



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5027/1
File Number: 2011/004721-1
Duration of Permit: From 15 June 2012 to 15 June 2014

PERMIT HOLDER

Alcoa of Australia Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 151 on Plan 10914, OAKLEY 6208

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.1 hectares of native vegetation within the area hatched yellow on attached Plan 5027/1.

CONDITIONS

1. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) shall only move soils in *dry conditions*;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

DEFINITIONS

The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

24 May 2012

Plan 5027/1



LEGEND

- Clearing Instruments
-  Areas Approved to Clear
 -  Road Centrelines

Perth Metropolitan South
15cm Orthomosaic - Landgate
2011




0 50 m

Scale 1:2069
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

 Date: 24/5/12
K. Faulkner

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



Department of
Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 5027/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Alcoa of Australia Ltd

1.3. Property details

Property: LOT 151 ON PLAN 10914 (OAKLEY 6208)
Local Government Area: Shire of Murray
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.1		Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 24 May 2012

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 area under application has been mapped as Beard Vegetation Association 968 and Heddle Complex Guildford. Mapped Beard Vegetation Association 968 is described as 'Medium woodland; jarrah, marri and wandoo' (Shepherd et al, 2001). Heddle Vegetation Comple: Guildford Complex is described as 'A mixture of open forest to tall open forest of <i>Corymbia calophylla</i> (Marri) - <i>Eucalyptus wandoo</i> (Wandoo) - <i>Eucalyptus marginata</i> (Jarrah) and woodland of <i>Eucalyptus wandoo</i> (Wandoo) (with rare occurrences of <i>Eucalyptus lane-poolei</i> (Salmon White Gum)). Minor components include <i>Eucalyptus rudis</i> (Flooded Gum) - <i>Melaleuca raphiophylla</i> (Swamp Paperbark) (Heddle et al 1980).	The proposed clearing of 0.1 hectares of native vegetation is for the purpose of haul road construction. The vegetation under application includes a patch of Marri, some isolated remnant trees and some regrowth from historical clearing activities (Alcoa of Australia, 2012). The vegetation is in a degraded (Keighery, 1994) condition.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition of the vegetation was determined through aerial imagery (Perth Metropolitan South 15cm Orthomosaic-Landgate 2011).

3. Assessment of application against clearing principles

Comments

The proposed clearing of 0.1 hectares of native vegetation is for the purpose of haul road construction.

The vegetation under application consist of wandoo, jarrah and marri in a degraded to completely degraded

(Keighery, 1994) condition.

Rare flora species, *Diuris purdiei* and *Synaphea stenoloba* have been recorded within the local area (10km radius). A flora survey undertaken in October and November 2004 did not identify any rare flora within the application area (Woodman Environmental Consulting, 2004). Given this and that the vegetation under application is in a degraded (Keighery 1994) condition, it is not likely for these species to occur within the application area.

The area under application is mapped within a multiple use palusplain wetland and may contain riparian vegetation. However, this type of wetland has few important ecological attributes and functions remaining (Water and Rivers, 2001). A minor perennial watercourse is located 0.01km north of the application area. Therefore, the proposed clearing may be at variance to Principle (f), and is not likely to be at variance to the remaining principles.

Methodology

References:

(Keighery, 1994)
(Woodman Environmental Consulting, 2004)
(Water and Rivers Commission 2001)

GIS Databases

-SAC Biodatasets
-Hydrography linear (hierarchy)
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
-Pre European Vegetation Mapping

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

Comments

The area under application is mapped within the Murray River surface and groundwater area which is an area proclaimed under the Rights in Water and Irrigation Act 1914

The area under application is zoned as Rural under the Metropolitan Regional Scheme.

Methodology

4. References

- Alcoa of Australia Ltd (2012) Clearing Permit Application for CPS 5027, supporting documentation (DEC Ref: A495757).
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.
Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.
Woodman Environmental Consulting Pty Ltd (2011) Vegetation Survey of Pinjarra Farmlands Area under Application for Rezoning. Prepared for Alcoa World Alumina Australia. DEC ref A398259.

5. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
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 DEC)