



## 1. Application details

### 1.1. Permit application details

Permit application No.: 2488/1  
 Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Doyles Lime Service

### 1.3. Property details

Property: LOT 4 ON PLAN 15419 (Lot No. 4 LUDLOW MYALUP 6220)  
 LOT 4 ON PLAN 15419 (Lot No. 4 LUDLOW MYALUP 6220)  
 LOT 5 ON PLAN 15419 (Lot No. 5 LUDLOW MYALUP 6220)  
 LOT 5 ON PLAN 15419 (Lot No. 5 LUDLOW MYALUP 6220)

Local Government Area: Shire Of Harvey  
 Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7.6		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 complex 998: Medium woodland; tuart	Clearing of 2 areas (west; 2.3ha, east; 5.3ha) totalling 7.6ha of native vegetation for the purpose of Extractive Industry.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation condition determined from aerial mapping Swan Coastal Plain South 40cm Orthomosaic DLI 05
	The vegetation is of a similar condition (good) with the exception of the northern portion of the eastern area which is an old pit (degraded).		
Beard vegetation complex 998: Medium woodland; tuart	Clearing of 2 areas (west; 2.3ha, east; 5.3ha) totalling 7.6ha of native vegetation for the purpose of Extractive Industry.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition determined from aerial mapping Swan Coastal Plain South 40cm Orthomosaic DLI 05
	The vegetation is of a similar condition (good) with the exception of the northern portion of the eastern area which is an old pit (degraded).		

## 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**  
 The proposal to clear up to 7.6ha of native vegetation in good to degraded (Keighery, 1994) condition for the purpose of extractive industry.

A flora survey conducted by Landform Research (2008) found no rare or priority flora in either of the 100m square sample plots within the application areas. However GIS mapping suggests that 3 priority species may occur within the application area; namely *Conostylis pauciflora* subsp. *pauciflora* (P4), *Hibbertia spicata* subsp. *leptotheca* (P3) and *Stylidium maritimum* (P3), all of which occur on the same soil and vegetation as the applied

area approximately 1 km north west of the applied area.

There are 5 records of declared threatened fauna occurring within the local area however due to the condition of the vegetation it is considered unlikely that the applied area is a significant habitat in the local area (10km radius) for fauna indigenous to Western Australia.

There are 2 declared plants (pest weeds) within the area under application namely Cotton Bush and Apple of Sodom.

The area under application also borders the Yarloop ecological linkage (identified by the Greater Bunbury Regional Scheme) and removal of the vegetation may incrementally degrade this corridor.

The clearing as proposed maybe at variance to this principle as it is supporting an ecological corridor.

Conditions for revegetation and weed management will be placed on the permit in order to minimise the impact on this corridor.

**Methodology** Keighery (1994)  
GIS Database:  
Declared Rare and Priority Flora List - CALM 13/08/03  
SAC Biodatasets - accessed 19 June 08  
Hydrography linear - DOW 13/7/06  
Soils, Statewide DA 11/99  
Swan Coastal Plain South 40cm Orthomosaic DLI 05

**(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 proposal to clear up to 7.6ha of native vegetation in good to degraded (Keighery, 1994) condition for the purpose of extractive industry.

There are 5 records of declared threatened fauna occurring within the local area however due to the condition of the vegetation and given there are nearby areas of more suitable habitat it is considered unlikely that the applied area is a significant habitat for fauna indigenous to Western Australia.

Therefore the clearing as proposed is not likely to be at variance to this principle.

**Methodology** Keighery (1994)  
SAC Biodatasets - accessed 19 June 08  
Swan Coastal Plain South 40cm Orthomosaic DLI 05

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

**Comments** **Proposal is not at variance to this Principle**  
There are no rare flora within a 10km radius of the application area.

Therefore the clearing as proposed is not at variance to this principle.

**Methodology** GIS Database:  
Declared Rare and Priority Flora List - CALM 13/08/03  
SAC Biodatasets - accessed 19 June 08

**(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**  
The applied area lies approximately 100m from the buffer zone for a Threatened Ecological Community (TEC) (SCP18; ELLIS02), due to the distance between the applied area and the TEC it is unlikely that the area under application is necessary for the maintenance of this TEC.

Therefore the clearing as proposed is not likely to be at variance to this principle.

**Methodology** GIS Database:  
SAC Biodatasets - accessed 19 June 08

**(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 proposal to clear up to 7.6ha of native vegetation in good to degraded (Keighery, 1994) condition for the purpose of extractive industry.

The applied area is within the Swan Coastal Plain Interim Biogeographic Region and is mapped as Beard vegetation association 998: Medium woodland; tuart (super group: open woodland, marri wandoo and river gum). (Hopkins et al., 2001; Shepherd, 2006)

There is approximately 41.8% of the pre-European extent remaining of Beard vegetation association 998 of which 27.3% is currently in conservation reserves.

The areas proposed to be cleared are not considered to be significant as a remnant in an extensively cleared landscape due to the condition of the applied area relative to nearby vegetated areas.

Therefore the clearing as proposed is not likely to be at variance to this principle.

**Methodology** Keighery (1994)  
Hopkins et al. (2001)  
Shepherd (2006)

GIS Database:  
Swan Coastal Plain South 40cm Orthomosaic DLI 05  
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 proposal to clear up to 7.6ha of native vegetation in good to degraded (Keighery, 1994) condition for the purpose of extractive industry.

The applied area is approximately 800m east (at its closest point) of Preston Lake and is therefore outside the recommended buffer zone (200m) (EPA, 2000). Despite the degraded condition of approximate 350m of the buffer it is not likely that the clearing as proposed will impact on Preston Lake.

There is also a major drain approximately 800m east of the application area however clearing is not expected to have any impact on this watercourse.

Given the distances between the applied area and the nearby watercourses the clearing as proposed is not likely to be at variance to this principle.

**Methodology** EPA (2000)

GIS Database:  
Swan Coastal Plain South 40cm Orthomosaic DLI 05  
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 11/04/07  
Hydrography linear - DOW 13/7/06  
Hydrography linear (hierarchy) DoW 13/7/06  
Ramsar wetlands - DEC 03  
South Coast Significant Wetlands WRC 10/06/2003  
ANCA wetlands - Environment Australia 26/3/99

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

**Comments Proposal is at variance to this Principle**

The proposal to clear up to 7.6 ha of native vegetation in good to degraded (Keighery, 1994) condition for the purpose of extractive industry.

Salinity risk of the applied area has not been mapped however there are areas of high to medium risk approximately 1.5km east on the same soil and vegetation as the applied area. The groundwater salinity level is currently mapped between 500 to 1000 mg/L.

The Department of Environment (now Department of Environment and Conservation) determined that in the coastal strip of the Shire of Harvey (of which this application is included) extractive industry has shown no

significant impacts of the quality of groundwater from pollution, nor has it been shown to increase salinity (DoE, 2006).

The soils of the application area are mapped as B24: undulating dune landscape underlain by aeolianite which is frequently exposed; small swales of estuarine deposits are included: chief soils are siliceous sands with smaller areas of brown sands and leached sands in the wetter sites. (Northcote et al., 2001)

As the soils are chiefly sands, clearing of native vegetation is likely to cause wind erosion within the application area.

The clearing as proposed is at variance to this principle as wind erosion is likely to occur.

Conditions will be placed on the permit to control wind erosion.

**Methodology** Keighery (1994)  
Northcote et al., (2001)  
DoE (2006)  
GIS Database:  
Acid Sulfate Soil Risk Map, Swan coastal Plain - DEC 07/08/06  
Swan Coastal Plain South 40cm Orthomosaic DLI 05  
Average Annual Rainfall Isohyets - WRC 29/09/98  
Annual Evaporation Contours (Isopleths) - WRC 29/09/98  
Hydrographic catchments, catchments - DoW 01/06/07  
Hydrographic catchments, subcatchments - DoW 01/06/07  
Hydrography, linear - DOW 13/7/06  
Salinity Risk LM 25m - DOLA 00  
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 proposal to clear up to 7.6 ha of native vegetation in good to degraded (Keighery, 1994) condition for the purpose of extractive industry.

The application area is located 750m south of Yalgorup National Park and the applied area has been identified as having 2 declared plants (pest weeds) namely Cotton Bush and Apple of Sodom.

The clearing as proposed is not likely to impact on the environmental values of the Yalgorup National Park due to the distance between the conservation area and the applied area.

Therefore the clearing as proposed is not likely to be at variance to this principle.

**Methodology** Keighery (1994)

GIS Database:  
Swan Coastal Plain South 40cm Orthomosaic DLI 05  
CALM Managed Lands and Waters - CALM 01/06/05

**(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 proposal to clear up to 7.6 ha of native vegetation in good to degraded (Keighery, 1994) condition for the purpose of extractive industry.

The applied area is within the South West Coastal groundwater area gazetted for water management. The hydrogeography of the area is categorised as surficial sediments with shallow aquifers.

The application area is 800m from the nearest watercourse and is therefore considered unlikely to have any impact on surface water quality in the area.

The Department of Environment (now the Department of Environment and Conservation) determined that in the coastal strip of the Shire of Harvey (of which this application is included) extractive industry has shown no significant impacts of the quality of groundwater from pollution, nor has it been shown to increase salinity (DoE, 2006).

Clearing of the vegetation within the applied area is not likely to impact on the quality of surface or groundwater, therefore the clearing as proposed is not likely to be at variance to this principle.

**Methodology** Keighery (1994)  
DoE (2006)

GIS Database:  
Swan Coastal Plain South 40cm Orthomosaic DLI 05  
Average Annual Rainfall Isohyets - WRC 29/09/98  
Annual Evaporation Contours (Isopleths) - WRC 29/09/98  
Hydrographic catchments, catchments - DoW 01/06/07  
Hydrographic catchments, subcatchments - DoW 01/06/07  
Hydrography, linear - DOW 13/7/06  
Salinity Risk LM 25m - DOLA 00  
Topographic contours statewide - DOLA and ARMY 12/09/02  
Soils, Statewide DA 11/99

**(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 soils of the application area are mapped as B24: undulating dune landscape underlain by aeolianite which is frequently exposed; small swales of estuarine deposits are included: chief soils are siliceous sands with smaller areas of brown sands and leached sands in the wetter sites. (Northcote et al., 2001)

As the soils are chiefly sands clearing of native vegetation is not likely to flooding as the soil profile has a high infiltration rate.

Therefore the clearing as proposed is not likely to be at variance with this principle.

**Methodology** Northcote et al., (2001)

GIS Database:  
Swan Coastal Plain South 40cm Orthomosaic DLI 05  
Average Annual Rainfall Isohyets - WRC 29/09/98  
Annual Evaporation Contours (Isopleths) - WRC 29/09/98  
Soils, Statewide DA 11/99  
Hydrography, linear - DOW 13/7/06

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

**Comments**

There is a registered Native Title claim over the applied area for the Gnaala Karla Booja peoples however the claim is extinguished by the designation of the land to a Registered Proprietor (freehold).

The proposed clearing is within the South West Coastal groundwater area gazetted for water management under the Rights in Water and Irrigation Act 1914 (RIWI) by the Department of Water (DoW).

An Extractive Industry Development Approval has been provided from the Shire of Harvey. (Trim Ref DOC59482)

The applicant has provided documentation Excavation and Rehabilitation Management Program which details the management proposals intended to be implemented to maintain / manage the environmental values of Lot 4 Ludlow Road (DOC 52844).

**Methodology** Native Title Claims - LA 2/5/07

**4. Assessor's comments**

**Comment**

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to principle (g), may be at variance to principle (a), is not likely to be at variance to principle (b), (d), (e), (f), (h), (i) and (j) and is not at variance to principle (c).

**5. References**

- DoE (2006) Extractive Industries within the Coastal Strip of the Shire of Harvey (Limestone and Sand), Department of Environment South West Guideline Series, Department of Environment.
- 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.