



1. Application details

1.1. Permit application details

Permit application No.: 620/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: AM70/274
Local Government Area: Shire Of East Pilbara
Colloquial name: Yandicoogina Iron Ore Mine - AM70/274

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
32.1		Mechanical Removal	Mining

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beards Vegetation Association # 82 - hummock grasslands, low tree steppe; snappy gum over <i>Triodia wiseana</i> (Hopkins et al, 2001). There is ~100% of the pre-European extent remaining (Shepherd et al, 2001).	The vegetation of the site comprises grasses and lower storey native species. No Declared Rare Flora and Fauna were located within the area proposed for clearing.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The area proposed for clearing is within a mining lease area, so is either currently subject to or surrounded by significant disturbance. The project areas consist of a long, narrow section adjacent to a haul road, and a widened area at the southern end that is 350m at its widest point. The flora found within the area are generally widespread within the surrounding area (Hopkins et al, 2001).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments **Proposal is not likely to be at variance to this Principle**
The vegetation of the site retains mixed hummock grasslands, which are well represented in the area surrounding the project area (Hopkins et al, 2001). The area is unlikely to represent an area of outstanding biological diversity.

Methodology Hopkins et al, 2001
GIS Database: Pre-European Vegetation - DA 01/01

(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.

Comments **Proposal is not likely to be at variance to this Principle**
Hummock grasslands may provide some habitat for fauna species, however the application area is mainly a long, narrow strip which has experienced some level of disturbance from mining activities so the vegetation is unlikely to represent an area of significant habitat for fauna.

Methodology GIS Database: Pre-European Vegetation - DA 01/01

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, significant flora.

Comments **Proposal is not likely to be at variance to this Principle**
There are no known Declared Rare and Priority Species within the area proposed for clearing.

Methodology GIS Database: Declared Rare and Priority Flora List - CALM 13/08/04

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significant ecological community.

Comments **Proposal is not likely to be at variance to this Principle**
There are no known Threatened Ecological Communities within the area proposed for clearing.

Methodology GIS Database: Threatened Ecological Communities - CALM 15/07/03

(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.

Comments **Proposal is not likely to be at variance to this Principle**
The vegetation under application is Beard Vegetation Association #82 (Hopkins et al, 2001) of which there is ~100% of the pre-European extent remaining (Shepherd et al, 2001).

Methodology Hopkins et al, 2001;
Shepherd et al, 2001;
GIS Database: Pre-European Vegetation - DA 01/01

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposal is not likely to be at variance to this Principle**
The vegetation to be cleared is not associated with a wetland or watercourse.

Methodology GIS Database:
- Hydrology, linear - DOE 1/2/04;
- RAMSAR, Wetlands - CALM 21/10/02

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal is not likely to be at variance to this Principle**
The application area has a gradual slope of 6m over ~700m at the widest point. Erosion from rainfall runoff is unlikely to be severe due to the flatness of the area. Therefore land degradation is unlikely to result from vegetation removal if the area is appropriately managed as part of mining activities.

Methodology GIS Database: Topographic Contours, Statewide - DOLA 12/09/02

(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.

Comments **Proposal is not likely to be at variance to this Principle**
There are no conservation areas adjacent to the areas proposed for clearing. The clearing is within an operational mine site.

Methodology GIS Database: CALM Managed Lands and Waters - 1/06/04

(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.

Comments **Proposal is not likely to be at variance to this Principle**
The area under application is not in a designated water catchment area and is not in close proximity to any water bodies, therefore the clearing of vegetation within the operational mine area is unlikely to be at variance to this principle.

Methodology GIS Database: Hydrology, linear - DOE 1/2/04

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Comments **Proposal is not likely to be at variance to this Principle**
Flooding occurs seasonally over the December to March period, where flood height and duration are lengthy and extreme. The clearing of 32.1 hectares of vegetation is unlikely to increase these flood factors.

Methodology GIS Database: Rainfall, Mean Annual - BOM 30/09/01

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

Comments

There are two Native Title Claims over the area under application by the Innawonga Bunjima and Niapaili peoples and the Martu Idja Banyjima peoples. However, the Mineral Lease has been granted so therefore the granting of a clearing permit does not constitute a future act under the Native Title Act 1993.

Methodology GIS Database: Native Title Claims - DLI 19/12/04

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	32.1	Grant	Assessable criteria have been addressed and no objections were raised. The Assessing Officer therefore recommends that the permit should be granted.

5. References

- Hamersley Iron (2002) Ground Disturbance Authorisation: Environment. Permit Number E02-002. Unpublished Document. Department of Environment Reference: TRIM KNI780
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DoE)