GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4516 / 1
File Number: 2011/06682-1
Duration of Permit: From 31 October 2011 to 31 October 2013

PERMIT HOLDER

Mecca Holdings Pty Ltd and Kandalee Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

LOT 60 ON DIAGRAM 59263 (House No. 394 ROBERTSON CARDUP 6122)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 3 hectares of native vegetation within the area cross hatched yellow on attached Plan 4516/1.

CONDITIONS

1. **Fauna management**
   (a) Prior to undertaking any clearing authorised under this Permit, the areas shall be inspected by a *fauna specialist* who shall identify *habitat tree(s)* suitable to be utilised as habitat by Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*), Baudin's Cockatoo (*Calyptorhynchus baudinii)* or Forest Redtailed Black Cockatoo (*Calyptorhynchus banksii naso*).
   (b) The Permit Holder shall retain *habitat tree(s)* identified under condition 1(a).

2. **Dieback 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 introduction and spread of 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-affected soil, mulch, fill or other material is brought into an area that is not affected by dieback; and
   (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. **Records to be kept**
   (a) In relation to fauna management pursuant to condition 1 of this Permit:
      (i) the location of each habitat tree identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
      (ii) the species name of fauna reasonably likely to utilise, or that have been observed utilising, the habitat/habitat tree(s).

4. **Reporting**
   (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
      (i) of records required under condition 3 of this Permit; and
      (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
   (b) Prior to 17 July 2013, the Permit Holder must provide to the CEO a written report of records required under condition 3 of this Permit where these records have not already been provided under condition 4(a) of this Permit.

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;

habitat tree(s) means trees that have a diameter, at average adult human chest height, of greater than 70cm, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

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;

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

6 October 2011

Plan 4516/1

LEGEND

Clearing Instruments

- Areas Approved to Clear
- Road Centrelines
- Cadastre for labelling

Swan Coastal Plain Central
20cm Orthomosaic - Landgate
2009

N

0 ~62 m

Scale 1:2270
(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 6/10/11

Kelly Faulkner

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

Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4516/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Mecca Holdings Pty Ltd and Kandalee Pty Ltd**

1.3. Property details

Property: LOT 60 ON DIAGRAM 59263 (House No. 394 ROBERTSON CARDUP 6122)
Local Government Area: Shire of Serpentine Jarrahdale
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3		Mechanical Removal	Building or Structure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 6 October 2011

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 vegetation within the application area is described as: Beard vegetation association 968 medium woodland; jarrah, marri and wandoo (Shepherd 2007). Heddle vegetation complex: Guildford Complex described as open forest to tall open forest and woodland.	The application area consists of an open woodland of Corymbia calophylla over Kingia australia over scattered Banksia dallanneyi and sedges over pasture grass. The vegetation under application is in a degraded (Keighery, 1994) condition. Adjacent to the application area is an area currently under investigation for clearing, ICMS21937	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition of the vegetation under application was determined through the site visit conducted by DEC (2011a).

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 application is to clear 3 hectares of native vegetation on Lot 60 Robertson Road, Cardup for the purpose of constructing a concrete lay down area. The applicant has advised that habitat trees will be retained and they are prepared to re-plant and re-establish where possible some of the native plants in the clear spaces within the adjoining bush area.

The vegetation within the application consists of an open woodland of Corymbia calophylla over Kingia australis over scattered Banksia dallanneyi and sedges over pasture grass (DEC 2011a). The vegetation is in a degraded (Keighery, 1994) condition. Due to the degraded (Keighery, 1994) condition, the application area is not likely to support a high level of biological diversity.

The application area contains a number of large, mature trees which are considered to be habitat trees as they have or are likely to develop hollows for fauna. One of the hollows observed contained a pair of galahs (DEC 2011a). The application is also with the flight path of the Carnaby black cockatoo and is a potential roosting site for this species, no Carnaby's were observed.

The vegetation south of the application, still within the property boundary, is fenced and in a good to very good (Keighery, 1994) condition. This vegetation consists of floristic community type 3b Corymbia calophylla Eucalyptus marginata woodlands on sandy clay soils of the southern Swan Coastal Plain and is listed as a Vulnerable threatened ecological community (DEC 2011b). This area comprises of a high level of biological diversity for bushland on the eastern side of the Swan Coastal Plain.

Considering the application area is in a degraded (Keighery, 1994) condition, the proposed clearing is not likely to be at variance to principle (a).

Methodology

References:
DEC (2011a)
DEC (2011b)
Keighery (1994)

GIS Database:
- Clearing Regulations - Environmentally Sensitive Areas
- ICMS Polygons - DEC current
- SAC Biodatasets - accessed 9 August 2011

(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 may be at variance to this Principle

The application area consists of mature Corymbia calophylla individuals that were identified during the site investigation to be very large. These species are considered to be habitat trees and currently contain or are likely to develop hollows for fauna. One of these trees was observed to currently contain hollows which were occupied by a pair of galahs, another tree was observed to contain a large nest (DEC 2011a). The applicant has advised that large habitat trees will be retained.

DEC (2011c) note that the application is within the flight path of the Carnaby's black cockatoo and the site is potentially a roosting site for these species. No Carnaby's cockatoos or Carnaby's feeding residue were observed during the site investigation (DEC 2011a).

During the site investigation (DEC 2011a) the applicant noted that no fauna has been observed in the application area and that kangaroos are common on the property in the adjacent bushland. It is likely that kangaroos also utilise the application area for feeding sites.

The closest recorded fauna species were quenda (priority 5) and the trapdoor spider (priority 1), located 1.2km east and 1.6km south respectively (DEC 2007). As the understorey is minimal, the application area is not likely to contain suitable habitat for small mammals such as quenda however, the application may be a suitable habitat for trapdoor spiders.

Given the condition of this vegetation, and the location, the value of fauna linkage is negligible and the value of fauna habitat is minor.

Due to the presence of habitat trees and linkages for avian fauna, the application may be at variance to principle (b).

Methodology

References:
DEC (2007)
DEC (2011a)
DEC (2011c)

GIS Database:
- SAC Biodatasets - accessed 9 August 2011

(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

No declared rare flora (DRF) were mapped within the application. The closest recorded DRF, Drakaea elastica is located over 1km away and is associated with winter wet areas (WA Herbarium, 1998 -2011). This species is not likely to occur within the application area as it requires different soil types and hydrological requirements.

Due to the degraded (Keighery, 1994) condition of the application area it is not likely that DRF occur at the site. The application is not likely to be at variance to principle (c).

Methodology

References:
Keighery (1994)

WA Herbarium (1998 -2011)

GIS Database:
- SAC Biodatasets - accessed 9 August 2011

(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 southern edge of the application area borders bushland in very good (Keighery, 1994) condition which aligns with FCT 3b Corymbia calophylla, Eucalyptus marginata woodland on sandy clay soils of the southern Swan Coastal Plain (Vulnerable) (DEC 2011b). This bushland borders two additional threatened ecological communities (TECs) including types 3b, 20b Banksia attenuata and/or Eucalyptus marginata woodlands of the eastern side of the Swan Coastal Plain (Endangered) and a priority ecological community Eucalyptus haematoxylin, Eucalyptus marginata woodlands on the Whicher Scarp (DEC 2011b). To the immediate west of the application area is additional occurrences of TEC type 3b (DEC 2011b).

Due to the degraded (Keighery, 1994) condition of the application area it is not considered to be representative of TEC type 3b nor be necessary for the maintenance of adjacent TECs.

Given the above the vegetation under application is not likely to be at variance to this clearing principle.

Methodology

References:
DEC (2011b)
Keighery (1994)

GIS Database:
- SAC Biodatasets - accessed 9 August 2011

(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 application area is within Beard vegetation association 968 of which 7% is remaining in the Swan Coastal Plain bioregion (Shepherd 2007). It is also within the Heddle vegetation complex: Guildford of which only 5.5% is remaining in the Swan Coastal Plain bioregion. Should clearing be granted, vegetation is calculated to remain as 7% and 5.5%.

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 application is within a constrained area and within constrained areas (i.e. areas if urban, urban deferred or industrial zoned land or land with existing development approvals in cities and major towns) on the Swan Coastal Plain the target for representation of the pre-clearing extent of a particular native vegetation complex is 10 % (EPA 2006).

The proposed clearing is in a degraded (Keighery 1994) condition and therefore is not significant as a remnant.

The application is in an area that has been extensively cleared however the vegetation under application is not significant as a remnant. The application is not likely to be at variance with principle (e).

Methodology

References:
Commonwealth of Australia (2001)
EPA (2006)
Keighery (1994)
Heddle et al (1980)
Shepherd (2007)

GIS Database:
- Local Government Authorities
- Pre European Vegetation
- SAC Biodatasets - accessed 9 August 2011

(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 area under application is not located within a watercourse or a wetland. A Multiple Use management category wetland is located 12m to the north west of the application. The closest watercourse is approximately 400m south. No riparian or wetland dependant vegetation was observed during the site investigation (DEC

2011a).

The application is not likely to be at variance with principle (f).

Methodology

References:
DEC (2011a)

GIS Database:
- ANCA Wetlands
- Geomorphic Wetlands (Mt Categories), Swan Coastal Plain
- 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 vegetation under application is located in sandy acidic yellow mottled soils containing ironstone gravel (Northcote et al, 1960-68).

The proposed removal of vegetation is unlikely to contribute to appreciable land degradation if practices to control wind erosion are adopted. The risk of salinity and waterlogging from the clearing is also likely to be minimal due to the depth to the groundwater measured at approximately 30m.

With reference to the above information the application is not likely to be at variance to principle (g).

Methodology

References:
Northcote et al (1960-68)

GIS Database:
- Acid Sulphate Soil Risk Map, Swan Coastal Plain
- Hydrogeology, Statewide
- WIN groundwater sites

(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

The application is for 3 hectares within Lot 60 Robertson Road, Cardup. The southern portion of this property, including approximately 1 hectare of the application area is located within Bush Forever site 361 Norman Road Bushland. Bush Forever sites are considered to be significant as they support regionally significant vegetation, contains plant communities representative of the eastern side of the Swan Coastal Plain and regionally significant fragmented bushland/wetland linkages (Government of Western Australia 2000).

The application area is connected to other Bush Forever sites including sites 350 to the west (fragmented by a road) and 354 to the south (Government of Western Australia). DEC (2011b) indicates that the ecological linkage provided by the application area is negligible as there is no continuous linkage to the north, east or west.

Due to the degraded (Keighery 1994) condition and only a continuous linkage to the south, the application may be at variance to principle (h).

Methodology

References:
Government of Western Australia (2000)
Keighery (1994)
DEC (2011b)

GIS Database:
- DEC Tenure
- Bush Forever

(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 application is not within a watercourse or wetland. The quality of surfacewater and groundwater are only likely to be affected, through sedimentation and diminished water quality, should appropriate drainage practices not be in place during and post clearing. The application did not specify proposed drainage mechanisms.

The application is not likely to be at variance to principle (i).

Methodology GIS Database:
- Hydrographic linear
- Geomorphic Wetlands (Mt Categories), Swan Coastal Plain
- WIN groundwater sites

(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

Large scale removal of wetland vegetation can affect local hydrology causing waterlogging. However, as the groundwater level is approximately 30m below the surface the removal of mature tree species is not likely to cause waterlogging.

The application is not likely to be at variance to principle (j).

Methodology GIS Database:
- Average Annual Rainfall Isohyets
- Hydrogeology, Linear
- Hydrogeology, Statewide
- WIN groundwater sites

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

Comments

The application is to clear native vegetation to construct a concrete lay down area. The applicant has advised that habitat trees will be retained and they are prepared to re-plant and re-establish, where possible, some of the native plants in the clear spaces within the adjoining bush area.

The land between the two application areas has been cleared and is currently under investigation as part of ICMS 21937.

Portions of the application area are mapped as an environmentally sensitive area due to Bush Forever.

The application area is currently zoned special use manufacturing/distribution timber.

The Land Conservation District Committee (2011) has advised that they do not support the application to clear as it is part of a regionally significant bushland in need of holistic protection and recommended that the following actions are taken should clearing occur; development of measurable offsets for the clearing, fencing of the Bush Forever boundary.

The Shire of Serpentine Jarrahdale (2011) has indicated that the application is not supported in its current form and should clearing occur recommends; fencing of the remaining bushland, conducting a vegetation survey to ensure no DRF or TECs are present, offset clearing, collects seeds before clearing.

The Department of Planning (State Strategic Policy) does not support the clearing of the bushland in the Guildford complex as it is underrepresented on the Swan Coastal Plain (DoP 2011).

Noting the request to place a fence on the side adjoining the Bushforever site. This vegetation is outside of the clearing boundary and it is unlikey the clearing activity will impact or cause inadvertant cleairng on this adjacent vegetation. As such conditions can not be imposed however it is noted that any subsequent clearing within this area will need to be done in accordance with the Clearing Provisions of the Environmental Protection Act 1986.

Methodology References;
DEC (2011a)
DoP (2011)
Land Conservation District Committee (2011)
Shire of Serpentine Jarrahdale (2011)

GIS Database:
ICMS DEC Polygons
Bush Forever
SAC Biodatasets - accessed 9 August 2011

4. References

Commonwealth of Australia (2001) National objectives and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra, ACT.

DEC (2007 - 2011) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation.

URL: http://naturemap.dec.wa.gov.au/. Accessed 9/08/2011.
DEC (2011a) Site Inspection Report for Clearing Permit Application CPS 4516/1, Lot 60 Robertson Road, Cardup. Site inspection undertaken 18/08/2011. Department of Environment and Conservation, Western Australia
DEC (2011b) DEC Species and Communities Advice for CPS 4516/1. Advice dated 24/08/2011. Department of Environment and Conservation. Western Australia.
DEC (2011c) DEC Regional Advice for CPS 4516/1. Email dated 9/08/2011. Department of Environment and Conservation. Western Australia.
Department of Planning (2011) Bush Forever advice for CPS 4516/1. Dated 18/08/2011. Department of Planning. Western Australia.
EPA (2006) Guidance for the Assessment of Environmental Factors - Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.
Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
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.
Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
Land Conservation District Committee (2011) Serpentine Jarrahdale LCDC advice for CPS 4516/1. Dated 19/08/2011. Western Australia.
Serpentine Jarrahdale Shire (2011) Advice for CPS 4516/1. Email dated 25/08/2011. Serpentine Jarrahdale Shire. Western Australia.
Shepherd, D.P. (2009) Adapted from: 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.
Western Australian Herbarium (1998-2011) FloraBase - The Western Australian Flora. Department of Environment and Conservation. http://florabase.dec.wa.gov.au/ (Accessed 9/08/2011).

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)