



1. Application details

1.1. Permit application details

Permit application No.: 341/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Birla Nifty Pty Ltd

1.3. Property details

Property: AM70/271
Local Government Area: Shire Of East Pilbara
Colloquial name: Nifty Copper Mine, gas pipeline

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
24.5		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 #134: Mosaic: Hummock grasslands, open low tree steppe; desert bloodwood and feathertop spinifex on sandhills / Hummock grasslands, shrub steppe; mixed shrubs over spinifex between sandhills (Hopkins et al, 2001). There is ~100 of the pre-European extent remaining (Shepherd et al, 2001).	The vegetation of the site is primarily hummock grasslands of <i>Triodia basedowii</i> and <i>Triodia schinzii</i> , a sparse mid storey of <i>Eucalyptus pachyphylla</i> and a number of <i>Grevillea</i> species, and a very sparse upper storey consisting primarily of <i>Corymbia chippendalei</i> and <i>Eucalyptus victrix</i> (MBS Environmental, 2004).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The vegetation to be cleared adjoins a current waste rock dump and is bound by existing roads and lay down yards, so is already significantly disturbed (MBS Environmental, 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 vegetation of the site is primarily hummock grasslands of *Triodia basedowii* and *Triodia schinzii*, a sparse mid storey of *Eucalyptus pachyphylla* and a number of *Grevillea* species, and a very sparse upper storey consisting primarily of *Corymbia chippendalei* and *Eucalyptus victrix* (MBS Environmental, 2004). The vegetation to be cleared is adjacent to a current waste rock dump and is bound by existing roads and lay down yards, so is already significantly disturbed (MBS Environmental, 2004). There are no Environmentally Sensitive Areas present within or around the application area, therefore it is unlikely to represent an area of outstanding biological diversity.

Methodology MBS Environmental, 2004;
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**
The fauna habitat to be cleared is widely represented in the Eastern Pilbara and the Great Sandy Desert and none of the fauna species recorded in the survey have ranges restricted to the immediate area (MBS Environmental, 2004). Therefore, it is unlikely the fauna will be impacted upon by any major disturbance or loss of habitats (MBS Environmental, 2004). Minimal impact would be expected over the long term as the proposed management measures include the progressive rehabilitation and revegetation of the cleared area (MBS Environmental, 2004).

Methodology MBS Environmental, 2004

(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**
No Declared Rare Flora species were surveyed within the project area (MBS Environmental, 2004). One Priority Two flora species, *Goodenia hartiana*, was recorded in the application area, predominantly in disturbed areas such as on the edge and middle of tracks. It is possible that disturbance to the soil as a result of construction activities may result in further populations of the species establishing (MBS Environmental, 2004). The implementation of progressive rehabilitation and revegetation will ensure the vegetation, including this Priority Two species, is able to regenerate within the area (MBS Environmental, 2004).

Methodology MBS Environmental, 2004;
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**
There are no known Threatened Ecological Communities within the area proposed for clearing.

Methodology 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 Beards Vegetation Association #134 (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 contained within the Sandy Desert Basin catchment area, but is not associated with any major watercourses or wetlands.

Methodology GIS Databases:
-Hydrography, linear - DOE 1/2/04
-ANCA Wetlands - CALM 08/01
-Hydrographic Catchments - Catchments - DOE 3/4/03

(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 24.5 hectares of vegetation are minimal as the areas are already heavily degraded (MBS Environmental, 2004).

Methodology MBS Environmental, 2004

(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 area proposed to be cleared.

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 proposed clearing of 24.5 hectares is unlikely to have an impact on surface water quality and is unlikely to provide a major input to the recharge of groundwater.

Methodology GIS Database:

-Hydrographic Catchments - Catchments - DOE 3/4/03
-Hydrography, 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

The average annual rainfall of the area is ~400mm, which falls predominantly over the December to March period. Surface flow in this area only occurs during exceptionally high rainfall events (MBS Environmental, 2005). It is unlikely that the clearing of 24.5 hectares of vegetation will have a significant influence on the run-off and flood regimes in the local area.

Methodology MBS Environmental, 2005;

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

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

Comments

The Shire of East Pilbara had no objections to the proposed clearing application.

The Pilbara Native Title Service provided no comment on the clearing application.

Methodology Shire of East Pilbara (2005) Submission

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	24.5	Grant	Assessable criteria have been addressed and no objections were raised. The Assessing Officer therefore 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.
- MBS Environmental (2004) Nifty Copper Operation: Power Supply and Infrastructure Corridor Vegetation and Habitat Assessment. Prepared by MBS Environmental for Birla Nifty Pty Ltd. Department of Environment Reference: TRIM KNI666
- 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.
- Shire of East Pilbara (2005) Submission