



1. Application details

1.1. Permit application details

Permit application No.: 799/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Worsley Alumina Pty Ltd

1.3. Property details

Property: LOT 5314 ON PLAN 220209 (MORNINGTON 6221)
Local Government Area: Shire Of Harvey
Colloquial name: Wellington Loc 5314 Gastaldo Rd

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
11.88		Mechanical Removal	Stockpile

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 Unit 3 - Medium forest; jarrah-marri.	The vegetation under the application has been previously cleared of native vegetation and has been rehabilitated.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The revegetation is recently sown (less than 10 years old), and comprises a variety of native Acacia species and other native understory species. The initial intent of the planting was to control erosion and dust creation on that site, not to rehabilitate the area. Rehabilitation of the entire site is outlined separately in the closure plan.
Mattiske: Dwellingup (D1) - Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on lateritic uplands in mainly humid and subhumid zones.	Clarification of application (Huxtable, B. , Environmental Officer, Worsley Alumina Pty Ltd, 2005)		Clarification of application (Huxtable, B. , Environmental Officer, Worsley Alumina Pty Ltd, 2005)

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 at variance to this Principle**
The area under application is not considered to be of high biological diversity due to the close proximity to the highly disturbed environment of the refinery bauxite residue disposal area. The area under application is a previously cleared area that has been rehabilitated (Huxtable, 2005) and is of a small size limiting the biodiversity value of the vegetation.

Methodology Clarification of application (Huxtable, B. , Environmental Officer, Worsley Alumina Pty Ltd, 2005)

GIS databases:
CollieBusselton 2.5m Orthomosaic - DOLA 99
Collie 40cm Orthomosaic - DLI 03

(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 at variance to this Principle**
Aerial Photography indicates that the vegetation is unlikely to provide significant habitat for fauna species as it appears to generally sparse in nature. Furthermore, it has been rehabilitated within the last 10 years, and comprises a variety of Acacia species, and other native species (Huxtable, 2005). The level of disturbance within the site, and the small size of the area under application, is likely to further limit the habitat value of the vegetation.

Methodology Clarification of application (Huxtable, B., Environmental Officer, Worsley Alumina Pty Ltd, 2005)

GIS databases:
CollieBusselton 2.5m Orthomosaic - DOLA 99
Collie 40cm Orthomosaic - DLI 03

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

Comments Proposal is not at variance to this Principle

There are no known Declared Rare or Priority Flora species within the application area.
The area under application is a previously cleared area that has been rehabilitated (Huxtable, 2005). It is within an active area of the refinery. Given the above, there is therefore a low probability of the proposed clearing being at variance with this principle.

Methodology Clarification of application (Huxtable, B., Environmental Officer, Worsley Alumina Pty Ltd, 2005)

GIS database:
Declared Rare and Priority Flora List - CALM 01/07/05

(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

There are no records of Threatened Ecological Communities (TEC) or Threatened Plant Communities (TPC) within the local area (10km radius).

As the area has previously been cleared and rehabilitated, it can be concluded that it does not contain a TEC or TPC.

Methodology GIS databases:
Threatened Ecological Communities - CALM 12/4/05
Threatened Plant Communities - DEP 06/95

(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

The area under application is located in the Jarrah Forest Bioregion in the Shire of Harvey. The extent of native vegetation in these areas is 58.3% and 60.1% respectively (Shepherd et al. 2001).

	Pre-European (ha)*	Current extent (ha)*	Remaining (%)*	Conservation** status
IBRA Bioregion - Jarrah Forest***	4544335	2 624 301	58.3	Least Concern
Shire of Harvey	168 294	101 085	60.1	Least Concern
Vegetation type: Beard: Unit 3	3 046 385	2 197 837	72.1	Least Concern
Mattiske: Dwellingup (D1)	2 082 806	1 832 869	88	Least Concern

Heddle:
Yarragil Complex (no data available)

* (Shepherd et al. 2001)
** (Department of Natural Resources and Environment 2002)
*** Within the Intensive Landuse Zone

Methodology Department of Natural Resources and Environment (2002)
Havel (2002)
Heddle et al. (1980)
Hopkins et al. (2001)
Shepherd et al. (2001)
GIS databases:
Local Government Authorities - DLI 8/07/04_1

Mattiske Vegetation - CALM 24/3/98
Pre-European Vegetation - DA 01/01
Hedde Vegetation Complexes - DEP 21/06/95
Interim Biogeographic Regionalisation of Australia - EA 18/10/00

(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 is not at variance to this Principle**
The area under the application is not within a watercourse or wetland, or its buffer.

Methodology GIS databases:
Rivers, 1M - GA 01/06/00
Hydrography, linear (hierarchy) - DOE 13/4/05
Hydrography, 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 at variance to this Principle**
There is no information for Acid Sulphate Soils within the area under application. Groundwater salinity is mapped at 500 - 1000 mg/L. Salinity is mapped at a low risk area.

There is a slightly increased risk of salinity occurring in the area under application to the west as this is a river/ drainage area, however, clearing of the area under application is small and unlikely to significantly contribute to salinity.

It is not likely that the proposed clearing is at variance to this principle.

Methodology GIS databases:
Salinity Risk LM 25m - DOLA 00
Groundwater Salinity, Statewide - 22/02/00

(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**
The area under application is within the Harris River State Forest. The area has undergone a high level of disturbance and has been previously cleared and rehabilitated.

Clearing of the area under application is unlikely to significantly reduce the environmental value of the area.

Methodology GIS databases:
CALM Managed Lands and Waters - CALM 1/07/05

(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 at variance to this Principle**
The application area is within the catchment of the Augustus River, which is a tributary of the Brunswick River. Comments made relating to CPS 551 earlier this year, apply to this application:

The area under application is within the Brunswick Catchment Area Water Source Protection Plan.

Due to the small scale of the proposed clearing, it is unlikely to significantly degrade water quality.

The area under application to the east of the northern valley pipehead dam is within a closed circuit water management system. As part of licensing requirements, all water captured in this area is recycled back to the refinery catchment lake to be used in the refinery process. (Bishop, 2005).

Methodology Hydrogeological advice (Bishop, C., Environmental Officer, DoE, 2005)

GIS databases:
Hydrography, linear - DOE 1/2/04_1
Hydrography, linear - DOE 1/2/04
Topographic Contours, Statewide - DOLA 12/09/02
Rivers, 1M - GA 01/06/00

(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

Flooding impacts are unlikely to occur as a result of the proposed clearing due to its size relative to the surrounding vegetated forest.

Methodology GIS databases:
CollieBusselton 2.5m Orthomosaic - DOLA 99
Collie 40cm Orthomosaic - DLI 03

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

Comments

There is a Native Title Claim over the southwest corner of the area under application (Gnaala Karla Booja). However, the tenement has been granted, and the clearing is for a purpose consistent with the tenement type, therefore the granting of a clearing permit is not a future act under the Native Title Act 1993.

The area under application is zoned Forestry.

The proponent has the relevant current licences being an EP Licence No. L50/81, Works Approval No. W50/81/13 and Surface Water Licence No. SWL68041(002). There is no other RIWI Act Licence, Works Approval or EP Act Licence that will affect the area that has been applied to clear.' (Carter, 2005)

Methodology Environmental licensing advice (Carter, J. , Environmental Officer, DoE, 2005)
Carter, 2005.
GIS database:
Native Title Claims - DLI 19/12/04
Town Planning Scheme Zones - MFP 8/98

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Stockpile	Mechanical Removal	11.88	Grant	Recommend that the application be granted as it is not at variance to any of the Clearing Principles. Clearing will conducted using a bulldozer. Vegetation will be mulched and used for revegetation projects.

5. References

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.

EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.

Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.

Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

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, B.J. (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.