GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5274/1
Permit Holder:	Becker Underwood Pty Ltd
Duration of Permit:	7 December 2012 to 7 December 2017

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I –CLEARING AUTHORISED

1. **Purpose for which clearing may be done**
   Clearing for the purpose of establishing a firebreak

2. **Land on which clearing is to be done**
   Lot 12811 on Deposited Plan 210271, Mordalup

3. **Area of Clearing**
   The Permit Holder must not clear more than 0.4 hectares of native vegetation within the area hatched yellow on attached Plan 5274/1.

4. **Application**
   This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

6. **Compliance with Assessment Sequence and Management Procedures**
   Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. **Avoid, minimise etc clearing**
   In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:
   (a) avoid the clearing of native vegetation;
   (b) minimise the amount of native vegetation to be cleared; and
   (c) reduce the impact of clearing on any environmental value.

8. **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) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
   (c) 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;

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

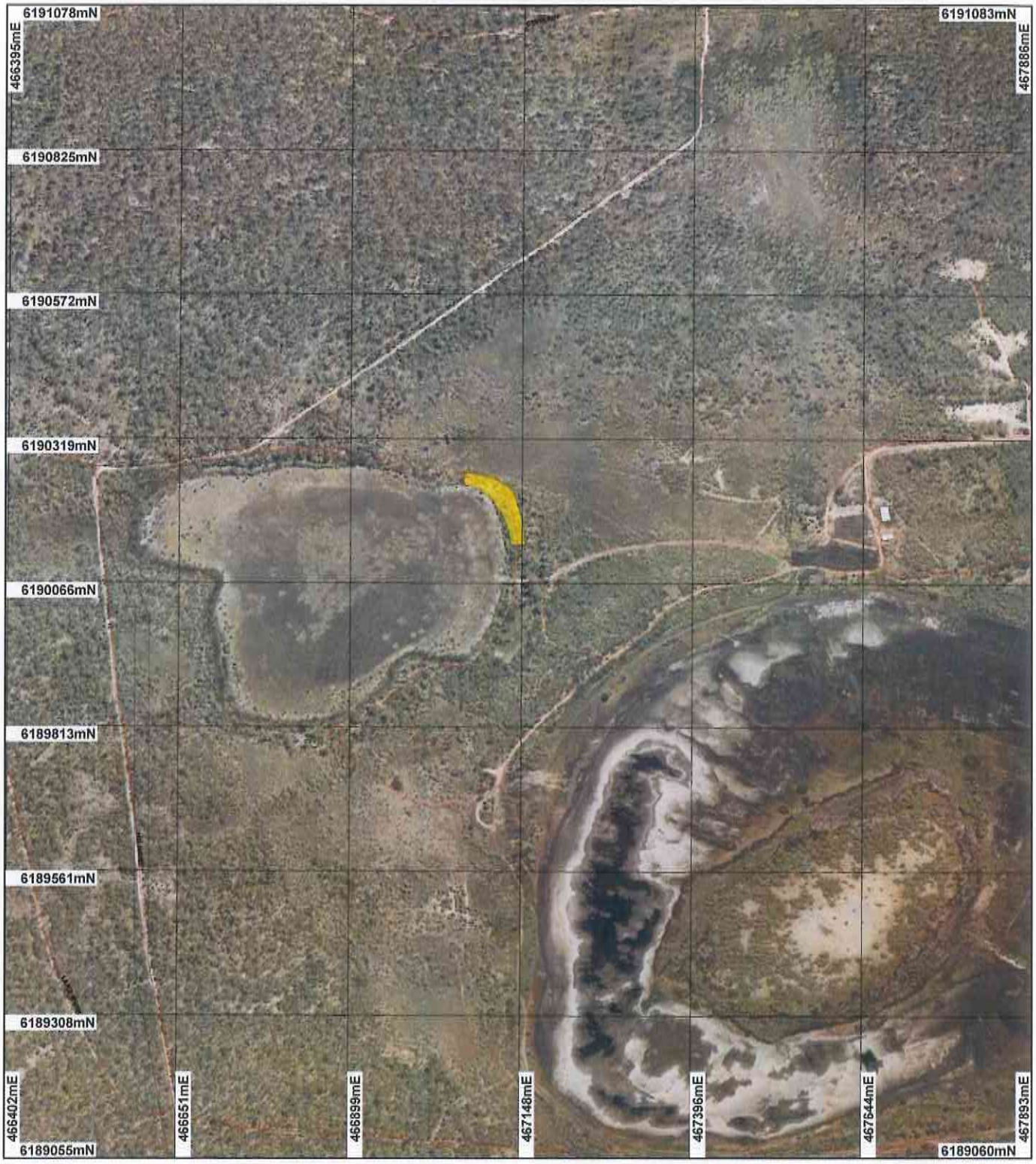
mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

M Warnock
MANAGER COMPLIANCE AND AUDIT SECTION
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

15 November 2012

Plan 5274/1



LEGEND

Clearing Instruments

- Areas Approved to Clear
- Road Centrelines
- Cadastre
  --> Image Index
  (cont)

- Recently added
- Coverage

Tonebridge 50cm Orthomosaic - Landgate 2004

N

0 ~250 m

Scale 1:8885
(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 15/11/12

M Warnock

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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

Department of Environment and Conservation

Our environment, our future

* Project Data. This data has not been quality assured. Please contact map author for details.

Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5274/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Becker Underwood Pty Ltd

1.3. Property details

Property: LOT 12811 ON PLAN 210271 (MORDALUP 6258)
Local Government Area: Shire of Manjimup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.4		Mechanical Removal	Hazard reduction or fire control

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 15 November 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 Associations 27 and 126, and Mattiske Vegetation Complex YR: 27: Low woodland; paperbark (Melaleuca sp.). 126: Bare areas; freshwater lakes. (Shepherd et al, 2001). YR: Mosaic of open woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla, open woodland of Melaleuca cuticularis, open woodland of Melaleuca preissiana-Banksia littoralis-Banksia seminuda, tall shrubland of Myrtaceae spp. and sedgelands on broad depressions in humid and subhumid zones (Mattiske and Havel, 1980).	This application proposes to clear up to 0.4 hectares of native vegetation for the purpose of establishing a firebreak around a wetland. The vegetation within the application area is predominately Eucalyptus and Melaleuca woodland (DMP, 2012). The area under application has been previously cleared for a firebreak, however there has been a large amount of regeneration and the area is currently in a very good to excellent (Keighery, 1994) condition (DMP, 2012).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994) To Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The condition of the vegetation was determined via a site inspection conducted by the Department of Mines and Petroleum (DMP, 2012) and via digital imagery (Tonebridge 50cm Orthomosaic - Landgate 2004).

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

This application proposes to clear up to 0.4 hectare of native vegetation within Lot 12811 on Deposited Plan 210271, Mordalup, for the purpose of establishing a firebreak around a peat swamp.

The majority of the proposed firebreak occurs within a mining tenement and is being assessed by the Department of Mines and Petroleum.

The area under application is in a very good to excellent (Keighery, 1994) condition.

Numerous priority and rare flora species have been mapped within the local area on the same vegetation and soil types as the application area. Rare flora has been mapped as close as 200 metres from the application area. The applicant has advised that the area will be cleared via slashing which will cause minimal ground disturbance.

No priority ecological communities have been recorded within the local area (10km radius).

Given the very good to excellent (Keighery, 1994) condition of the area under application it may contain a high level of biodiversity.

The proposed clearing may be at variance to this principle.

Methodology References:
Keighery (1994)

GIS Database:
- Pre European Vegetation
- SAC Biodatasets - accessed October 2012

(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**
Numerous fauna species have been mapped within the local area (10km radius), including Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black Cockatoo), Calyptorhynchus baudinii (Baudin's Cockatoo (long-billed black-cockatoo)), Calyptorhynchus latirostris (Carnaby's Cockatoo (short-billed black-cockatoo)), Dasyurus geoffroii (Chuditch, Western Quoll), Galaxiella munda (Western Mud Minnow), Myrmecobius fasciatus (Numbat), Nannatherina balstoni (Balston's Pygmy Perch), Phascogale tapoatafa subsp. tapoatafa (Southern Brush-tailed Phascogale, Wambenger)and Pseudocheirus occidentalis (Western Ringtail Possum). All of these species are listed as 'rare or likely to become extinct' under the Wildlife Conservation Act 1950 (DEC, 2007-).

It is the applicant's intention to clear regrowth vegetation which covers an existing firebreak. The regrowth vegetation is to be cleared via slashing. This means of clearing will have minimal impact on fauna.

The local area (10km radius) surrounding the application area retains approximately 70 per cent vegetation cover.

Given the large amount of vegetation remaining in the local area and the low impact means of clearing this application is not likely to be at variance to this principle.

Methodology References:
DEC (2007-)

GIS Database:
- Pre European Vegetation
- SAC Biodatasets - accessed October 2012

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

Comments **Proposal may be at variance to this Principle**
Two species of rare flora have been mapped within close proximity to the area under application. The application area contains favourable conditions for both of these species.

The applicant has advised that the area will be cleared via slashing which will cause minimal ground disturbance.

Clearing by slashing will have no long lasting impacts on rare flora or its habitat.

The proposed clearing may be at variance to this principle.

Methodology GIS Database:
- Pre European Vegetation
- SAC Biodatasets - accessed October 2012

(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**
No threatened ecological communities have been mapped within the local area (10km radius).

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

Methodology GIS Database:
- Pre European Vegetation

- SAC Biodatasets - accessed October 2012

(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 area under application is located within the Jarrah Forest Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 55 per cent of its Pre European vegetation extent remaining (Government of Western Australia, 2011).

The application area is mapped as Beard Vegetation Associations 27 and 126. These vegetation associations have approximately 77 and 27 per cent of their pre-European extent remaining in the Jarrah Forest bioregion respectively (Government of Western Australia, 2011). Mattiske Vegetation Complex YR retains approximately 63 per cent vegetation.

Digital imagery (Tonebridge 50cm Orthomosaic - Landgate 2004) indicates that the local area (10km radius) retains approximately 70 per cent vegetation.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The local area, Beard Vegetation Association 27 and Mattiske Vegetation Complex all retain above the nationally recommended threshold level.

This application is not likely to be at variance to this clearing principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Jarrah Forest	4,506,656	2,473,559	55	68
Shire*				
Shire of Manjimup	287,390	242,922	85	93
Beard Vegetation Association in Bioregion*				
27	49,877	38,554	77	77
126	9,957	2,732	27	60
Mattiske Vegetation Complex ***				
YR	19,259	12,090	63	56

*Government of Western Australia (2011)
**Mattiske and Havel (1980)

Methodology

References:
Commonwealth of Australia (2001)
Government of Western Australia (2011)
Mattiske and Havel (1980)

GIS Database:
- Tonebridge 50cm Orthomosaic - Landgate 2004
- Pre European Vegetation

(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 at variance to this Principle

The area under application surrounds a seasonally inundated sumpland and is surrounded by a seasonally waterlogged palusplain wetland.

The vegetation under application is predominately Eucalyptus and Melaleuca woodland (DMP, 2012).

Given the presence of wetland dependant vegetation the proposed clearing is at variance to this principle.

Methodology

GIS Database:
- Hydrogeology, Linear

(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 has been mapped as soil type Cd22, which Northcote (1960-68) describes as flat to gently undulating portions of lateritic plateau at moderate elevation, occasional low hills, chief soils are leached sands, underlain by thick ironstone gravel and boulder layers and mottled kaolinitic clays at depths below 2-5 ft.

The topography of the application area is relatively flat.

Give the small size of clearing, soil types present and the topography of the site appreciable land degradation is unlikely to occur.

The proposed clearing is not likely to be at variance to this principle.

Methodology

GIS Database:
- Pre European Vegetation
- SAC Biodatasets - accessed October 2012
- Topographic Contours, Statewide

(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 may be at variance to this Principle

Tone - Perup Nature Reserve is located within 250 metres of the application area. The proposed clearing for the establishment of a fire break may assist in protecting the Nature Reserve in the event of a wildfire.

The disturbance caused by the proposed clearing will increase the likelihood of weeds and dieback being introduced/spread into this conservation area. Weed and dieback management practices will assist in mitigating this risk.

The proposed clearing may be at variance to this principle.

Methodology

GIS Database:
- DEC Tenure

(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 groundwater salinity within the application area is 3000 - 7000 milligrams per litre of Total Dissolved Solids. This level of groundwater salinity is considered to be brackish to moderately saline. The removal of the 0.4 under application is not likely to increase the level of groundwater salinity.

The area under application surrounds a seasonally inundated sumpland and is surrounded by a seasonally waterlogged palusplain wetland.

The proposed clearing may result in some short term increase sedimentation levels within these seasonally wet areas, however long term impacts are likely to be minimal.

This application is not likely to at variance to this principle.

Methodology

GIS Database:
- Groundwater Salinity Statewide
- Hydrogeology, Linear

(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

Given the small area under application, the proposed clearing is not likely to increase the incidence or intensity of flooding.

Therefore, the application is not likely to be at variance to this principle.

Methodology

GIS Database:
- Groundwater Salinity Statewide
- Hydrogeology, Linear

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

Comments

The majority of the proposed firebreak occurs within a mining tenement and is being assessed by the Department of Mines and Petroleum.

The application area falls within the Deep River Water Reserve which is a Public Drinking Water Source Area. The Department of Water has advised that the proposed clearing may have a short-term negative impact upon the individual wetland, however the effect of a fire upon peat wetlands would sustain a far greater, long term impact (DoW, 2012). Fire could also spread to other wetlands in the Byenup lagoon system and Lake Muir, given the hydrological inter-connectivity of the wetlands (DoW, 2012).

The Shire of Manjimup has advised that the Shire has no objection to the clearing and that there is no planning or other matters which would affect this proposal (Shire of Manjimup, 2012).

The area under application falls within a mapped Aboriginal Sit of Significance - Yeriminup/Frankland Hunting and Camping Area. The applicant will be notified of their responsibilities under the Aboriginal Heritage Act 1972.

A native title claim exists over the area under application. The Southern Noongar Native Title Claimants and their representative body have been notified of the clearing application. No comments have been received.

No public submissions have been received in relation to this application.

Methodology

References:
DoW (2012)
Shire of Manjimup (2012)

GIS Database:
-Aboriginal Sites of Significance
- Native Title Determinations
- Public Drinking Water Sourse Areas

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: http://naturemap.dec.wa.gov.au/. Accessed October 2012

DMP (2012) Site Inspection Report for Clearing Permit Application CPS 5211/1. Site inspection undertaken 26 October 2012. Department of Mines and Petroleum, Western Australia (DEC Ref: A555851).

DoW (2012) Advice for Clearing Permit Application CPS 5274/1. Department of Water, Western Australia (DEC Ref: A559156).

Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.

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.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

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.

Shire of Manjimup (2012) Planning advice for Clearing Permit Application CPS 5274/1 (DEC Ref: A557956).

5. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
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