Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 442/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Worsley Alumina Pty Ltd**

1.3. Property details

Property: AM70/258
Local Government Area:
Colloquial name: Timber Reserve 171 25

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.15		Mechanical Removal	Bore construction

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
Mattiske Vegetation Complex: Y5 - Mixture of open forest of Eucalyptus marginata subsp. Thalassica, Corymbia calophylla and woodland of Eucalyptus wandoo on lateritic uplands in semiarid to perarid zones.	The clearing proposal is for the installation of three groundwater bores. Two of the three bores are unlikely to result in clearing of native vegetation. With one of the three bores likely to remove approximately 5 Hakea sp. and approximately 5 Dryandra sp. species. No over-storey species are likely to be removed under this clearing application.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Site Inspection by Jenna Perrott (BBM) September 2005 and site survey undertaken by Mattiske Consulting Pty Ltd (DOE Trim ref: 2005I/1353)

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

While the area under application contains vegetation in good to very good condition, there is evidence of impact through historical land-uses on the site. With the area under application forms a very small part of a larger remanent it is considered unlikely that the vegetation under application represents an area of higher biological diversity.

Methodology Mattiske Consulting (DOE Trim ref: 2005I/1353)

(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

The 0.15 of a hectare under application is considered a relatively small part of the 2500 hectare remanent. The vegetation communities in the application area are well represented. Thus the vegetation under application is not considered to be likely to be at variance with this principle. Additionally, it is unlikely that the overstorey will need to be cleared during the installation of the bores and as such potential overstorey habitat such as hollows are not likely to be affected by this proposal (Pers comm. Worlsey Alumina 29/09/2005)

Methodology GIS Database: Brookton-Boddington 1m Orthomosaic - DLI 04

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

Comments

Proposal is not likely to be at variance to this Principle

A study by Mattiske Consulting (DOE TRIM ref: 2005I/1353) of the priority and DRF flora species around the Quindanning drilling area was conducted during May 2004. No evidence of Declare Rare or Priority flora was discovered within the area under application.

Methodology Mattiske Consulting Pty Ltd (DOE TRIM ref: 2005I/1353)

(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.

Comments

Proposal is not likely to be at variance to this Principle

There are no records of Threatened Ecological Communities (TEC) in the vicinity of the proposed clearing (the nearest community is approximately further than 20 kilometres away). Based on the limited area of vegetation under application, percentage of vegetation remaining in the complex and the distance to the nearest TEC it is unlikely that the proposed clearing will impact this principle.

Methodology GIS Database: Threatened Ecological Communities - CALM 12/4/2005

(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 likely to be at variance to this Principle

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; EPA 2000). The vegetation at the site is a component of Beard Vegetation association 3 (Hopkins et al. 2001) and Mattiske (1998) Vegetation Complexes Yalanbee (Y5), which are both considered in the category of least concern and are well above the recommended minimum 30% limit.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in reserves/CALM-managed land
IBRA Bioregion	4,544,335	2,665,480	58.7%	Least concern	
Shire	195,281	138,327	70.8%	Least concern	
Beard vegetation association -3	3,046,385	2,197,837	72.1%	Least concern	10.1%
Mattiske vegetation complex -Y5	1,243,773	852,364	68.5%	Least concern	

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

Methodology

Department of Natural Resources and Environment 2002
EPA 2000
Hopkins et al. 2001
Mattiske 1998
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 likely to be at variance to this Principle

The area under application is ~1000metres from the nearest minor watercourse and a distance of greater than 5 km from the Hotham River. There is no wetlands categorised within 5km of the area under application. Due to the distance from any wetland or watercourse it is considered that the removal of vegetation from the site is unlikely to be at variance with this principle.

Methodology

GIS Databases:
Geomorphic Wetlands (Management Categories), Swan Coastal Plain - DOE 15/9/04
Hydrography, linear - DOE 1/2/04
Clearing Regulations - Environmentally Sensitive Areas - DOE 30/5/05

(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

Salinity Risk Mapping of the applied area identified little to no risk of salinity occurring within these areas. Based on the small amount of vegetation under application, the large area of vegetation remaining in the local area

and the fact that the clearing is unlikely to remove overstorey species, the approval of this proposal is considered unlikely to be at variance with this principle.

Methodology GIS Database:
- Salinity Mapping LM 25m - DOLA 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 likely to be at variance to this Principle**
The nearest conservation reserve is Mooradong Nature Reserve which is greater than 9km from the site. Given the distance to the nearest conservation area and the limited area that is proposed for clearing the proposal is unlikely to effect nearby conservation areas..

Methodology GIS Database: CALM Managed Lands and Waters - CALM 1/07/05

(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 in a moderate rainfall area with less than 800mm per year, it is not within a prescribed groundwater area and it is not within a public drinking water source area (PDWSA). When considering the area under application is within a moderate rainfall area, does not form part of the PDWSA and given the relatively small scale of the proposed clearing is unlikely to significantly affect ground or surface waters.

Methodology GIS Databases:
Isohyets - BOM 09/98
PDWSA Protection Zones - DOE 7/1/04

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

Comments **Proposal is not likely to be at variance to this Principle**
The clearing is ~1000metres from the nearest minor watercourse and greater than 5km from the Hotham River. Due to the relatively small scale of clearing and distance from any watercourse it is considered that the removal of vegetation from the site would have no impact on peak flood height or duration.

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

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

Comments
No groundwater licence required as the area under application is not within a proclaimed groundwater area.

Worsley Alumina Pty Ltd is the holder of a valid mining lease. Under the granting of this lease native title has been extinguished, therefore the clearing should not fall under the future acts process of the Native Title Act 1993.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Bore construction	Mechanical Removal	0.15	**Grant**	The assessable criteria have been addressed and the proposal is not likely to be at variance with any of the principles The assessing officer therefore recommends that the permit be granted.

5. References

Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales ; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

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)