Department of Environment
Government of Western Australia

Clearing Permit Assessment Report

1. Application details

1.1. Permit application details

Permit application No.: 289/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Hamersley Iron Pty Ltd**
Postal address: G.P.O. Box A42 Perth WA 6837
Contacts: Phone: 9327 2351
Fax: 9327 2008
Email:

1.3. Property details

Property: AML70/246
Colloquial name: Paraburdoo Iron Ore Mine, Pit development

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
97		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 #82 - Hummock grasslands, low tree steppe; snappy gum over Triodia wiesana (Hopkins et al, 2001). Beards Vegetation Association #181 - Shrublands; mulga & snakewood scrub (Hopkins et al, 2001).	The vegetation of the site comprises lower storey native species with some weed species present, such as Acetosa vesicaria and Aerva javanica (Pilbara Iron, 2004).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The area to be cleared is adjacent to a current mining area, so vegetation surrounding the application area is already significantly disturbed. The project area also has a track running through it, further disturbing the vegetation present (Pilbara Iron, 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 comprises lower storey native species with some weed species present, such as Acetosa vesicaria and Aerva javanica. The area to be cleared is adjacent to a current mining area, so vegetation within the area is subject to some disturbance. The project area has an access track passing through it, further disturbing the vegetation present (Pilbara Iron, 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 Pilbara Iron, 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**

Since the type of vegetation in the application area is regionally abundant, it is unlikely the fauna will be impacted upon by any major disturbance or loss of habitats (Pilbara Iron, 2004). Minimal impact would be expected based on the proximity of the proposed clearing to an active mine site (CALM, 2005).

Methodology Pilbara Iron, 2004;
CALM, 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**

No Declared Rare or Priority Flora species were surveyed within the project area (Pilbara Iron, 2004).

Methodology Pilbara Iron, 2004;
GIS Database: Declared Rare and Priority Flora List - CALM 13/08/04;
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 occurrences of Threatened Ecological Communities within the area proposed for clearing (CALM, 2005).

Methodology GIS Database: Threatened Ecological Communities CALM 15/4/03;
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 likely to be at variance to this Principle**

The vegetation under application is Beards Vegetation Association #82 - Hummock grasslands, low tree steppe; snappy gum over Triodia wiesana (Hopkins et al, 2001). Beards Vegetation Association #181 - Shrublands; mulga & snakewood scrub (Hopkins et al, 2001). There is ~100% of the pre-European extent of Association #82 and #181 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. Two non-perennial watercourses are present within the area but are only minor waterways that are not identified as having significant environmental values and disturbance is unlikely to greatly affect water tables or ecological communities.

Methodology GIS Database: Hydrography, linear - DOE 1/2/04;
GIS Database: 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 proposed clearing of 97 hectares for pit development, haul roads and waste rock dump is not likely to cause appreciable on site and off site land degradation with the implementation of appropriate management strategies to address any resultant soil erosion (DAWA, 2005).

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 likely to be at variance to this Principle**

The nearest conservation area is the Karijini National Park, situated 40km North East of the proposed clearing site. Due to the distance between the proposed clearing and the National Park, the environmental values of the Park are unlikely to be impacted (CALM, 2005).

Methodology GIS Database: CALM Managed Lands and Waters - CALM 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**

There are two non-perennial watercourses present within the area that are only minor waterways and are not identified as having significant environmental values. The clearing of 97 hectares is not likely to cause appreciable on site and off site land degradation with the implementation of appropriate management strategies to ensure that surface water flow regimes are maintained (DAWA, 2005).

Methodology DAWA, 2005;
GIS Database: Hydrography, linear - DOE 1/2/04;
GIS Database: Groundwater Subareas - WRC 10/10/00;
GIS Database: 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**

The region within which the project area is located receives an average annual rainfall of 300mm which falls predominantly over the December to march period. The implementation of appropriate management strategies to ensure that surface water flow regimes are maintained will guard against incremental increases in flood regimes in the application area (DAWA, 2005).

Methodology DAWA, 2005;
GIS Database: Rainfall, Mean Annual - BOM 30/09/01

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

Comments The Shire of Ashburton has raised no objections to the proposed clearing.

The Pilbara Native Title Service raised concerns that the clearing of significant areas of vegetation may be a matter that affects native title, through the future act processes of the Native Title Act 1993.

Methodology Shire of Ashburton, 2005;
Pilbara Native Title Service, 2005;

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	97	**Grant**	Assessable criteria have been addressed and no objections were raised. The Assessing Officer therefore recommends that the permit should be granted. The concern of the Pilbara Native Title Service is clarified by advice received from the State Solicitor's Office that indicate the granting of the permit would not be invalidated by the Native Title Act 1993 (DoE Legal Advice, 2004).

5. References

Department of Agriculture Western Australia (2005) Application for Clearing Permit CPS 289/1; Paraburdoo Iron Ore Mine AML70/246. Unpublished Report. Department of Environment Reference: TRIM CEO188/05

Department of Conservation and Land Management (2005) Application for Clearing Permit CPS 289/1; Paraburdoo Iron Ore Mine AML70/246. Unpublished Report. Department of Environment Reference: TRIM KNI467

Department of Environment Legal Advice (8 December 2004) "Grant of Clearing Permits in Relation to Mining Activities Under Mining Leases - Future Act Under Native Title Act 1993" Internal Memorandum from F. Sunderland to S. McEvoy.

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 (2004) Paraburdoo Four East Botanical Survey, Document 103724

Pilbara Native Title Service (2005) Submission

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 Ashburton (2005) Submission