



1. Application details

1.1. Permit application details

Permit application No.: 406/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Rocla Quarry Products

1.3. Property details

Property: LOT 569 ON PLAN 152941 (House No. 968 BALDIVIS BALDIVIS 6171)
Local Government Area: City Of Rockingham
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.5		Mechanical Removal	Extractive Industry

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 associations: 1001:Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina 998:Medium woodland; tuart 999:Medium woodland; marri (Hopkins et al. 2001, Shepherd et al. 2001)	The proposal includes clearing of 2.5 hectares of mature trees of Eucalyptus gomphocephala, Eucalyptus marginata, Banksia attenuata, Allocasuarina fraseriana and Xylomelum occidentale over a cleared understorey of Erharta calycina (Veldt Grass). (Bowman Bishaw Gorham, 2004)	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Aerial photography of Lot 569 Baldvis Road show the area under application be in a degraded condition, as vegetation appears very sparse. Photographs from of Flora Survey (Bowman Bishaw Gorham, 2004) display and area extensively modified, with a complete absence of understorey vegetation species.
Heddl vegetation complex: Karrakatta Complex - Central & South (Heddl et al. 1980)			

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 under application has been classified by Bowman Bishaw Gorham (2004) as being in a degraded to highly degraded condition. No Declared Rare Flora or Threatened Ecological Communities were observed within the survey area. Vegetation is not well represented at a local area scale, however based on the condition of the vegetation under application it is not considered that this area represents an area of higher biological diversity than other nearby vegetated areas reserves and/or properties.

Methodology Bowman Bishaw Gorham (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 is not likely to be at variance to this Principle**
The area under application was identified by Bowman Bishaw Gorham (2004) as being highly degraded, with occasional understorey species or Macrozamia riedlei and Mesomelana sp. Photographs and aerial photography of the area indicated that upperstorey vegetation is relatively sparse, and not well represented in

comparison to other areas of vegetation within the local area.

Although vegetation within the site would provide habitat to some native fauna, its extent and quality make it unlikely to provide significant habitat or act as a significant ecological linkage.

Methodology Bowman Bishaw Gorham (2004)

(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 Declare Rare or Priority Flora (DRF) within Lot 569 Baldvis Road. The local area surrounding the proposal (defined as a 10km radius of the property) contains 11 known populations of DRF, although none of these exist within the same vegetation complex as that on Lot 569. Based on the current condition of the vegetation, it is considered unlikely that any DRF would be impacted through the implementation of this proposal.

A flora survey conducted by Bowman Bishaw Gorham (2004) did not identify any DRF within the boundaries of the property.

Methodology GIS Database - Declared Rare and Priority Flora List - CALM 13/08/03
Bowman Bishaw Gorham (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 likely to be at variance to this Principle

There are no known Threatened Ecological Communities (TEC) present within the vegetation under application. The local area surrounding the proposal (defined as a 10km radius of the property) contains 79 known TEC, although the majority of these are associated with the Quindalup Vegetation Complex, and not vegetation existing within Lot 569. It is considered unlikely that the clearing of vegetation within Lot 569 would impact on any TEC.

Methodology 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 may be at variance to this Principle

The vegetation proposed to be cleared is comprised of Beard associations 999 and 1001, which have a representation of 11.8% and 27.6% respectively. The area is also classified by Heddle (1980), as Karrakatta Complex - Central & South, which has a representation of 29.5%. These figures are below the 30% representation level committed to by the State Government within the National Objectives Targets for Biodiversity Conservation 2001-2005 (AGPS, 2001).

reserves/CALM-	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in managed land
IBRA Bioregion	1,529,235	657,450	43%	Depleted	
City of Rockingham	24,326	8,534	35.1%	Depleted	
Beard vegetation association:					
- 1001	68,475	18,907	27.6%	Vulnerable	4.2%
- 998	51,094	18,320	35.9%	Depleted	32.9%
- 999	275,380	32,451	11.8%	Vulnerable	8.1%
Heddle vegetation complex:					
- Karrakatta Complex - Central & South		49,912	14,729	29.5%	Vulnerable
	2.5%				

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

Methodology Shepherd (2001)
Heddle (1980)
AGPS (2001)
Department of Natural Resources and Environment (2002)

(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

There are no wetlands or watercourses within the boundaries of Lot 569. Vegetation under application is located on a well-drained sandy ridge, and is not consistent with vegetation that grows in association with wet environments. Clearing of the vegetation under application is not likely to appreciably impact upon the groundwater table within the area.

Methodology GIS Database - Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE 15/09/04
Bowman Bishaw Gorham (2004)

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal may be at variance to this Principle

The soil type on which Lots 569 & 1263 are located is defined as undulating dune landscape with some steep dune slopes and underlain by aeolianite at depth. Associated are siliceous sands on the deeper dunes, especially on the western side of the unit; and leached sands on the more subdued dunes, especially on the eastern side of the unit where the properties are located.

The removal of vegetation from the proposed area will likely lead to an increase in the risks of both water and wind erosion on site.

Methodology GIS Database - Soils, Statewide - DA 11/99

(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 vegetation on under application is within relatively close proximity to Bush Forever sites 376 and 419, which are at an approximate distance of 1 km and 2 km respectively. Based on the condition of the vegetation under application, being highly altered with no remaining understorey species, it is not considered likely that this area contributes to the environmental values of these sites or as ecological linkages to them.

Methodology GIS Database - Bush Forever - MFP 07/01

(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

The area under application within Lot 569 Baldvis Road is located upon a well-drained sandy ridge. While the clearing of vegetation will lead to an increase in groundwater recharge, it is not expected that appreciable impacts to the quality of this resource will occur.

Methodology GIS Database - Soils, Statewide - DA 11/99

(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

Due to the size of the proposed clearing, and its position within the landscape, flooding impacts are not likely to occur as a result of this application.

Methodology GIS Database - Swan Coastal Plain South 1m Orthomosaic - DLI 01/04

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

Comments

No comment.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive Industry	Mechanical Removal	2.5	Grant	The assessable criteria have been addressed, and the proposal may be at variance to Principles (e) and (g) Principle (e): While the vegetation under application has been found to have a

representation lower than the recommended 30% level, the condition of the vegetation is highly degraded, and not likely to represent significant vegetation within the local area and Bioregion.

Principle (g): Lots 569 & 1263 Baldivis Road are licensed under Part V of the Environmental Protection Act 1986, for the purpose of Screening material, and also subject to a current Extractive Industry Licence issued by the City of Rockingham. These licences place conditions upon any development works, essentially limiting possible wind and water erosion.

The assessing officer therefore recommends that this proposal be granted.

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- Bowman Bishaw Gorham (2004). Lot 569 Baldivis Road, Baldivis Vegetation Survey. DoE TRIM ref: IN19737
- 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.
- Heddle, 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, 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.