



1. Application details

1.1. Permit application details

Permit application No.: 553/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Rex Michael Ryles

1.3. Property details

Property: M38/845
Local Government Area: Shire Of Laverton
Colloquial name: Mining Lease M38/845

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.2	4	Mechanical Removal	Miscellaneous
0.2	4	Mechanical Removal	Miscellaneous

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 109: Hummock grasslands, shrub steppe; Eucalyptus youngiana over hard spinifex. (Shepherd et al. 2001, Hopkins et al. 2001)	The area under application is less than half a hectare and is to be cleared to excavate sand for use in Laverton (pers. comm. Rex Ryles 9/8/2005).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The proponent described the area as Cyprus's (<i>Callitris</i> sp.) and stunted trees, the area has little understorey (spinifex) (pers. comm. Rex Ryles 9/8/05).
	From the photographs submitted by the proponent the vegetation appears to consist of small bushes and trees over sparse spinifex clumps on red sand. (Photograph of site submitted by proponent, 2005, Trim ref. KGI1186)		

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 area under application is less than one hectare and consists of only one vegetation association (Shepherd et al 2001, Hopkins et al 2001). The East Murchison Biogeographical subregion has species that are wide ranging and usually occur in at least one, and often several, adjoining subregions (Shepherd et al 2001, Hopkins et al 2001). It is unlikely that the small area under application would be of greater biodiversity than surrounding areas.

Methodology Shepherd et al (2001)
Hopkins et al (2001)

(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 consists of less than one hectare of vegetation similar to that in the surrounding areas and will not significantly reduce the available habitat for fauna in the region. It is therefore unlikely that the clearing will be at variance to this Principle.

Methodology GIS databases:
Pre-European Vegetation - DA 01/01

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

Comments **Proposal is not likely to be at variance to this Principle**
There are no known Declared Rare Flora mapped within the area under application or within 50km of the area under application.

Methodology 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 threatened ecological community.

Comments **Proposal is not likely to be at variance to this Principle**
There are no known Threatened Ecological Communities within the area under application or within 50km of the area under application.

Methodology GIS database:-
Threatened Ecological Communities - CALM 12/4/05

(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 outlines a target that prevents clearance of ecological communities with an extent below 30% of the that present Pre-European (Department of Natural Resources and Environment 2002, EPA 2000).

The vegetation within the area under application is a component of Beard Vegetation Association 109 (Hopkins et al. 2001) of which there is nearly 100% (>1,000,000 ha) of the pre-European extent remaining (Shepherd et al. 2001). This 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)
EPA (2000)
Department of Natural Resources and Environment (2002)
EPA (2000)

(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 nearest drainage line is over 1km from the area under application. The nearest salt pan/lake is 8km from the area under application. Therefore the vegetation under application is not considered to be associated with a watercourse or is wetland dependent.

Methodology GIS databases: -
Lakes 250K - GA
Rivers 250K - GA

(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 area under application is to be cleared to expose an area of dune for sand mining. Exposure of sand may increase the likelihood of wind erosion. The chief soil type is red earthy sand, scattered dunes and small breakaways. Given the small size of the area under application, the DoE considers that the clearing is not likely to be at variance to this Principle.

The DoIR has advised (TRIM Ref KG11228) that rehabilitation of the area is a condition of the mining lease. The assessing officer recognises that while this permit, should it be granted, be valid for two years, a condition on the mining lease, and for rehabilitation, is valid for a period of 21 years.

Methodology Mining Tenement Conditions - DOIR (DoE Trim Ref KG11228)

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 at variance to this Principle

There are no CALM managed lands or other reserves within the area under application or within 45km of the area under application.

Methodology GIS databases: -
WRC Estate - DOE 9/04
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 likely to be at variance to this Principle

The area under application is within the Laverton Public Drinking Water Source Area. However, the proposed clearing represents less than 0.5 ha within the Public Drinking Water Source Area of 263,000 ha (less than 0.01%). The effect of the clearing on the groundwater is unlikely to be significant. Therefore, the clearing as proposed is unlikely to be at variance with this Principle.

There are no drainage lines or watercourses within the immediate vicinity of the proposed clearing, therefore the clearing as proposed is unlikely to significantly impact on the surface water quality.

Methodology GIS database: -
Public Drinking Water Source Areas (PDWSAs) - DOE 28/4/05
Hydrology, Linear - DOE 01/02/04

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments Proposal is not likely to be at variance to this Principle

The drainage of surface water in the area under application is likely to be sheet flow over a wide area. The dune to be cleared is part of a plain between an area of hills to the east and south east and a lake to the west and north west. Drainage into the lake is from the north and north-east without many clearly defined drainage channels leading toward the lake.

The large area of this plain (approx. 34,000ha) compared to the small area under application (<0.5ha) indicates that the proposed clearing of native vegetation is unlikely to significantly affect the incidence or intensity of flooding.

Methodology GIS databases: -
Shaded relief - GA
Rivers 250K - GA
Pre-European Vegetation - DA 01/01

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

Comments

The Shire of Laverton had no adverse comment in relation to this clearing permit application.

There is no other RIWI Act licence, Works Approval or EP Act licence issues that will affect the area that has been applied to clear.

There is a Native Title Claim over the area under application by the Wongatha peoples. However, mining tenements for purposes consistent with the clearing have been granted so, therefore, the granting of a clearing permit is not a future act under the Native Title Act.

Methodology Direct interest submission - Shire of Laverton (DoE Trim Ref KGI885)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Miscellaneous	Mechanical Removal	0.2 4	Grant	The application has been assessed and the clearing as proposed is not or not likely to be at variance with the Clearing Principles. The DoIR has advised that rehabilitation is a condition of the mining lease, which is valid for a period of 21 years. This clearing permit will be valid for a period of two years and as mining will continue beyond expiry of this permit, revegetation cannot

occur until full extraction of the sand and cannot, therefore, practically be included as a condition of this permit.

The assessing officer therefore advises that the permit be granted.

Miscellaneous Mechanical 0.2 4
Removal

5. References

- CALM (2003) A biodiversity audit of Western Australia's 53 Biogeographical Subregions in 2002, Department of Conservation and Land Management, Western Australia.
- 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.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALM Science 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.

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)