Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 545/1
Permit type: Area Permit

1.2. Proponent details

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

1.3. Property details

Property: AML70/4
Local Government Area: Shire Of Ashburton
Colloquial name: Tom Price Iron Ore Mine - West Pit extension

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
11.3		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
Beard Vegetation Association 82: Hummock grasslands, low tree steppe; snappy gum over Triodia wiseana (Hopkins et al., 2001)	The area under application comprises of 11.3 Ha of remnant vegetation that is surrounded by existing mine operations. The vegetation has been impacted upon by exploration tracks and adjacent mining activities. No declared rare flora were located within the surveyed area, however one Priority 2 species, Indigofera ixocarpa, and one Priority 4 species, Eremophila magnifica subsp. magnifica were recorded. Only one weed species, Acetosa vesicaria, was identified on the site (Hamersley Iron Pty Ltd, 2004).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Desktop assessment of vegetation association based on Pilbara Iron's Botanical Survey Advice (Hamersley Iron Pty Ltd, 2004).

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 area under application is a small area (11.3 Ha) of remnant vegetation in a mostly cleared landscape. While the vegetation is quite diverse with a total of 33 families, 57 genera and 91 species were identified within the survey area, the vegetation to be cleared borders an active mine pit and the site area has also been previously disturbed by exploration tracks (Hamersley Iron Pty Ltd, 2004). Therefore, the site to be cleared is unlikely to be of higher biodiversity significance than the vegetation in the local region.

Methodology Permit Application;
Hamersley Iron Pty Ltd (2005)

(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

While there is limited CALM fauna records that relate to the area under application (CALM, 2005), it has been disturbed by previous mining activity and is surrounded by existing mining infrastructure. Therefore links, such

as wildlife corridors, between the proposed area to be cleared and other native vegetation do not exist. Thus, the vegetation is unlikely to support significant habitat for fauna populations (CALM, 2005).

Methodology Aerial Photograph;
Permit application;
CALM (2005).

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

Comments

Proposal may be at variance to this Principle

The vegetation to be cleared borders an active mine pit. Whilst no Declared Rare Flora was located within the proposed area to be cleared, a number of occurrences of Priority Species Indigofera ixocarpa (priority 2) and Eremophila magnifica subsp. magnifica (priority 4) were recorded in the survey area (Hamersley Iron Pty Ltd, 2004). These species seem to be distributed throughout the Tom Price area as they have been recorded in numerous prior surveys (Hamersley Iron Pty Ltd, 2004).
Clearing of the area under application is unlikely to pose a significant risk on the regional viability of Indigofera ixocarpa given that it is known to be a disturbance opportunist and is present elsewhere in the local area (CALM, 2005). CALM is supportive of licensed seed collection and the subsequent regeneration of Indigofera ixocarpa in rehabilitation programs following the cessation of mining activities in the area (CALM 2005).

Methodology Permit Application;
Hamersley Iron Pty Ltd (2004);
CALM (2005).

(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 recorded within 50km of the area under application. Further to this, past and present mining activities in the areas adjacent to the area under application would have significantly impacted on flora and fauna habitat values (CALM, 2005).
Therefore, the site under application is unlikely to be necessary for the maintenance of a threatened ecological community.

Methodology GIS Database:
Threatened Ecological Communities - CALM 15/7/03;
Threatened Plant Communities - -DEP 06/95;
CALM (2005).

(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 at variance to this Principle

	Pre-European area (ha) *	Current extent (ha) *	Remaining %*	Conservation Status**	% in reserves/ CALM managed land
IBRA Bioregion - Pilbara	17,944,694	17,944,694	~100%	Least concern	15.17
Shire of Ashburton	No information available				
Beard vegetation associations - 82	2,920,910	2,920,910	~100%	Least concern	10.1

* Shepherd et al. (2001)
** Department of Natural Resources and Environment (2002)
*** Area within the Intensive Landuse Zone - if this is applicable

The State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-European settlement (Department of Natural Resources and Environment, 2002).

Vegetation complexes within this application are above 30% representation. The vegetation of the site is a component of Beard Vegetation Association 82 (Hopkins et al, 2001), of which there is ~100% of the pre-European extent still remaining (Shepherd et al, 2001). The vegetation type is therefore of 'least concern' for biodiversity conservation (Department of Natural Resources and Environment, 2002).

Methodology GIS database: Pre-European Extent - DA 01/01;

Department of Natural Resources and Environment (2002);
Hopkins et al. (2001);
Shepherd et al. (2001).

(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 at variance to this Principle

The vegetation to be cleared is not associated with a watercourse or wetland.

Methodology

GIS Database: Hydrology, linear - DOE 1/02/04
Aerial Photograph

(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 likely land degradation risks posed by the clearing of vegetation are minimal as the immediate surrounding area is already largely cleared for mining operations and will be managed as part of the mine infrastructure.
Water and wind erosion, water logging and land salinisation is not likely to be increased should the vegetation on this site be cleared.

Methodology

GIS Database:
Aerial Photgraph;
Soils, Statewide - DA 11/99;
Groundwater Salinity, Statewide - 22/02/00.

(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 at variance to this Principle

Karijini National Park is located 16km east of the area under application. However, the proposed clearing area is within an operating mine site and therefore is unlikely to cause an appreciable additional impact on this conservation area (CALM, 2005).

Methodology

GIS Database: CALM Managed Land and Waters - 1/06/04;
CALM (2005)

(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 clearing of vegetation within the operating mine area is unlikely to impact on surface water quality or groundwater resources in the area. The proposed clearing area is not in a Public Drinking Water Source Area.

Methodology

GIS Database:
- Public Drinking Water source Areas (PDWSA's) -DOE 29/11/04;
- Hydrography, linear (hierachy) - DOE 13/4/05

(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

The average rainfall of the area is ~400mm. It is unlikely that the removal of 11.3 ha of vegetation will have a significant influence on the run-off and flood regimes in the local area.

Methodology

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

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

Comments

No objections have been received regarding the clearing native vegetation in the area under application.
The vegetation to be cleared is within Mineral Lease AML70/4 granted in accordance with the Iron Ore (Hamersley Range) Agreement Act 1963 and the Mining Act 1908.
There is one Native Title Claim over the area under application by the Eastern Guruma 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.
The proposed area lies within the Mulba area on the Interim register on the Aboriginal Sites of Significance. A scarred tree, which is on the permanent register of Aboriginal sites of Significance, is also located within the

proposed clearing area. The applicant has advised that this site has been previously salvaged in November 2000 under section 18 permit 266 and fulfilment of the s18 conditions were acknowledged by the Department of Aboriginal Affairs on 20 February 2001 (Pilbara Iron, pers. comm., 2005).

This application to clear is not at variance to the EPA advice given under s48 level 2 (CRN 104411) (Environmental Protection Authority, 1996).

There are no other RIWI Act Licences or Works Approvals that will affect the area that has been applied to clear. This application is not at variance to the conditions set by EP licence number 4762.

Methodology GIS Database:- Aboriginal Sites of Significance - DIA 04/07/02;

Pilbara Iron, pers. comm. (2005);

Environmental Protection Authority (1996).

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	11.3	**Grant**	Assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit should be granted.

5. References

CALM (2005) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Wester Australia. DoE Reference: Trim KNI903; Reference IN22822.

Department of the Environment and Heritage Database Reporting Tool (coordinates: -22.7486, 117.7454; 3km buffer)

Environmental Protection Authority (1996) Level of assessment for Scheme TPS 6 - District Scheme, Shire of Ashburton, Scheme Not Assessed - Advice Given (no appeals). DoE Reference: Trim KTI5341.

Hamersley Iron Pty Ltd (2003) Tom Price Mine Expansion Rare Flora Survey; West Pit Road, Area NTD2EX-WD and Area Between WEPBSXTEN2 & WEPIWDS2. Unpublished Document. Department of Environment Reference: TRIM KNI718

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.

Pilbara Iron (2005) E-mail: Aboriginal Site at Tom Price. Personal Communication. DoE Reference: Trim KTI5281

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)