Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 508/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Robe River Iron Associates**

1.3. Property details

Property: LOT 65 ON PLAN 241547 (POINT SAMSON 6720)
Local Government Area: Shire Of Roebourne
Colloquial name: DOLA LGE I123396 - Cape Lambert

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
31.5		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 #157 - Hummock grasslands, grass steppe; hard spinifex Triodia wiseana (Hopkins et al., 2001). There is ~100 of the pre-European extent remaining (Shepherd et al., 2001).	The vegetation of the site contains several alien species that were recorded in the area by Pilbara Iron. These include Aerva javanica, Cylindropuntia fulgar var. mamillata, Phoenix dactylifera, Vitex sp. (Pilbara Iron, 2005a) and Cenchrus ciliaris Pilbara Iron (2005b). All weed species are to be removed before completion of the project, in line with Pilbara Iron's best practice approach (Pilbara Iron, 2005a).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The areas under application have previously been disturbed by construction related activities. The Cape Lambert Construction Camp has had approximately 40% of the area disturbed (Pilbara Iron, 2005a).

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 area retains hummock grasslands, which are well represented in the areas surrounding the project area. The areas under application have previously been disturbed by construction related activities (Pilbara Iron, 2005a). Several alien species were recorded in the area, such as Aerva javanica, Cylindropuntia fulgar var. mamillata, Phoenix dactylifera (Pilbara Iron, 2005a) and Cenchrus ciliaris (Pilbara Iron, 2005b), which are to be removed before completion of the project. There are no Environmentally Sensitive Areas present within or in close proximity to the application area, therefore it is unlikely to represent an area of outstanding biological diversity.

Methodology

Pilbara Iron (2005a);
Pilbara Iron (2005b);
GIS Database: Environmentally Sensitive Areas - DOE 22/10/04

(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

Specially Protected Fauna:
Pilbara Olive Python - Morelia olivaceus barroni - T,

Banded Hare-wallaby - Lagostrophus fasciatus fasciatus - T,
Humpback Whale - Megaptera novaeangliae T,
Dugong - Dugong dugons (Other Specially Protected Fauna)

CALM Pilbara Region has indicated that a major consideration regarding the project is the potential impact of light pollution from the camp impacting upon the egg laying activities of marine turtles that are known to utilise the nearby beach.

Priority Listed Fauna:
Little North-western Mastiff Bat
Mormopterus loriae cobourgiana P1,
Lerista quadrivincula P1,
Eastern Curlew Numenius madagascariensis P4,
Western Pebble-mound Mouse (Ngadji) Pseudomys chapmani P4,
Indo-Pacific Humpback Dolphin Sousa chinensis P4.

The area of the proposed clearing has previously been used for similar construction camp activities and has undergone rehabilitation to a standard that is no longer acceptable. There are unlikely to be any additional significant impacts on fauna as a consequence of this project going ahead provided that the proponent liaises closely with CALM regional officers to ensure that any potential fauna management issues, such as light pollution impacts on nesting turtles, are adequately addressed as they arise.

Methodology CALM advice (2005)

(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**
Seven populations of Terminalia supranitifolia P1 are known to occur within a 50km radius of the area under application, but none are located within the local area (CALM, 2005). Separate botanical surveys of the 'Construction Camp' and the 'Cape Lambert Quarry Extension' areas were undertaken on 13 January 2005 by a Botanical Advisor in company of a Botanist, both of whom were employed by Pilbara Iron. The resultant report states that no declared Rare or Priority Flora taxa were identified during the surveys (Pilbara Iron, 2005a, Pilbara Iron 2005b). The only Priority Flora taxa, Terminalia supranitifolia (P1), identified within the local area (50km radius) on the CALM datasets was not recorded within the area of the proposed clearing (CALM, 2005). There appears to be limited records of flora of special conservation significance in the local area and this is supported by separate botanical surveys carried out by Pilbara Iron staff earlier this year. On this basis, the proposal is not likely to be at variance to this principle (CALM, 2005).

Methodology CALM (2005);
Pilbara Iron (2005a);
Pilbara Iron (2005b);
GIS Database: Declared Rare and Priority Flora Lists - CALM 13/08/03

(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**
CALM records indicate that no Threatened Ecological Communities are known to occur in the local area, and on this basis the proposal is not likely to be at variance to this principle (CALM, 2005).

Methodology CALM Advice (2005);
GIS Database: Threatened Ecological Communities - CALM 15/7/03

(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 to be cleared is Beard's Vegetation Association #157 (Hopkins et al, 2001) of which there is ~100% of the pre-European extent still remaining (Shepherd et al, 2001).

Methodology Hopkins et al (2001);
Shepherd et al (2001);
GIS Database: Pre-European Extent - 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:
-Hydrography, linear - DOE 1/2/04
-ANCA Wetlands - CALM 08/01

(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 this vegetation are minimal as approximately 40% of the area is already disturbed by previous construction related activities (Pilbara Iron, 2005a). In line with Pilbara Iron's Best Practice approach, disturbance should be kept to a minimum at all times (Pilbara Iron, 2005a, Pilbara Iron 2005b).

Methodology

Pilbara Iron (2005a);
Pilbara Iron (2005b)

(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

The following nature Reserves occur in the local area; 36913, 36915, 39202, 36910, 36907, 36909, 36913, 37089, 32144, 38287 and Dolphin Island Nature Reserve. There is unlikely to be any deleterious impacts on lands managed for conservation in the local area due to the proposed clearing being sufficiently distanced from the reserves. This proposal is not likely to be at variance to this Principle (CALM, 2005).

Methodology

CALM Advice (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

It is unlikely that the vegetation clearing will have a significant impact on ground or surface water quality given the close proximity of the application area to the coast.

Methodology

GIS Databases:
-Hydrography, linear - DOE 1/2/04
-Groundwater Subareas - WRC 10/10/00
-RIWI Act, Surface Water Areas - WRC 18/10/02

(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 impacts are unlikely to occur as a result of the proposed clearing due to its location and rainfall levels in the area. The region within which the project area is located receives an average annual rainfall of 300mm, majority of which falls during December to March. The elevation of the area is gradually sloping, ranging from 5m to 20m. The rainfall level and frequency and topographic slope would not impact on peak flood height or duration with the removal of vegetation.

Methodology

GIS Databases:
-Rainfall, Mean Annual - BOM 30/09/01
-Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The vegetation to be cleared is within Special Lease 3116/4623 granted in accordance with Section 116 of the Land Act 1933 and the Iron Ore (Cleveland-Cliffs) Agreement Act 1964.

The proposed construction activities within the area under application have not received approval under the Shire of Roebourne Town Planning Scheme No 8.

There are two Native Title Claims over the area under application by the Ngaluma/Injibandi peoples and the Wong-goo-tt-oo peoples. However, the Special Lease has been granted so therefore the granting of a clearing

permit does not constitute a future act under the Native Title Act.

Methodology Shire of Roebourne submission (2005)
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	31.5	**Grant**	Assessable criteria have been addressed and no objections were raised. It is recommended that the proponent liaises closely with regional Department of Conservation and Land Management officers to ensure that any potential fauna management issues, such as light pollution impacts on nesting turtles, are adequately addressed as they arise. It is recommended that the proposal area be rehabilitated following cessation of activities as set out in the Iron Environmental Management System Rehabilitation Handbook (MacMillan K, 2004) with consideration for the following amendments: Section 1.6 - Vegetation used for rehabilitation is to be endemic to the local area found within a 5km radius of the proposal area. Section 1.8 - Soil stabilisation is to be achieved using a mulch consisting of coastal heath, if available, or soil stabilisation matting to prevent wind erosion of top soil during vegetation establishment. The Assessing Officer recommends that the permit should be granted.

5. References

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 (2005a) Botanical Survey Advice: Environment Department. Project Number 2004/1 Document Number 107946. Department of Environment Reference: TRIM KNI667

Pilbara Iron (2005b) Botanical Survey Advice: Environment Department. Project Number 2005/2 Document Number 107947. Department of Environment Reference: TRIM KNI668

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.