



## 1. Application details

### 1.1. Permit application details

Permit application No.: 672/1  
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: Cape Lambert - Lot 65 on Plan 241547

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
9.9		Mechanical Removal	Road construction or maintenance

## 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
Beard Vegetation Association 157: Hummock grasslands, grass steppe; hard spinifex Triodia wiseana (Hopkins et al, 2001).	The area under application is a linear tract of vegetation in an otherwise uncleared area. Adjoining the application area to the northeast is a new camp site currently under construction. Approximately 2km to the southwest is a quarry under expansion. The application area has been impacted upon by a number of beach and mine infrastructure access tracks. No Declared Rare Flora were located within the surveyed area. Two weed species, <i>Cenchrus ciliaris</i> and <i>Aerva javanica</i> , were identified within the site (Pilbara Iron, 2005c).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The description of the vegetation to be cleared was obtained from three survey reports performed by staff at Pilbara Iron (DoE Ref: TRIM KNI883, KNI884, KNI888) and aerial photographs of the application area provided by the proponent in the Permit Application.

## 3. Assessment of application against clearing principles

### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments	<p><b>Proposal is not likely to be at variance to this Principle</b></p> <p>The vegetation under assessment is fairly diverse, with a total of 17 families, 31 genera and 40 species being identified (Pilbara Iron, 2005c). Two weed species were located, <i>Cenchrus ciliaris</i> and <i>Aerva javanica</i>, in surveys performed by Pilbara Iron staff (2005c). The vegetation to be cleared adjoins a camp site currently under construction to the north-east. The application area has been previously disturbed by beach and mine infrastructure access tracks. In comparison to other areas surveyed in the vicinity (Pilbara Iron, 2005a, Pilbara Iron, 2005b), the area under application contains species that are well represented in the surrounding locality, therefore the site is unlikely to represent an area of higher biological diversity than the surrounding local region.</p>
Methodology	<p>Pilbara Iron, 2005a Pilbara Iron, 2005b Pilbara Iron, 2005c Permit Application</p>

**(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 within a 50km radius:

Pilbara Olive Python - *Morelia olivaceus barroni* - T

Banded Hare-wallaby - *Lagostrophus fasciatus fasciatus* - T

Humpback Whale - *Megaptera novaeangliae* - T

Dugong - *Dugong dugon* - S

Priority Listed Fauna within a 50km radius:

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

CALM Pilbara Region have commented on a nearby clearing application submitted by the same proponent, that a major consideration is the potential impact of light pollution from a proposed camp impacting upon the egg laying activities of marine turtles that are known to utilise the nearby beach.

There are unlikely to be any additional significant impacts on local fauna as a consequence of this proposal going ahead, provided that the proponent liaises closely with CALM regional officers to ensure that any potential fauna management issues (such as street light pollution from the planned road impacting on nesting turtles) are adequately addressed as they arise. (CALM, 2005)

**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 supranitfolia* (P1) are known to occur within a 50km radius of the area under application.

Botanical surveys of the nearby 'Construction Camp' and the 'Cape Lambert Quarry Extension' areas were undertaken on 13 January 2005 by a Botanical advisor in company of a Botanist (Pilbara Iron employees). The resultant report states that no Declared Rare or Priority Flora taxa were identified during the surveys. This report is also relevant to this application since the areas are within close proximity to each other. The only priority flora taxa identified within the local area (50km radius) on the CALM datasets, *Terminalia supranitfolia* P1, was not recorded within the vicinity of the proposed clearing.

There are 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. This proposal is not likely to be at variance to this Principle (CALM, 2005)

**Methodology**      CALM Advice (2005)  
Pilbara Iron (2005a)  
Pilbara Iron (2005b)  
GIS Database: Declared Rare and Priority Flora List - CALM 13/08/04

**(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 have been recorded from the local area. 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 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).

Vegetation complexes within this application are above 30% representation. The vegetation of the site is a

component of Beard Vegetation Association 157 (Hopkins et al, 2001), of which there is ~100% of the pre-European extent still remaining (Shepherd et al, 2001). The vegetation type is therefore of 'least concern' for biodiversity conservation (Department of Natural Resources and Environment, 2002).

**Methodology** Hopkins et al (2001)  
Shepherd et al (2001)  
Department of Natural Resources and Environment (2002)  
GIS Database: Pre-European Vegetation - 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 application area has a topographical incline from 10 to 20m across the application area. Erosion from rainfall runoff is unlikely to be severe due to the flatness of the area. Therefore, land degradation is unlikely to result from vegetation removal if the area is appropriately managed in line with Pilbara Iron's Best Practice approach (Pilbara Iron, 2005a; Pilbara Iron, 2005b)

**Methodology** Pilbara Iron, 2005a  
Pilbara Iron, 2005b  
GIS Database: Topographic Contours, Statewide - DOLA 12/09/02

**(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 (50km radius): 36913, 36915, 39202, 36910, 36907, 36909, 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 them. This proposal is not likely to be at variance to this Principle. (CALM, 2005)

**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**  
Since the vegetation of the area consists of shallow rooted vegetation such as hummock grasslands and spinifex (Hopkins et al, 2001), its removal would not influence water tables or water quality. Surface water quality is unlikely to be affected as there are no water bodies in close proximity to the application area, and there is a buffer of 300m between the application area and the ocean that would prevent runoff due to rainfall events.

**Methodology** Hopkins et al (2001)  
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 occurs seasonally over the December to March period, where flood height and duration are lengthy and extreme. The clearing of 9.9 hectares of vegetation is unlikely to increase these flood factors.

## 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.

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 1993.

**Methodology** GIS Database: Native Title Claims - DLI 19/12/04

## 4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road construction or maintenance	Mechanical Removal	9.9	Grant	<p>Assessable criteria have been addressed and no objections were raised.</p> <p>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 pollution from roadway lights, are adequately addressed as they arise.</p> <p>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 topsoil during vegetation establishment.</p> <p>The Assessing Officer recommends that the permit should be granted.</p>

## 5. References

- CALM Land Clearing Proposal Advice. Advice to A/Director General, Department of Environment (2005) Department of Conservation and Land Management, Western Australia. DoE Reference: TRIM KNI844
- 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.
- MacMillan K (2004) Iron Environmental Management System: Rehabilitation Handbook Version 1.2. Document Number IEMS-PI-PRO-054. Unpublished Document. DoE Reference: TRIM KNI886
- Pilbara Iron (2005a) Botanical Survey Advice: Environment Department. Project Number 2004/1. Document Number 107946. Unpublished Document. DoE Reference: TRIM KNI883
- Pilbara Iron (2005b) Botanical Survey Advice: Environment Department. Project Number 2005/2. Document Number 107947. Unpublished Document. DoE Reference: TRIM KNI884
- Pilbara Iron (2005c) Botanical Survey Advice: Environment Department. Project Number 2005/52. Document Number 111203. Unpublished Document. DoE Reference: TRIM KNI888
- 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)