



1. Application details

1.1. Permit application details

Permit application No.: 235/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: AML70/246
AML70/4

Local Government Area:

Colloquial name: Paraburdoo mine site

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
400		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
Vegetation Association 82 – Hummock grasslands, low tree steppe; snappy gum over <i>Triodia wiseana</i> .	The subject vegetation is variously impacted upon by roads and by resource evaluation activities.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	There are no Declared Rare Flora and only one Priority 3 flora species that is quite widespread within the project area (Biota, 2002).
Vegetation Association 181 - Shrublands, mulga and snakewood scrub.			

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**
A flora survey conducted by Biota (2002) found no Declared Rare Flora and one Priority 3 flora (*Eriachne teniculmis*) which is recognised as having a wide distribution.

From the information available, it is unlikely that the area represents outstanding biological diversity.

Methodology Biota (2002)

(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**
A single Peregrine Falcon (*Falco peregrinus*) was observed flying in the local area in 2001. In 1967 a Night parrot (*Pezoporus occidentalis*) was observed 65km to the south west of the proposed clearing area.

There is a low likelihood of this proposal being at variance with this principle, however as the area includes likely habitat for the P4 Western Pebble-mound Mouse (*Pseudomys chapmani*), non-essential ground disturbance should be minimised

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

There are no known Declared Rare Flora within the vegetation to be cleared and a flora survey (Biota, 2002) located only one Priority 3 flora species. This particular species (*Eriachne tenuiculmis*) was recorded several times and is believed to be poorly collected rather than uncommon.

Methodology Biota (2002); CALM Advice (2005); 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 vegetation to be cleared.

Methodology CALM (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 within the project area is Beard Vegetation Associations 82 and 181 (Hopkins et al. 2001), of which there is ~100% of the pre-European extent of these communities remaining (Shepherd et al. 2001).

Methodology GIS Database: Pre-European Extent - DA 01/01; 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 likely to be at variance to this Principle

The vegetation to be cleared is not growing in association with a watercourse or a wetland.

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

(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 proposed clearing is unlikely to cause land degradation with the appropriate use of erosion and surface water run-off controls as provide.

Methodology DAWA (2005)

(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

There are no nearby conservation areas, the closest being Karijini National Park some 40km to the north east.

Methodology CALM Advice (2005); 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 hydrogeology of the area and experience with the clearing of vegetation for other mine sites in the Pilbara suggests that detrimental impacts on groundwater are unlikely to arise as a result.

Seasonal rainfall events in the catchment are likely to drive impacts on surface water quality rather than vegetation clearing alone.

Methodology Dept of Environment, 2004, DWAID

(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 clearing of vegetation is unlikely to significantly alter the flood regimes of the local area which are driven by seasonally variable rainfall events.

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

Planning instrument or other matter.

Comments Proposal is not at variance to this Principle

Both tenements (AML70/246 and AML70/4 Sec236) were granted in accordance with the Iron Ore (Hamersley Range) Agreement Act 1963 and Mining Act 1908.

Methodology GIS Database: Mining Tenements - DOIR 1/09/03

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	400	Grant	<p>By October, the permit holder is to provide the Department of Environment with an annual report outlining: the areas of vegetation cleared and their location in the landscape; the purpose of the clearing completed (eg road, mine site); the management strategies and actions employed to protect native vegetation and significant fauna habitat and avoid areas of sensitivity within the landscape as part of the clearing program; and the rehabilitation practices adopted and implemented.</p> <p>The permit holder is advised that the area includes likely habitat for the Western Pebble-mound Mouse (<i>Pseudomys chapmani</i>) and, as such, non-essential ground disturbance should be minimised.</p>

5. References

- CALM (2004) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref KNI520.
- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref HD19412.
- 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.
- 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.