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

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4391/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Hamersley Exploration Pty Ltd**

1.3. Property details

Property: Exploration Licence 47/584
Exploration Licence 47/1943
Local Government Area: Shire of Ashburton
Colloquial name: Juna Downs Exploration Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
11.5		Mechanical Removal	Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 5 May 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. Two Beard vegetation associations have been mapped within the application area:

18: Low woodland; mulga (*Acacia aneura*); and
82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana* (GIS Database).

A Rio Tinto botanist conducted a flora and vegetation survey over the application area and its surrounds in May 2009, July 2009 and October 2010 (Rio Tinto, 2011). Eleven vegetation types were recorded within the application area (Rio Tinto, 2011).

Vegetation from Stony Hill Slopes

Vegetation Type 1 EgAsElCHTbPmTtCd
Eucalyptus gamophylla low open forest over *Acacia steedmanii* open scrub over *Eremophila longifolia* open shrubland over *Corchorus* sp. Hamersley Range low open shrubland over *Triodia basedowii* open hummock grassland over *Paraneurachne muelleri*, *Themeda triandra* open tussock grassland over *Cyperus dichotoma* very open sedges.

Vegetation Type 2 ElScSeSsPrTpTbAcAl
Eucalyptus leucophloia low open forest over *Sida cardiophylla*, *S. echinocarpa*, *Solanum sturtianum*, *Ptilotus rotundifolius* low open heath over *Triodia pungens*, *T. basedowii* hummock grassland over *Amphipogon caricinus*, *Aristida latifolia* very open tussock grassland over various *Ptilotus* very open herbs.

Vegetation Type 3 ElSpSfScTpTbPmTtEm
Eucalyptus leucophloia low open forest over *Senna pruinosa*, *S. ferraria* open shrubland over *Sida cardiophylla* low shrubland over *Triodia pungens*, *T. basedowii* hummock grassland over *Paraneurachne muelleri*, *Themeda triandra*, *Eriachne mucronata* tussock grassland.

Vegetation from Slight Slopes

Vegetation Type 4 ElEgAiAsApAbPrSoTwTp
Eucalyptus leucophloia, *E. gamophylla* low woodland over *Acacia inaequilatera*, *A. steedmanii* high open shrubland over *Acacia pachyacra*, *A. bivenosa* open shrubland over *Ptilotus rotundifolius*, *Senna oligophylla* low open shrubland over *Triodia wiseana*, *T. pungens* hummock grassland.

Vegetation Type 5 CdEgPrTwTpAc
Corymbia deserticola, *Eucalyptus gamophylla* low open forest over *Ptilotus rotundifolius* low open shrubland over *Triodia wiseana*, *T. pungens* hummock grassland over *Amphipogon caricinus* very open tussock grassland.

Vegetation from Rocky Outcrops
Vegetation Type 6 ElSgPrTpTMeTt
Eucalyptus leucophloia low open woodland over *Senna glutinosa* open shrubland over *Ptilotus rotundifolius* low

open shrubland over *Triodia pungens*, *Triodia* sp. Mt Ella hummock grassland over *Themeda triandra* open tussock grassland.

Vegetation from Flats and Plains

Vegetation Type 7 ChCdEgAtPrSsTbAcAlAhPm
Corymbia hamersleyana, *C. deserticola*, *Eucalyptus gamophylla* low open forest over *Acacia trudgeniana* open shrubland over *Ptilotus rotundifolius*, *Solanum sturtianum* low open shrubland over *Triodia basedowii* open hummock grassland over *Amphipogon caricinus*, *Aristida latifolia*, *A. holathera*, *Paraneurachne muelleri* tussock grassland.

Vegetation Type 8 ChGrSsPrPmTtSf
Corymbia hamersleyana low open woodland over *Gossypium robinsonii*, *Stylobasium spathulatum* shrubland over *Ptilotus rotundifolius* low shrubland over *Paraneurachne muelleri*, *Themeda triandra* tussock grassland over *Schizachyrium* fragile open bunch grassland.

Vegetation Type 9 CdEgAsScTpPm
Corymbia deserticola, *Eucalyptus gamophylla* low woodland over *Acacia steedmanii* shrubland over *Sida cardiophylla* low open heath over *Triodia pungens* very open hummock grassland over *Paraneurachne muelleri* tussock grassland.

Vegetation from Minor Drainage Lines

Vegetation Type 10 ElAsSpSgCHRHsTpTMETt
Eucalyptus leucophloia low woodland over *Acacia steedmanii* high open shrubland over *Senna pruinosa*, *S. glutinosa* shrubland over *Corchorus* sp. Hamersley Range, *Hibiscus sturtii* low open heath over *Triodia pungens*, *T.* sp. Mt Ella hummock grassland over *Themeda triandra* tussock grassland.

Vegetation Type 11 ElGrAcTwTpTt
Eucalyptus leucophloia low open woodland over *Gossypium robinsonii*, *Acacia cowleana* shrubland over *Triodia wiseana*, *T. pungens* open hummock grassland over *Themeda triandra* open tussock grassland.

Clearing Description

Juna Downs Exploration Project
Hamersley Exploration Pty Ltd proposes to clear up to 11.5 hectares within a total boundary of approximately 168 hectares for the purpose of mineral exploration (GIS Database).

The project is located approximately 80 kilometres south-east of Tom Price, in the Shire of Ashburton (GIS Database).

Vegetation Condition

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994);

To

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment

The vegetation condition was assessed by a botanist from Rio Tinto (2011). 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. The proposed clearing is for the purpose of mineral exploration. This includes the creation of 77 drill pads and sumps, and the establishment of access tracks (Rio Tinto, 2010). Clearing will be by mechanical means.

Clearing permit CPS 4391/1 was granted by the Department of Mines and Petroleum on 18 August 2011 and was valid from 10 September 2011 to 31 July 2016. The clearing permit authorised the clearing of 11.5 hectares of native vegetation within a permit boundary of 168 hectares.

Hamersley Exploration Pty Ltd has applied to extend the duration of the permit to 31 December 2026, with no clearing to be undertaken after 31 December 2021. The proposed clearing area will remain unchanged at 11.5 hectares.

3. Assessment of application against clearing principles

Comments

Proposal is not likely to be at variance to this Principle

The amendment to change the permit expiry date and final date clearing is permitted is unlikely to result in any significant change to the environmental impacts of the proposed clearing. The size of the area approved to clear (11.5 hectares) and the permit boundary remain unchanged.

The assessment against the clearing Principles remains consistent with the assessment contained in decision report CPS 4391/1.

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

Comments

There is one native title claim over the area under application (DAA, 2016). This claim (WC2011/006) has been registered with the National Native Title Tribunal on behalf of the claimant group (GIS Database). However, the mining tenements have 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*.

According to available GIS databases, there are no registered Aboriginal Sites of Significance within the proposed clearing area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Water, and the Department of Parks and Wildlife, 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

DAA (2016)

GIS Database:
- Aboriginal Sites of Significance

4. References

DAA (2016) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, <http://maps.dia.wa.gov.au/AHIS2/> (accessed 18 April 2016).

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 (2011) Botanical Survey for an Exploration Drilling Program at Juna Downs South E47/1943 and Supporting Document to a Native Vegetation Clearing Permit Application. Report Prepared by Rio Tinto Iron Ore, January 2011.

Trudgen, M.E. (1988) A Report on the Flora and Vegetation of the Port Kennedy Area. Unpublished 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)
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
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.