



1. Application details

1.1. Permit application details

Permit application No.: 175/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Portman Iron Ore Limited

1.3. Property details

Property:

- M77/988
- M77/607
- M77/606
- M77/611
- M77/989
- M77/990
- E77/1004
- E77/1089
- E77/438
- E77/874
- M77/676
- M77/737
- M77/993
- M77/999
- M77/1000
- M77/1001
- M77/1038
- M77/1039
- M77/1040
- E77/993
- E77/1032
- E77/896
- E77/919
- E77/842
- M77/994
- M77/995
- M77/996
- M77/997
- M77/998
- E77/922
- E77/924

Local Government Area: Shire Of Yilgarn
Colloquial name: Koolyanobbing Project Area, ~54km northeast of Southern Cross

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
50		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
The areas under application contain the following Beard vegetation Associations:	This permit application covers a broad range of vegetation types. Portman Iron Ore Ltd has	Excellent: Vegetation structure intact; disturbance affecting individual species,	Vegetation condition is likely to be variable across the area under application. However, much of the area is likely to be relatively undisturbed and therefore in very good to excellent condition (Piers Goodman,

128-Bare areas; rock outcrops	undertaken to carry out surveys to determine unrecorded areas of environmental significance in its Guidelines and Environmental Procedures for Exploration Activities (Portmans Iron Ore Limited 2004).	weeds non-aggressive (Keighery 1994)	Environmental Officer, Portman Iron Ore Limited, pers. comm. 2004).
144-Medium woodland; Wandoo, salmon gum, morrel, gimlet and rough fruited mallee			
147-Succulent steppe with scrub; acacia species over saltbush			
520-Shrublands; Acacia quadrimarginea thicket			
538-Shrublands; Acacia brachystachya scrub			
8-Medium woodland; Salmon gum and gimlet (Hopkins et al 2001, Shepherd et al. 2001)			

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 may be at variance to this Principle**

Several areas subject to this application have a high level of biological diversity. However, if the Koolyanobbing Project. Guidelines and Environmental Procedures for Exploration Activities (Portman Iron Ore Limited, 2004) are strictly adhered to, impacts are likely to be manageable.

Methodology Portman Iron Ore Limited (2004)

(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 may be at variance to this Principle**

The proposed purpose permit for exploration activities is unlikely to pose a significant threat to the survival of the listed fauna, provided exploration and clearing is carried out in a manner which limits the disturbance of potential habitat and is managed in accordance with the supplied 'Koolyanobbing Project. Guidelines and Procedures for Explorations Activities' document (Portman Iron Ore Limited, 2004). However, for CALM to provide comprehensive advice on the likely impacts of proposed clearing on significant fauna, it is essential that the proponent continues to supply the appropriate CALM Region with the details of Ground Disturbance Applications (GDA's) at the earliest available opportunity.

Species known to occur in the local area (50 km radius) (based on CALM's Threatened and Priority Fauna Database):

(b1) it is or is likely to be habitat for fauna that is declared Specially Protected under the Wildlife Conservation Act:

- Major Mitchell's Cockatoo (*Cacatua leadbeateri*) S4
- Peregrine Falcon (*Falco peregrinus*) S4

(b2) if it is or is likely to be habitat for Priority Listed Fauna:

- Malleefowl (*Leipoa ocellata*) T,
- Shy Heathwren (western spp.) (*Hylacola cauta whitlocki*) P4,
- Hooded Plover (*Charadrius rubricollis*) P4,
- Crested Bellbird (southern) (*Oreoica gutturalis gutturalis*) P4,
- Chuditch (*Dasyurus geoffroyi*) T,
- Tree Stem Trapdoor Spider (*Aganippe castellum*) T,

Methodology Portman Iron Ore Limited (2004), CALM (2004)

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

Comments **Proposal may be at variance to this Principle**

The proposed purpose permit area is located in an area of proven significant environmental value, both on a local and regional scale. However, as specific locations of proposed exploration activities and vegetation clearing were not provided as part of the purpose permit application, it is essential that adequate site inspections by a botanist are carried out to determine the likelihood of Declared Rare and/or Priority flora being present in the local area before ground disturbance activities are carried out (as per Portman Iron Ore Limited 2004). Consultation with CALM is essential where such surveys have identified the presence of DRF or Priority flora.

(c1) it is necessary for the continued in situ existence of populations of Declared Rare Flora under the Wildlife Conservation Act 1950

Species known to occur in the local area (50 km radius) (based on CALM's Threatened Flora Data Management System (DEFL)):

- 8 populations of *Tetratheca aphylla*,
- 1 population of *Leucopogon* sp. Helena & Aurora,
- 2 populations of *Tetratheca harperi*,
- 2 populations of *Tetratheca paynterae*

Species known to occur in the local area (50 km radius) (based on CALM's Herbarium Specimen Collection Database (WAHerb)):

- 11 specimens of *Tetratheca paynterae*,
- 1 specimen of *Eremophila* sp. Mt Jackson

(c3) it is necessary for the continued in situ existence of significant habitat for priority flora species published by CALM:

Species known to occur in the local area (50 km radius) (based on CALM's Threatened Flora Data Management System (DEFL)):

- 2 populations of *Ricinocarpos brevis* P1,
- 1 population of *Lepidium genistoides* P2,
- 1 population of *Haegiela tatei* P2,
- 1 population of *Sowerbaea multicaulis* P4,
- 1 population of *Eremophila caerulea* subsp. *Merrallii* P4,

Species known to occur in the local area (50 km radius) (based on CALM's Herbarium Specimen Collection Database (WAHerb)):

- 5 specimens of *Stenanthemum newbeyi* P1,
- 1 specimen of *Jacksonia jackson* P1,
- 2 specimens of *Pseudactinia* sp. Bungalbin Hill P1,
- 1 specimen of *Baeckea* sp. Pigeon Rocks P1,
- 4 specimens of *Acacia adinophylla* P1,
- 10 specimen of *Ricinocarpos brevis* P1,
- 6 specimens of *Baeckea* sp. Bungalbin Hill P1,
- 17 specimens of *Tetratheca erubescens* P1,
- 1 specimen of *Verticordia pulchella* P2,
- 1 specimen of *Frankenia brachyphylla* P2,
- 1 specimen of *Malleostemon* sp. Adelong P2,
- 1 specimen of *Lepidium merrallii* P2,
- 1 specimen of *Phlegmatospermum eremaeum* P2,
- 2 specimens of *Stylidium choreanthum* P2,
- 1 specimen of *Baeckea* sp. Jaurdi Station P2,
- 1 specimen of *Alyxia tetanifolia* P3,
- 1 specimen of *Grevillea eriobotrya* P3,
- 4 specimens of *Grevillea georgeana* P3,
- 1 specimen of *Philotheca coateana* P3,
- 1 specimen of *Euryomyrtus leptospermoides* P3,
- 1 specimen of *Verticordia mitodes* P3,
- 1 specimen of *Gompholobium asperulum* P3,
- 1 specimen of *Frankenia georgei* P3,
- 2 specimens of *Sowerbaea multicaulis* P4,
- 11 specimens of *Eucalyptus formanii* P4,
- 4 specimens of *Grevillea tetrapleura* P4,
- 2 specimens of *Sowerbaea multicaulis* P4

Methodology Portman Iron Ore Limited (2004); CALM (2004)

(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 at variance to this Principle**

No impact on known TEC's likely from proposed purpose permit application area (CALM 2004).

Methodology CALM (2004)

GIS database: Threatened Ecological Community Database - CALM 15/07/03 [Data supplied does not necessarily represent a comprehensive listing of threatened ecological communities in the area in question. The comprehensiveness is dependent on the amount of survey carried out. The database is subject to updates and amendments] (CALM 2004).

(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 at variance to this Principle

This application is not within the Intensive Landuse Zone and high percentages of the pre-European vegetation types remain (Shepherd et al. 2001).

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in reserves/CALM-managed land
IBRA Bioregion- Coolgardie	12,917,718	12,719,084	98.5	Least concern	
Shire of Yilgarn	2,340,521***	100% vegetation cover presumed outside the Intensive Landuse Zone			
Beard veg type-128	412,121	325,830	79.1	Least concern	12.3
Beard veg type-144	535,130	465,663	87.0	Least concern	5.7
Beard veg type-147	35,868	29,063	81.0	Least concern	3.3
Beard veg type-520	39,236	36,048	91.9	Least concern	4.9
Beard veg type-538	177,284	157,652	88.9	Least concern	10.2
Beard veg type-8	1,238,672	675,472	54.5	Least concern	16.7

* Shepherd et al. (2001)

** Department of Natural Resources and Environment (2002)

*** Area outside the Intensive Landuse Zone

Methodology Shepherd et al. (2001); Department of Natural Resources and Environment (2002)

GIS databases:

- Pre-European Vegetation - DA 01/01

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

- EPA Position Paper No 2 Agriculture Region - DEP 12/00

(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 may be at variance to this Principle

There are numerous wetlands and watercourses within the application areas. However, if the Koolyanobbing Project. Guidelines and Environmental Procedures for Exploration Activities (Portman Iron Ore Limited 2004) are strictly adhered to, and all other approval processes/approvals are in place, impacts are likely to be manageable.

Methodology Portman Iron Ore Limited (2004)

GIS database: Hydrography, linear - DOE 01/02/04.

(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

DAWA (2004a & b) advice: 'A desktop study together with local knowledge suggests that the risk of land degradation is minimal provided the company's Koolyanobbing Project. Guidelines and Environmental Procedures for Exploration Activities are adhered to (Portman Iron Ore 2004). However, the management of surface hydrology, during the operational phase, on access tracks with significant grades (slope) may require specific attention.'

Methodology DAWA (2004a & b)

(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 may be at variance to this Principle

There appears to be a low to medium probability of the proposed clearing to be at variance with Principle h (CALM 2004). Mt Manning Nature Reserve, Yellowdine Nature Reserve, Duladgin Nature Reserve and CALM Ex Dir Leasehold (ex Jaurdi and ex Mt. Elvire) are located within 50 kilometers of the purpose permit application area. Both Windarling Range and Mt Jackson are included in CALM's (1994) recommended western extension of the Mt Manning Nature Reserve. It is recommended that consultation with CALM be sought prior to exploration activities being undertaken in areas which are within the local area (50km) of a conservation reserve.

The benchmark of 15% representation in conservation reserves (Janis Forests Criteria 1997) has not been met for Beard vegetation types 125, 128, 144, 147, 538 and 520 which are within the area under application. However, because of the largely uncleared state of these vegetation types, this is not considered to be a serious conservation issue.

Methodology CALM 2004, Shepherd et al. (2001), Janis Forests Criteria (1997)

GIS database: Pre-European Vegetation - DA 01/01

(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 no areas under application that are Public Drinking Water Source Areas. If the clearing is done in accordance with the Koolyanobbing Project. Guidelines and Environmental Procedures for Exploration Activities (Portman Iron Ore Limited 2004), and all other approval processes/approvals are in place, impacts on other water quality issues are likely to be minimal.

Methodology Portman Iron Ore Limited (2004)
GIS database: Public Drinking Water Source Areas (PDWSAs) - DoE 01/06/04.

(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 at variance to this Principle

The Department of Agriculture (2004) suggests that the risk of flooding related to vegetation clearing should be minimal, provided the company adheres to the Guidelines and Environmental Procedures for Exploration Activities.

Methodology DAWA (2004)

Planning instrument or other matter.

Comments The proposal is not at variance with any planning instruments

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	50	Grant	<p>It is recommended that the purpose permit be granted conditional upon the adherence to the Koolyanobbing Project. Guidelines and Environmental Procedures for Exploration Activities (Portman Iron ore Limited 2004). that was submitted with the clearing permit application</p> <p>In addition to the Clearing Permit, all proposed ground disturbance associated with mineral exploration is described in a Ground Disturbance Approval Application (GDAA) submitted to the Department of Industry and Resources (DOIR). The location and proposed extent of clearing is detailed in the GDAA. Applications for activity within proposed extensions to the Mt Manning Nature Reserve are also referred to the Department of Conservation and Land Management.</p> <p>All areas proposed for disturbance will be surveyed by qualified botanists. The vegetation communities will be described, and the presence of any species of conservation significance (Declared Rare, Priority and undescribed flora) will be recorded. Disturbance to flora species of significance will be minimised. Where disturbance to Priority or undescribed species is unavoidable (due to local abundance, constraints on relocating drill pads and access tracks, for example) approvals will be sought from CALM.</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 refAD84.
- DAWA (2004a & b) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref ND446 and AD74.
- 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.
- JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.
- Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Portman Iron Ore Limited (2004) Koolyanobbing Project. Guidelines and Environmental Procedures for Exploration Activities. Perth, 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.

