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

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5764/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Jupiter Mines Limited**

1.3. Property details

Property: General Purpose Leases 29/22, 29/23
Miscellaneous Licences 29/79, 29/100, 29/121
Mining Leases 29/408, 29/414
Local Government Area: Shire of Menzies
Colloquial name: Mt Mason DSO Hematite project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
115		Mechanical Removal	Mineral Production and associated activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 24 September 2015

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

The clearing permit application area has been broadly mapped as the following Beard vegetation associations:

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

202: Shrublands; mulga & *Acacia quadrimarginea* scrub;

483: Hummock grasslands, mixed sandplain - open mallee over sparse dwarf shrubs with spinifex; red mallee, mallee & mixed sparse dwarf shrubs over *Triodia basedowii*; and

484: Shrublands; jam thicket.

Vegetation association 18 is the dominant vegetation type within the application area (GIS Database). The northern end of the application area is mapped predominantly as vegetation association 202. Vegetation associations 483 and 484 represent only a very small part of the application area, occurring mainly at the southern end (GIS Database).

Flora and vegetation surveys conducted over the application area by Native Vegetation Solutions (NVS, 2012; 2013) identified the following ten main vegetation communities at the proposed minesite:

- *Thryptomene* Shrubland;
- Open Mulga woodland over laterite;
- Acacia shrubland;
- *Allocasuarina* over *Calytrix* shrubland;
- Mulga over *Eremophila forrestii* subsp. *forrestii* on hills and ridges;
- Mulga over *Prostanthera althoferi* subsp. *althoferi* on hills and ridges;
- Mulga over *Philotheca brucei* subsp. *brucei* on hills and ridges;
- Mulga over *Eremophila forrestii* subsp. *forrestii* on flats;
- *Acacia burkittii* shrubland within drainage lines; and
- *Acacia cockertoniana* over *Eremophila oldfieldii* and *Eremophila pantonii* on flats.
  (Jupiter Mines, 2013).

A further twelve main vegetation communities were identified along the proposed haul road route:

- Mulga Shrubland with occasional Eucalypts (1a);
- Mulga woodland-floodplain (1b);
- Mulga shrubland with *Philotheca brucei* subsp *brucei* (1g);
- Mulga open shrubland-drainage (1k);
- Mulga with *Acacia cockertoniana* and *Acacia ramulosa var. ramulosa* tall shrubland over *Olearia humilis* and/or *Hibbertia arcuata* and/or *Prostanthera althoferi* subsp. *althoferi* and/or *Eremophila forrestii* subsp. *forrestii* low shrubland (1n);
- Mulga over mixed shrubland (1o);

- *Acacia quadrimarginea*/*A. cockertoniana* open shrubland (2g);
- *Acacia effusifolia*/*Eucalyptus* mallee and other mixed shrublands burnt sandplain (3b);
- *Acacia effusifolia* Shrubland - transitional (3c);
- *Callitris* with scattered Eucalypt woodland-sandplain (4);
- *Eucalyptus lesouefii* open woodland (9a); and
- *Eucalyptus salubris* woodland (9b).
(Jupiter Mines, 2013).

Clearing Description

Mt Mason Direct Shipping Ore (DSO) Hematite Project.
Jupiter Mines Limited (Jupiter Mines) proposes to clear up to 115 hectares of native vegetation within a total boundary of approximately 115 hectares, for the purpose of a mine pit, mining related infrastructure and a haul road. The project is located approximately 70 kilometres north-west of Menzies, at its nearest point, in the Shire of Menzies.

Vegetation Condition

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

To

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

Comment

The vegetation condition was derived from vegetation surveys conducted by NVS (2012; 2013).

The proposed mining related infrastructure will include a run of mine (ROM) pad, workshop and hardstand areas, roads, fuel storage, explosives magazine, administrative building, laboratory, wastewater treatment facility, reverse osmosis plant, landfill facility, bioremediation facility, and camp expansion (Jupiter Mines, 2013).

Clearing permit CPS 5764/1 was granted by the Department of Mines and Petroleum on 17 October 2013, authorising the clearing of up to 115 hectares of native vegetation within a boundary of approximately 115 hectares.

On 3 July 2015, the permit holder applied to amend CPS 5764/1 to extend the permit expiry date from 30 November 2015 to 30 November 2018, as the project had not yet commenced and no clearing had been undertaken.

3. Assessment of application against clearing principles

Comments

The amendment to extend the permit duration by three years is unlikely to result in any significant change to the environmental impacts of the proposed clearing. The size of the area approved to clear (115 hectares) and the permit boundaries remain unchanged.

The assessment against the clearing principles remains consistent with the assessment contained in decision report CPS 5764/1.

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

Comments

There are no native title claims over the area under application (DAA, 2015).

There are no registered Aboriginal Sites of Significance overlapping the application area (DAA, 2015). 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, 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 (2015)

4. References

DAA (2015) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2/

Jupiter Mines (2013) Native Vegetation Clearing Permit Application - Mt Mason DSO Hematite Project. Prepared by KASA Consulting for Jupiter Mines Pty Ltd, July 2013.

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

NVS (2012) Mt Mason Project. Level 2 Flora and Vegetation Survey. Prepared for Jupiter Mines Limited, by Native Vegetation Solutions, May 2012.

NVS (2013) Level 1 Flora and Vegetation Survey of the Proposed Mount Mason Haul Road. Prepared for Jupiter Mines Limited, by Native Vegetation Solutions, January 2013.

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
s.17	Section 17 of *the Environment Protection Act 1986*, Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T **Threatened species:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

Rankings:
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.
EN: Endangered - considered to be facing a very high risk of extinction in the wild.
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.

X **Presumed Extinct species:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).

IA **Migratory birds protected under an international agreement:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.

S **Other specially protected fauna:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P1 **Priority One - Poorly-known species:**
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

P2 **Priority Two - Poorly-known species:**
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and

appear to be under threat from known threatening processes.

P3 **Priority Three - Poorly-known species:**
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

P5 **Priority Five - Conservation Dependent species:**
Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five 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.