Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5090/3
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:
595		Mechanical Removal	Mineral Production and Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 17 November 2016

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. Previous vegetation mapping by Biota over parts of the application area were incorporated into the results (Ecologia, 2012). Twenty-two vegetation communities were described for the permit area (Ecologia, 2012).

Vegetation of Hills and Ridges

AanAprAteTe: *Acacia aptaneura*, *A. pruinocarpa* tall open shrubland to low woodland 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.

DpERcrTe: *Dodonaea pachyneura*, *Eremophila cryptothrix* tall shrubland over *Triodia epactia* hummock grassland.

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

AteERfTw: *Acacia tetragonophylla* scattered tall shrubs over *Eremophila fraseri* subsp. *fraseri* scattered shrubs over *Triodia wiseana* hummock grassland.

AteTw: *Acacia tetragonophylla* tall open shrubland over *Triodia wiseana* hummock grassland.

AanSoERsppARc: *Acacia aneura* tall open scrub over *Senna oligophylla*, *Eremophila* spp. open heath over *Aristida contorta* open bunch grassland.

AtEttSglSsTe: *Acacia tetragonophylla* open shrubland over *Enchylaena tomentosa* var. *tomentosa*, *Senna glutinosa* subsp. *luerssenii*, *Senna stricta* over *Triodia epactia* hummock grassland.

Vegetation of Stony Plains

AxAteERcSspp: *Acacia xiphophylla* tall open shrubland over *A. tetragonophylla* open shrubland over *Eremophila cuneifolia*, *Senna* spp. scattered low shrubs.

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

AanAteTe: *Acacia aneura*, *A. tetragonophylla* tall shrubland over *Triodia epactia* open hummock grassland.

AcAjSsppCc: *Acacia citrinoviridis* tall open scrub over *Aerva javanica* and mixed *Senna* spp. open shrubland over *Cenchrus ciliaris* open tussock grassland.

AaAsAtEsppPoSa: *Acacia aptaneura*, *A. synchronicia*, *A. tetragonophylla* tall open shrubland over mixed *Eremophila* spp. and *Ptilotus obovatus* over *Sporobolus australasicus*.

ApAtAxEcSsTe: *Acacia aptaneura*, *A. tetragonophylla*, *A. xiphophylla* tall open shrubland over *Eremophila cuneifolia* and *Senna stricta* over *Triodia epactia* hummock grasslands.

AtSaoTsTp: *Acacia tetragonophylla* low open shrubland over *Senna artemisioides* subsp. *oligophylla* over *Triodia schinzii* and *Trachymene pilbarensis*.

Vegetation of Drainage Lines

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

EvAcMgCE: *Eucalyptus victrix* woodland to scattered trees over *Acacia coriacea* subsp. *pendens*, *Melaleuca glomerata* tall shrubland over *Cenchrus* spp. open tussock grassland.

EvTEr: *Eucalyptus victrix* scattered trees over *Tephrosia rosea* var. *glabrior* scattered low shrubs.

AciAanCE: *Acacia citrinoviridis*, *A. aneura* tall shrubland to low open forest over *Cenchrus* species open tussock grassland to tussock grassland.

AanTxTe: *Acacia aneura*, *A. xiphophylla* tall open scrub over mixed open shrubland over *Triodia epactia* open hummock grassland.

CfAciDpERcrTe: *Corymbia ferriticola* low open woodland over *Acacia citrinoviridis*, *Dodonaea pachyneura*, *Eremophila cryptothrix* tall shrubland over *Triodia epactia* open hummock grassland.

AxAsAtSaCc: *Acacia xiphophylla*, *Acacia synchronicia*, *A. tetragonophylla* tall open shrubland over *Sporobolus australasicus* and *Cenchrus ciliaris* tussock grasslands.

An additional area was applied for in amendment CPS 5090/2 and this area was surveyed by botanists from Biota in September 2011 as part of a larger survey for the Western Range project. The following vegetation types were mapped within the additional area (Biota, 2012):

Vegetation of Stony Plains

AanAxAteERcCAspp: *Acacia aneura, A. xiphophylla* tall open shrubland over *A. tetragonophylla* open shrubland over *Eremophila cuneifolia, Cassia* spp. scattered low shrubs.

Vegetation of Drainage Lines and Floodplains

AciAanCEspp: *Acacia citrinoviridis, A. aneura* tall shrubland over *Cenchrus* spp. open tussock grassland to tussock grassland.

AanAxTa: *Acacia aneura, A. xiphophylla* tall open scrub over *Triodia angusta* open hummock grassland.

AciAanAwTe: *Acacia citrinoviridis, A. aneura* low open woodland to low woodland over *A. wanyu* tall open shrubland over *Triodia epactia* very open hummock grassland.

Disturbed

Disturbed: Area cleared of vegetation.

Clearing Description

Paraburdoo Mine Project.
Hamersley Iron Pty Ltd proposes to clear up to 595 hectares of native vegetation, within a total boundary of approximately 5,695 hectares, for the purposes of mineral production and mineral exploration. 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.

Hamersley Iron Pty Ltd has applied to amend CPS 5090/2 to change the annual reporting date and period and extend the duration of the permit to 31 December 2027.

3. Assessment of application against clearing principles

Comments

Hamersley Iron Pty Ltd has applied to amend the annual reporting date to 30 June, change the reporting period to calendar year and extend the duration of the permit by an additional five months to 31 December 2027. The amount of clearing authorised and the permit boundary remain unchanged.

The proposed amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing. The assessment against the clearing principles remains consistent with the assessment contained in decision reports CPS 5090/1 and CPS 5090/2.

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

Comments

There is one Native Title Claim (WC2010/011) over the permit area (Department of Aboriginal Affairs, 2016). 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 multiple registered Aboriginal Sites of Significance in the vicinity of the application area (Department of Aboriginal Affairs, 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.

Methodology Department of Aboriginal Affairs (2016)

4. References

Biota (2012) Western Range Additional Area: Vegetation and Flora Report. Draft Report Prepared by Biota Environmental Sciences for Rio Tinto, March 2012.

Department of Aboriginal Affairs (2016) Aboriginal Heritage Inquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2/ (Accessed on 7 November 2016).

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.

Trudgen, M.E. (1988) A Report on the Flora and Vegetation of the Port Kennedy Area. Report Prepared for Bowman Bishaw and Associates, West Perth.

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)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia

DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
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.