from existing pastoralism and mining/roads/rail infrastructure within the application area (Astron, 2018). None of these have been identified as Weeds of National Significance (Astron, 2018). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by maintaining the weed management condition on the permit.

A total of 154 vertebrate fauna species were recorded by Astron (2018) over an 11,203.4 hectare area encompassing the application area. This total comprised two amphibian, 34 reptiles, 94 birds and 24 mammals (including four introduced species). The fauna species assemblage recorded during the survey are considered typical of the Hamersley Range subregion and Ashburton subregion (Astron, 2018). The broad fauna habitats identified during the survey are not restricted to the study area and are commonly found throughout both the Hamersley and Ashburton subregions (Astron, 2018).

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision reports CPS 5090/1, 5090/2, and 5090/3.

**Methodology** Astron, 2018  
Rio Tinto (2021)  
Western Australian Herbarium (1998-)

GIS Database:  
- DPaW Tenure  
- Hydrography, Lakes  
- Hydrography, Linear  
- IBRA Australia  
- Imagery  
- Landsystem Rangelands  
- Pre-European Vegetation  
- Public Drinking Water Source Areas  
- Soils, Statewide  
- 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 over the area under application (DPLH, 2021). 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 several registered Aboriginal Sites of Significance within the application area (DPLH, 2021). 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 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 amendment application was advertised on 12 July 2021 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

**Methodology** DPLH (2021)

#### 4. References

- Astron (2018) Greater Paraburdoo Detailed Flora and Vegetation Survey. Unpublished report prepared for Rio Tinto by Astron Environmental Services, April 2018.
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 16 August 2021).
- Ecologia (2012) Rio Tinto Paraburdoo Mine Area Botanical and Vertebrate Fauna Survey. Report Prepared by Ecologia Environment, May 2012.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Rio Tinto (2021) Application for Amendment to Purpose Permit CPS 5090/3. Rio Tinto, June 2021.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 16 August 2021).

#### 5. Glossary

##### Acronyms:

|                 |   |
|-----------------|---|
| <b>BC Act</b>   | <i>Biodiversity Conservation Act 2016</i> , Western Australia   |
| <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>DAWE</b>     | Department of Agriculture, Water and the Environment, Australian Government   |
| <b>DBCA</b>     | Department of Biodiversity, Conservation and Attractions, Western Australia   |
| <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>DoEE</b>     | Department of the Environment and Energy (now DAWE)   |
| <b>DoW</b>      | Department of Water, Western Australia (now DWER)   |
| <b>DPaW</b>     | Department of Parks and Wildlife, Western Australia (now DBCA)  |
| <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 (now known as Threatened Flora)   |
| <b>DWER</b>     | Department of Water and Environmental Regulation, Western Australia   |
| <b>EP Act</b>   | <i>Environmental Protection Act 1986</i> , Western Australia  |
| <b>EPA</b>      | Environmental Protection Authority, 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.
- (c)** Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened 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 the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.