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

# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

**Permit application No.:** 2525/2
**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,* Mining Lease 272SA (AM70/272)
**Local Government Area:** Shire of Ashburton
**Colloquial name:** Marandoo Dewatering Bore and Geotechnical Drilling

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|---|---|---|---|
| 12 | | Mechanical Removal | Dewatering bore drilling and geotechnical investigations |

### 1.5. Decision on application

**Decision on Permit Application:** Grant
**Decision Date:** 19 July 2012

## 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 at a 1:250,000 scale for the whole of Western Australia and are useful to look at vegetation extent in a regional context. Two Beard vegetation associations are located within the application area (GIS Database):

**18:** Low woodland; mulga (*Acacia aneura*)

**82:** Hummock Grasslands, low tree steppe; snappygum over *Triodia wiseana*

A vegetation survey over the application area and surrounding vegetation was conducted by Biota Environmental Sciences (Biota) in 2007/2008 (Biota, 2008). This survey updated vegetation mapping of the area conducted by Mattiske and Associates in 1992. As a result of this vegetation survey, six vegetation types were identified within the application area.

**AanTm -** *Acacia aneura var. pilbarana* low open woodland to low woodland over *Triodia melvillei* scattered hummocks to hummock grassland.

**ExAanpAbSAlTloTHtEUa -** *Eucalyptus xerothermica*, *Acacia aneura var. pilbarana* low open forest over *Acacia bivenosa*, *Santalum lanceolatum* open shrubland over *Triodia longiceps* hummock grassland and *Themeda triandra* , *Eulalia aurea* very open tussock grassland.

**ElAmTbrTw -** *Eucalyptus leucophloia ssp. leucophloia* scattered low trees over *Acacia maitlandii* (*A. marramamba*, *A. aneura var pilbarana*, *A. atkinsiana*, *A. bivenosa*) shrubland over *Triodia brizoides*, *T. wiseana* hummock grassland.

**ElAmAmaAaAatTsps -** *Eucalyptus leucophloia ssp. leucophloia* scattered low trees over *Acacia maitlandii*, *A. marramamba*, *A. ancistrocarpa*, *A. atkinsiana* open shrubland over *Triodia sp.* Shovellana Hill hummock grassland.

**EgAprAaTsps -** *Eucalyptus gamophylla* scattered low mallees over *Acacia pruinocarpa*, *A. ancistrocarpa* scattered tall shrubs over *Triodia sp.* Shovellana Hill (*T. wiseana*) hummock grassland.

**AatAaCapCAgTw -** *Acacia atkinsiana* scattered tall shrubs over *A. ancistrocarpa*, *Senna glutinosa ssp. pruinosa*, *Senna glutinosa ssp. glutinosa* scattered shrubs over *Triodia wiseana* hummock grassland.

**Clearing Description**

Hamersley Iron Pty Ltd (Hamersley Iron) have applied to clear up to 12 hectares within an application area of approximately 112 hectares for the purpose of drilling de-watering bores and geotechnical drilling. Dewatering pads will be approximately 60 metres x 60 metres. Drill pads will be constructed by expanding existing pads to 20 metres x 30 metres. Vegetation will be cleared using a dozer, blade down. Hamersley Iron have advised that vegetation and topsoil will be stockpiled and used in rehabilitation.

**Vegetation Condition**

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

To:

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

**Comment**

The application area occurs adjacent to an active mine site and rail infrastructure. Analysis of aerial photography reveals the vegetation to be adjacent to rail infrastructure and numerous tracks, sumps, a mine pit flood protection bund and topsoil stockpile. These raised structures appear to have had some impact on surface drainage and possibly the health of the vegetation in addition to the direct effects of clearing (Biota, 2008). Vegetation condition was derived from Biota (2008) based on vegetation condition scale described by Trudgen. Biota state that much of the vegetation is highly disturbed and/or burnt. Vegetation in the eastern half of the application area is relatively undisturbed between historic exploration gridlines.

Clearing permit CPS 2525/1 was granted on 31 July 2008, and is valid from 30 August 2008 to 31 July 2012. The clearing permit authorised the clearing of 12 hectares of native vegetation. An application for an amendment to clearing permit CPS 2525/1 was submitted by Hamersley Iron Pty Ltd on 14 June 2012. The proponent has requested extend the duration of the permit for an additional 5 years from 2012 to 2017. The duration of the permit has also been extended by 5 years to allow the rehabilitation condition to be implemented. There are no significant additional environmental impacts identified as a result of this amendment.

## 3. Assessment of application against clearing principles

**Comments**

Hamersley Iron has applied to extend the duration of the clearing permit by five years from 31 July 2012 to 31 July 2017. The permit has been extended by another 5 years to allow the implementation of a rehabilitation condition. There are no additonal environmental impacts associated with this amendment. Therefore, the assessment against the clearing principles is consistent with the assessment in Clearing Permit Decision Report CPS 2525/1.

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

**Comments**

There are no Native Title Claims over the area under application (GIS Database). However, the 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 three registered Aboriginal Sites of Significance within the application area; Site IDs: 747, 7985 and 29605 (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 and Conservation 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.

**Methodology**

GIS Database:
- Aboriginal Sites of Signficance
- Native Title Claims – Registered with the NNTT

## 4. References

Biota (2008) Marandoo Borefields and Expanded Drillpads: Native Vegetation Clearing Permit Report, May 2008). Unpublished report prepared from Pilbara Iron by Biota Environmental Sciences.

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

## 5. Glossary

### Acronyms:

| | |
|---|---|
| **BoM** | Bureau of Meteorology, Australian Government |
| **CALM** | Department of Conservation and Land Management (now DEC), Western Australia |
| **DAFWA** | Department of Agriculture and Food, Western Australia |
| **DEC** | Department of Environment and Conservation, Western Australia |
| **DEH** | Department of Environment and Heritage (federal based in Canberra) previously Environment Australia |
| **DEP** | Department of Environment Protection (now DEC), Western Australia |
| **DIA** | Department of Indigenous Affairs |
| **DLI** | Department of Land Information, Western Australia |
| **DMP** | Department of Mines and Petroleum, Western Australia |

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|---|---|
| **DoE** | Department of Environment (now DEC), Western Australia |
| **DoIR** | Department of Industry and Resources (now DMP), Western Australia |
| **DOLA** | Department of Land Administration, Western Australia |
| **DoW** | Department of Water |
| **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 |
| **RIWI Act** | Rights in Water and Irrigation Act 1914, Western Australia |
| **s.17** | Section 17 of the Environment Protection Act 1986, Western Australia |
| **TEC** | Threatened Ecological Community |

## Definitions:

**{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-**

**P1** **Priority One - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

**P2** **Priority Two - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

**P3** **Priority Three - Poorly Known taxa**: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.

**P4** **Priority Four – Rare taxa**: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.

**R** **Declared Rare Flora – Extant taxa** *(= Threatened Flora = Endangered + Vulnerable)*: taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

**X** **Declared Rare Flora - Presumed Extinct taxa**: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

**{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-**

**Schedule 1** **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.

**Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.

**Schedule 3** **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.

**Schedule 4** **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

**{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-**

**P1** **Priority One: Taxa with few, poorly known populations on threatened lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

**P2** **Priority Two: Taxa with few, poorly known populations on conservation lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

**P3** **Priority Three: Taxa with several, poorly known populations, some on conservation lands**: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under

immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

**P4** **Priority Four: Taxa in need of monitoring**: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.

**P5** **Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999)***

**EX** **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.

**EX(W)** **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

**CR** **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.

**EN** **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

**VU** **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

**CD** **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 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.