



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3550/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 47/18
Miscellaneous Licence 47/55
Iron Ore (Hamersley Range) Agreement Act 1963, Mining Lease 272SA (AM 70/272)
Local Government Area: Shire of Ashburton
Colloquial name: Minthdi Spring Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.075		Mechanical Removal	Hydrogeological investigations

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 31 July 2018

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:

Beard Vegetation Association 18: Low woodland; mulga (*Acacia aneura*);
Beard Vegetation Association 567: Hummock grasslands, shrub steppe; mulga and kanji over soft spinifex and *Triodia basedowii*.

Numerous flora and vegetation studies have occurred within the vicinity of the Marandoo Project Area and two of these surveys have been included in support of the clearing permit application. The first survey was conducted by Mattiske and Associates (Mattiske) in 1990/91 and summarised findings of field programmes undertaken in the period from 1974 to 1991 (Mattiske, 1992). The second survey was conducted by Biota Environmental Sciences (Biota) in Autumn 2008 and included a desktop review, in addition to a field survey. This survey was conducted over a distance of approximately 120 kilometres. These surveys identified the following eight vegetation units as potentially occurring within the application areas (Mattiske, 1992; Biota, 2008):

Broad Drainage Areas and Basins

1: Hummock Grassland of *Triodia melvillei*

This plant community is relatively restricted. Thus, although it is quite extensive locally, it is restricted on a regional level. A range of emergent species of *Acacia* and *Eucalyptus* also occur in this community.

Minor Creeks

2: Low Shrubland of mixed *Acacia* species

This community is associated with the small flow-lines through the ranges and erosional spurs. This plant community is very widespread in the Pilbara region. Local variations are a reflection of underlying soil conditions and adjacent plant communities.

Low Foothills and Escarpments

3: Low woodlands of mixed mallee species *Eucalyptus trivalvis*, *Eucalyptus socialis* and *Eucalyptus socialis*, with pockets of *Triodia angusta* and *Triodia wiseana* on shallow calcrete soils.

Although generally restricted within the Marandoo project area, this community is relatively widespread in the Pilbara region.

4: Low woodlands of mixed mallee species *Eucalyptus trivalvis*, *Eucalyptus socialis* and *Eucalyptus socialis*, with pockets of *Triodia angusta* and *Triodia longiceps* on the small moister eroded darker soils near vegetation unit 3.

This vegetation unit occurs downslope from vegetation unit 3, in the moister and more alluvial areas which lie on the calcrete soils. This community, although generally restricted in the Marandoo Project Area, is relatively widespread in the Pilbara region.

5: Low woodlands of mixed mallee species *Eucalyptus trivalvis*, *Eucalyptus socialis* and *Eucalyptus socialis*, with pockets of *Triodia angusta* and *Triodia wiseana* on shallow calcrete soils.

This plant community has a strong development of understorey species, including *Melaleuca eleuterostachya*, and as such is a variant of vegetation unit 3. This community, although generally restricted in the Marandoo Project Area, is relatively widespread in the Pilbara region.

Vegetation of Stony Plains

6: *Eucalyptus socialis* low open mallee woodland over *Triodia wiseana* hummock grassland

The vegetation type was recorded from calcrete footslopes of the Boolgeeda and Table land systems. Other associated species included *Acacia bivenosa* (wispy/weeping form), *Anthobolus leptomerioides*, *Capparis umbonata*, *Eucalyptus gamophylla*, *Heliotropium chrysocarpum*, *Melaleuca eleuterostachya*, *Ptilotus clementii*, *P. exaltus* var. *exaltus* and *Triodia angusta*.

Vegetation of Clayey Plains

7: *Acacia aneura*, *A. pruinocarpa* low open woodland over *A. pachyacra* scattered shrubs over *Aristida ingrata* tussock grassland and *Triodia melvillei* hummock grassland

This vegetation type was recorded from broad clay-loam plains, and was most strongly associated with the Boolgeeda and Wannamunna land systems. Many of the mature trees of *Acacia* were re-generating following a large fire. Other associated species included *Acacia pruinocarpa*, *Alternanthera nana*, *Aristida holathera*, *Cucumis maderaspatanus*, *Cymbopogon obtectus*, *Digitaria brownii*, *Eragrostis eriopoda*, *Goodenia microptera*, *Ptilotus obovatus* and *Solanum feracissimum*.

8: *Eucalyptus xerothermica* low open woodland over *Themeda triandra* closed tussock grassland

This vegetation type was recorded from a calcrete-based flowline crossing the Boolgeeda and Table land systems. Other associated species included *Acacia dictyophleba*, *A. inaequilatera*, *Cucumis maderaspatanus*, *Eulalia aurea*, *Goodenia stellata*, *Phyllanthus maderaspatensis*, *Rhynchosia minima*, *Scaevola amblyanthera* and *Stemodia grossa*.

Clearing Description	Minthdi Spring Project. Hamersley Iron Pty Ltd proposes to clear up to 1.075 hectares of native vegetation within a boundary of approximately 1.24 hectares, for the purpose of hydrogeological investigations. The project is located approximately 40 kilometres east of Tom Price, within the Shire of Ashburton.
Vegetation Condition	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
Comment	<p>The flora and vegetation surveys conducted by Biota (2008a) and Mattiske (1992) class the vegetation condition as varying from 'Very Good' to 'Excellent'. These surveys were not specific to the application areas and were conducted over large areas of land. Aerial photographs of the application areas provided with the clearing permit application indicate that the application areas have suffered from prior disturbance due to their location adjacent to existing roads and tracks. The result of this is that the application areas appear to have quite sparse vegetation within them and the vegetation remaining would be expected to be in a quite degraded condition.</p> <p>Clearing permit CPS 3550/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 18 February 2010 and was valid from 20 March 2010 to 31 July 2015. The permit authorised the clearing of up to 1.075 hectares of native vegetation within a boundary of approximately 1.24 hectares, for the purpose of hydrogeological investigations.</p> <p>CPS 3550/2 was granted on 13 May 2010, amending the permit to redescribe the permit boundary to avoid a heritage area, and extend the duration of the permit by 2 years.</p> <p>On 20 June 2018, the Department of Mines, Industry Regulation and Safety initiated an amendment to CPS 3550/2 to extend the duration of the permit by 5 years.</p>

3. Assessment of application against Clearing Principles

Comments	<p>The permit has been amended to extend the duration of the permit from 31 July 2018 to 31 July 2023 to allow the proponent to rehabilitate the area and fulfil Condition 4 of the Permit.</p> <p>The assessment against the Clearing Principles remains the same as in decision report CPS 3550/1.</p>
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Planning Instrument, Native Title, previous EPA decision or other matter.

Comments	<p>There is one Native Title claim over the area under application (DPLH, 2018). This claim has been registered with the National 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 <i>Native Title Act 1993</i> 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 <i>Native Title Act 1993</i>.</p>
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There are numerous registered Aboriginal Sites of Significance within the application area (DPLH, 2018). 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.

Methodology DPLH (2018)

4. References

- Biota (2008) A Vegetation and Flora Survey of the Rio Tinto Rail Duplication - Bellbird Siding to Juna Downs. Report prepared for Rio Tinto Iron Ore by Biota Environmental Sciences, Western Australia.
- DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 20 June 2018).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske (1992) Flora and Vegetation: Marandoo Project Area. Report prepared for Rio Tinto Iron Ore by Mattiske and Associates, Western Australia.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DBCA	Department of Biodiversity Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DSEWPac	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
DWER	Department of Water and Environmental Regulation, Western Australia
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

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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 1950*.

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 1950*.

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.