GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7642/1
Permit Holder:	Carbone Bros Pty Ltd
Duration of Permit:	21 October 2017 – 21 October 2027

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 gravel extraction.

2. **Land on which clearing is to be done**
   LOT 466 ON PLAN 105091, MYARA

3. **Area of Clearing**
   The Permit Holder must not clear more than four hectares of native vegetation within the area hatched yellow on attached Plan 7642/1.

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.

5. **Period in which clearing is authorised**
   The Permit Holder shall not clear any native vegetation after 21 October 2022.

PART II – MANAGEMENT CONDITIONS

6. **Fauna management**
   The Permit Holder shall not clear within 10 metres of *Black Cockatoo habitat trees* found within the area cross hatched yellow on attached Plan 7642/1.

7. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

(a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil

(b) prior to 31 December 2023 the permit holder must, *revegetate* and *rehabilitate* the areas that are no longer required for the purpose for which they were cleared under this Permit by:
  (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
  (ii) ripping the ground on the contour to remove soil compaction; and
  (iii) ripping the pit floor and contour batters within the extraction site; and
  (iv) laying the vegetative material and topsoil retained under condition 7(a) on the cleared area.

(c) within two years of laying the vegetative material and topsoil on the cleared area in accordance with condition 7(b) of this Permit the Permit Holder must:
  (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
  (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 7(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.

PART III - RECORD KEEPING AND REPORTING

8. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

(a) In relation to the clearing of native vegetation authorised under this Permit:
  (i) the species composition, structure and density of the cleared area;
  (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  (iii) the date that the area was cleared; and
  (iv) the size of the area cleared (in hectares).

(b) In relation to the revegetation and rehabilitation of areas pursuant to condition 7 of this Permit:
  (i) the location of any areas *revegetated* and *rehabilitated*, 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) a description of the *revegetation* and *rehabilitation* activities undertaken;
  (iii) the size of the area *revegetated* and *rehabilitated* (in hectares);
  (iv) the species composition, structure and density of *revegetation* and *rehabilitation*, and
  (v) a copy of the environmental specialist's report.

9. 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 8 of this Permit; and
   (ii) concerning activities done by the Permit Holder under this Permit between 1 July to 30 June of the preceding financial year.

(b) If no clearing authorised under this Permit was undertaken between 1 July to 30 June of the preceding financial year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.

DEFINITIONS

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

black cockatoo habitat tree(s): means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater and contain a hollow greater than 10 centimetres.
direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;
environmental specialist: means a person who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit, or who is approved by the CEO as a suitable environmental specialist.
local provenance means native vegetation seeds and propagating material from natural sources within 10 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared.
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;
optimal time means the period from April to June for undertaking *direct seeding*, and the period from May to June for undertaking *planting*;
planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;
regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;
rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;
revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

James Widenbar
MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

20 September 2017

Plan 7642/1

Legend

- Coastline
- Roads
- Imagery
- Clearing Instruments Activities

N

0 200m

1:7,333

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

..... Date 20/9/17

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

GOVERNMENT OF WESTERN AUSTRALIA

Government of Western Australia
Department of Environment Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7642/1
Permit type: Purpose Permit

1.2. Proponent details

Applicant's name: Carbone Bros Pty Ltd

1.3. Property details

Property: LOT 466 ON PLAN 105091, MYARA
Local Government Authority: MURRAY, SHIRE OF
DER Region: Greater Swan
DPaW District: PERTH HILLS
Localities: NORTH DANDALUP

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4	0	Mechanical Removal	Extractive industry

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 20 September 2017
Reasons for Decision: This application was received on 15 June 2017 and is for the clearing of four hectares of native vegetation for the purpose of gravel extraction.

The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing is at variance to principle (b) and is not likely to be at variance to any of the remaining clearing principles.

The Delegated Officer had regard to advice from the Department of Biodiversity, Conservation and Attractions (DBCA) and that the application area contains suitable habitat for black cokcatoos, including four hectares of foraging habitat and four potential habitat trees with hollows. The Delgated Officer noted the applicant's willingness to adopt avoidance measures regarding the four potential black cockatoo habitat trees.

In deciding to grant a clearing permit the Delegated Officer considered the requirement to retain the four habitat trees and provide a 10 metre buffer around each tree would minimise impacts to black cockatoo breeding habitat. The Delegated Officer also had regard to DBCA advice that the proposed clearing may not have a significant impact on black cockatoo's on a regional scale and the mitigation of impacts to black cockatoo foraging habitat through a requirement to revegetate the application area, post land use.

The Delegated Officer considered the outstanding development approval (extractive industry licence (EIL)) from the Shire of Murray was a relevant matter but noted that the applicant has a current EIL for the adjacent existing gravel extraction operation and the applicants advice that an extension to this licence is being obtained.

2. Background

2.1. Existing environment and information

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Mapped Mattiske vegetation complex D1 and is described as Open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla* on lateritic uplands in mainly humid and subhumid zones (Mattiske and Havel, 1998).	The clearing of four hectares of native vegetation within Lot 466 on Plan 105091, Myara for the purpose of gravel extraction.	Degraded	The condition and description of the vegetation was determined by photographs provided by the applicant (Lundstrom, 2017).

3. Assessment of application against clearing principles

Comments The application is to clear up to four hectares of native vegetation for the purpose of gravel extraction. The vegetation within the application area is *Eucalyptus marginata subsp. marginata-Corymbia calophylla* on lateritic uplands (Mattiske and Havel, 1998) and is considered to be in degraded (Keighery, 1994) condition.

Given the degraded (Keighery, 1994) condition of the vegetation, lack of understorey species and large extent of native vegetation in the local area (10km radius), the proposed clearing is not likely to impact on rare or priority flora, priority or threatened ecological communities within the local area and is not likely to be classified as clearing a significant remnant within a highly cleared landscape.

As no wetlands or watercourses are mapped within the application area and there will be vegetation remaining adjacent to the application area, the proposed clearing is not likely to impact on riparian vegetation, contribute to or cause land degradation, deteriorate the quality of ground water or surface water and is not likely to cause or exacerbate flooding.

The application area is likely to provided suitable nesting habitat for the Forest red-tailed Black Cockatoo, Baudin's Cockatoo and Carnaby's Cockatoo (Harewood, 2017). Carnaby's Cockatoo is listed as endangered and Baudin's Cockatoo and Forest Red-tailed Black Cockatoo are listed as vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Black cockatoos breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). These species nest in hollows in live or dead trees of karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). A habitat survey of the vegetation within the application area determined that there are four habitat trees suitable for these species within the application area (Harewood, 2017).

The Department of Biodiversity, Conservation and Attractions advised that "*there are numerous, recent records of all three Threatened black cockatoo species within the vicinity (10km) of the application area…. Based on the records, vicinity to confirmed roosting locations, vegetation, and evidence of foraging by black cockatoos, it is highly likely that all three black cockatoos opportunistically forage and potentially roost in the application area.*" (DBCA, 2017b).

DBCA also advised that "*…the Black Cockatoo Habitat Assessment was conducted outside of the breeding seasons for black cockatoos and hollows were not closely inspected for evidence of use, it cannot be confirmed whether black cockatoos breed in the application. However, based on the presence of Jarrah and Marri trees with suitable nesting hollows, the application area contains suitable breeding habitat for all three species of black cockatoo now and in the future. Based on habitat preferences of the three species, forest red-tailed black cockatoos are the most likely of the three species to breed within the application area.*" (DBCA, 2017b).

Further, DBCA advised that "*The clearing of any of the four trees with suitable nesting hollows will have a direct impact on any pair of black cockatoos that potentially use those hollows. Considering the extent of vegetation clearing within the Myara area for resource extraction, the proposed clearing will have some local impact by further reducing the amount of foraging, roosting and breeding habitat available now and in the future. However, the proposed clearing may not have a significant impact on a regional scale because of the large areas of uncleared land on nearby conservation estate and in state forest that contain potentially suitable feeding, roosting and breeding habitat. Although a shortage of available suitable nesting hollows is known to be a limiting factor in cockatoo breeding success and recruitment at the species level, and it is unknown how many suitable nesting trees occur within the regional area.*"

A known occurrence of Threatened Ecological Community *Eucalyptus calophylla - Eucalyptus marginata* woodlands on sandy clay soils of the southern Swan Coastal Plain is mapped approximately 2.5 kilometres from the application area. DBCA advise that "*All known occurrences of Eucalyptus calophylla - Eucalyptus marginata woodlands on sandy clay soils of the southern Swan Coastal Plain (FCT3b) occur on the eastern side of the Swan Coastal Plain or close to the junction of Swan Coastal Plain and Northern Jarrah Forest IBRA regions. The proposal area is about 2km east of the junction of the Swan Coastal Plain/Northern Jarrah Forest IBRA area. The IBRA boundary can be approximate in some areas, however, steep topography, altitude of 260-280m, habitat photographs, location at or near top of a ridge, and site descriptions indicate this is very unlikely to be the case in the proposal area. Location on Darling Plateau soil and landform units also supports this conclusion.*" (DBCA, 2017a).

The application area is located on a property adjacent to the Dwellingup State Forest. The minimum separation distance between the application area and the boundary of the State Forest is approximately 130 metres and the average separation distance is approximately 250 metres. Given the vegetation buffer it is unlikely that the clearing will cause a spread of weeds or dieback into nearby conservation areas.

Given the above, clearing the vegetation under application is at variance to clearing principle (b) and is not likely to be at variance to the remaining clearing principles.

DBCA recommend that the applicant avoid impacts to significant habitat for black cockatoos and that clearing be undertaken in a way to minimise fauna fatalities;

- "*The proposed clearing should avoid the removing the four trees containing suitable nesting hollows, and a 10m buffer (minimum) should be applied around each tree. If clearing of the suitable nesting trees cannot be avoided, clearing should not take place during the breeding seasons of any of the three black cockatoo species.*
- *Other fauna, including brushtail possums, brush-tailed phascogales and various birds, may also use any of the hollows identified in the Black Cockatoo Habitat Assessment. All hollows and logs should*

be checked for vertebrate fauna immediately prior to and after clearing. A Regulation 15 licence may be required.

- *Clearing should be undertaken in a direction that will allow vertebrate fauna to move away from the area to be cleared and into adjacent vegetation."* (DBCA, 2017b).

The applicant has been advised of these recommendations and is supportive of their implementation.

Consider advice from DBCA that the proposed clearing may not have a significant impact on black cockatoo's on a regional scale and taking into account the avoidance of suitable habitat trees (plus buffer) and mitigation through revegetation post land use, it is unlikely that the proposed clearing will have a significant residual environmental impact.

Methodology

References:
Commonwealth of Australia (2012)
DBCA (2017a)
DBCA (2017b)
Harewood (2017)
Keighery (1994)
Mattiske and Havel (1998)

GIS Databases:
- DBCA tenure
- SAC bio datasets accessed August 2017
- Virtual mosaic

Planning instruments and other relevant matters.

Comments

The applicant proposes to clear four hectares of native vegetation within Lot 466 on Plan 105091, Myara for the purpose of gravel extraction.

Clearing for gravel extraction is a temporary use of the land and revegetation of the cleared area is required once the land is no longer required for the purpose for which it was cleared.

The application area is zoned rural under the town planning scheme. The Shire of Murray advised that the purpose for clearing will require development approval and as at the date of advice no approval had been sort. The applicant advised the Department of Water and Environmental Regulation that an extractive industry licence application was being submitted to run concurrently with the clearing permit application. Clearing under this permit is for the purpose of gravel extraction, no clearing can occur prior to the purpose being approved through a development approval, by the Shire.

The clearing permit application was advertised on 30 June 2017 with a 21 day submission period. No public submissions have been received in relation to this application.

The subject area is located within the proclaimed Dandalup River Surface Water Area, featuring the North Dandalup River. Any activities that involve the disturbance of this water course will require a permit to interfere with bed and banks under Section 11, 17 and 21A of the *Rights in Water and Irrigation Act 1914*. Furthermore if activities take place within a water course which require the removal of surface water ie dust suppression, then both a 5c licence to take surface water and a permit to interfere with the bed and banks will be required. No wetlands or watercourses are mapped within the application area.

Methodology

GIS Databases:
- Town Planning Scheme Zones

4. References

Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species, Canberra.

DBCA (2017a) Threatened ecological community advice from the Department of Biodiversity, Conservation and Attractions regarding clearing permit application CPS 7642/1. DWER Ref A1486117.

DBCA (2017b) Fauna advice from the Department of Biodiversity, Conservation and Attractions regarding clearing permit application CPS 7642/1. DWER Ref A1501159.

Harewood (2017) Black Cockatoo Habitat Assessment of proposed clearing areas (CPS 7642/1) Lot 466 Sutherland Road, Myara, July 2017 by Greg Harewood, DWER Ref A1486122.

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.