GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Number: 3172/1
File Number: DEC11615
Duration of Permit: From 23 August 2009 to 23 August 2011

PERMIT HOLDER
Midland Brick Company Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE
Lot 166 Burgess Road, Gidgegannup
Lot 152 Toodyay Road, Gidgegannup

AUTHORISED ACTIVITY
Clearing of up to 2.5 hectares of native vegetation within the area hatched yellow on attached Plan 3172/1.

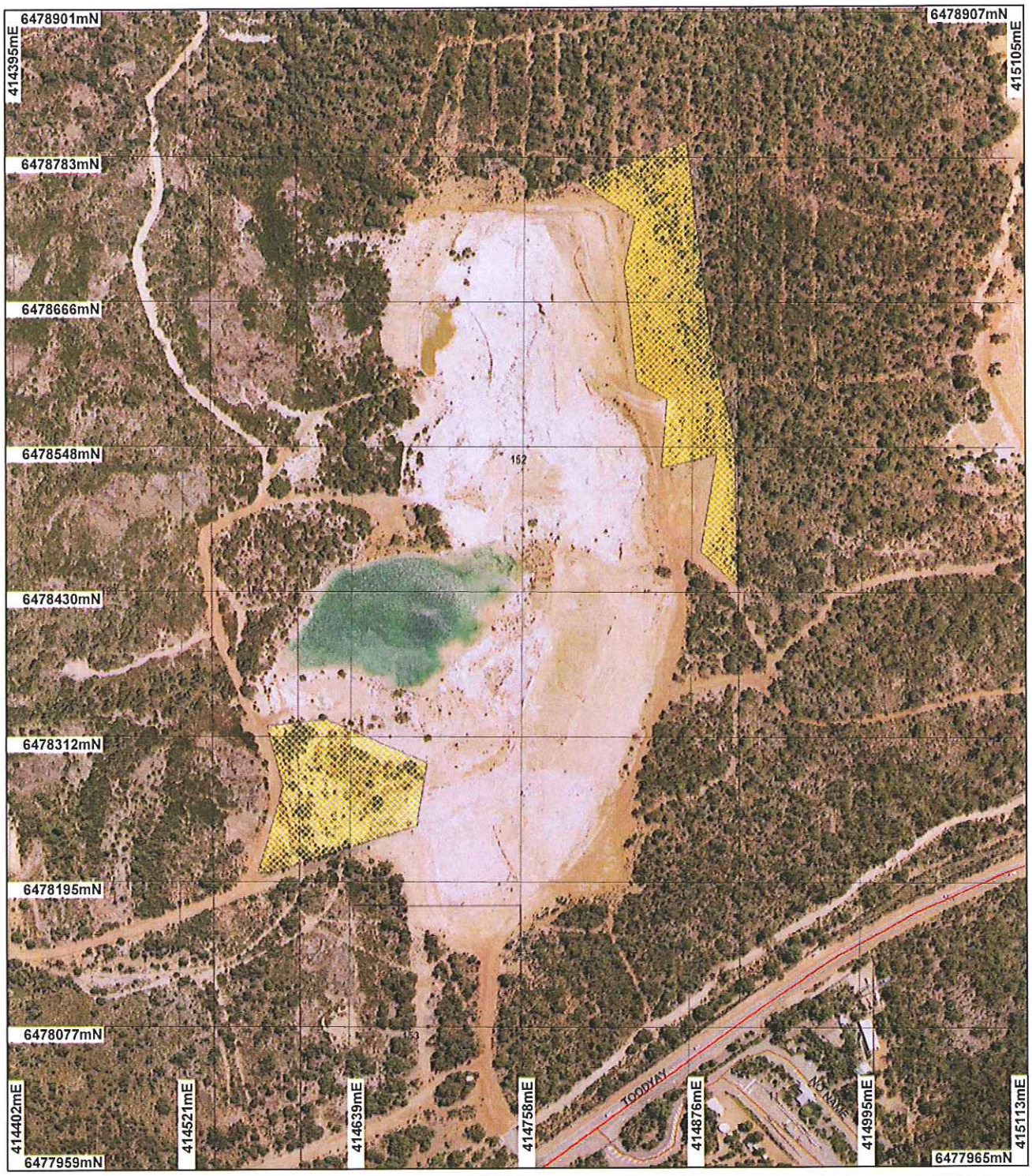
CONDITIONS
1. Nil.

Keith Claymore
A/ ASSISTANT DIRECTOR
NATURE CONSERVATION DIVISION

Officer delegated under Section 20
of the Environmental Protection Act 1986

23 July 2009

Plan 3172/1



LEGEND

- Cadastre for labelling
- Road Centrelines
  - FW
  - HY
  - LRQ (cont)
  - LRS
  - MR
  - N
  - TR
- Clearing Instruments
  - Areas Approved to Clear

Perth Metropolitan Area
North 20cm Orthomosaic - Landgate 2007

N

0 ~125 m

Scale 1:4357
(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.

Kate Claymore Date 23/7/09

K. Claymore
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 acknowledged 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.: 3172/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Midland Brick Company Pty Ltd**

1.3. Property details

Property: LOT 166 ON DIAGRAM 12584 (BURGESS RD GIDGEGANNUP 6083)
LOT 152 ON PLAN 30695 (GIDGEGANNUP 6083)
Local Government Area: City Of Swan
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.5		Mechanical Removal	Miscellaneous

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 Type 3: medium forest; jarrah and marri Heddle Vegetation Complex: Dwellingup Complex In Medium\To High Rainfall - No description available; (Heddle et al. 1980, SAC Bio Datasets 26/06/2009)	The proposal is to clear 2.5ha for the purpose of rehabilitation of a decommissioned extraction pit. The areas under application are overburden mounds which are now required for the re-contouring and revegetation of the pit. There are two area of vegetation proposed to be cleared. The northern area comprises of predominantly young Banksia sessilis growing at various densities throughout the area and scattered Marri (Corymbia calophylla) of approximately 15 years of age. Scattered Xanthorrhoea preissii exist throughout the site. A large pile of old logs occurs in this area. The vegetation within the northern area is considered to be in a degraded condition. The southern area comprises of a variety of indigenous and non-native species including the South Australia Blue Gum (Eucalyptus leucoxylon) and Banksia sessilis occurring in a degraded condition.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation clearing description based on photographs and additional information provided by Land Insights (2009).

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 vegetation under application consists of 10- 15 years of regrowth in two overburden areas. The northern area comprises of predominantly young Banksia sessilis growing at various densities throughout the area and scattered Marri (Corymbia calophylla) of approximately 15 years of age. Scattered Xanthorrhoea preissii exist throughout the site. A large pile of old logs occurs in this area. The vegetation within the northern area is considered to be in a degraded condition. The southern area comprises of a variety of indigenous and non-native species including the South Australia Blue Gum (Eucalyptus leucoxylon) and Banksia sessilis occurring in a degraded condition.

Considering the degraded condition of the vegetation under application, the lack of habitat value for local fauna

and the relatively small areas to be cleared (2.5ha), it is not considered likely for the vegetation under application to comprise of a high level of biological diversity. Therefore, the proposed clearing is not considered likely to be at variance to this Principle.

Methodology

References
-Land Insights (2009)
GIS Databases
-SAC Bio Databases (26/06/2009)

(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

Within the local area (~ 5 km radius) 3 species of conservation significant fauna have been recorded including the Chuditch (Dasyurus geoffroii), Western Brush Wallaby (Macropus irma) and the Forrest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso).

The majority of the vegetation under application is in a degraded condition and lacks habitat value. The vegetation under application lacks an understorey suitable for ground dwelling fauna (Land Insights 2009). The southern area contains some young Marri (Corymbia calophylla) trees which is a foraging species for the Forrest Red-tailed Black Cockatoo (DEC, 2007). However, given the very good to excellent vegetation present in the immediate area providing better foraging habitat, it is not considered likely for the area to be significant habitat for this species.

Therefore, it is not considered likely for the area under application to comprise the whole or a part of, or is necessary for the maintenance of a significant habitat for native fauna in the local area.

Methodology

References
-DEC (2007)
-Land Insights (2009)
GIS Databases
-SAC Bio Databases (26/06/2009

(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

There is one rare flora species recorded in the local area (~5 km radius) that being Thelymitra dedmaniarum recorded 4.3km southwest of the area under application.

Thelymitra dedmaniarum is a tuberous perennial herb growing to 0.8 m high. This species has yellow flowers during November to January and grows on granite (Western Australian Herbarium 1998).

The chief soils within the area under application consist of ironstone gravels with sandy and earthy matrices (Northcote et al. 1960-68).

Given that the vegetation under application is regrowth occurring on overburden piles, is in a degraded condition and occurs on ironstone gravel soils, it is not considered likely for any rare flora to occur within the area under application.

Methodology

References
-Northcote et al. (1960-68)
-Western Australian Herbarium (1998)
- Land Insights (2009)
GIS Databases
-SAC Bio Databases (26/06/2009)

(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

There is one recording of a Threatened Ecological Community (TEC) within the local area (5 km radius) being Floristic Community Type (FCT) 3c: Eucalyptus calophylla - Xanthorrhoea preissii woodlands and shrublands occurring 4.4 km southwest of the area under application.

The vegetation under application consists of 10- 15 years of regrowth in two overburden areas comprising of Southern Australian Blue Gum (Eucalyptus leucoxylon), Parrott Bush (Banksia sessilis) and Marri (Corymbia calophylla) occurring in a degraded condition (Land Insights 2009).

Given that the vegetation under application consists of re-growth and is in a degraded condition, it is not

considered likely for the vegetation to comprise the whole or a part of or is necessary for the maintenance of a threatened ecological community.

Methodology References
-Land Insights (2009)
GIS Databases
-SAC Bio Databases (26/06/2009)

(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 vegetation under application is mapped as Beard vegetation association 3: Medium forest; Jarrah or Marri of which there is 69.3% of pre-European extent remaining (Shepherd 2007). The vegetation is also mapped as Mattiske Vegetation Complex: Dwellingup 2: Open forest of Eucalyptus marginata subsp. marginata - Corymbia calophylla on lateritic uplands in subhumid and semi aid zones of which there is 90.5 % of pre-European extent remaining.

The State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents the clearance of ecological communities with an extent below 30% of that present Pre-European settlement (Commonwealth of Australia, 2001). All vegetation types occurring within the areas under application are above the State Government's biodiversity conservation target of 30%.

The vegetation extent in the City of Swan is 44.0% (Shepherd, 2007). There is approximately 86.2% of vegetation remaining in the local area (5km radius).

Given the degraded condition of the areas under application (Land Insights 2009), the relatively small size of the area (2.5 ha) and that vegetation types occurring within the area have above 30% or pre-European extent remaining, it is not considered likely for the proposed clearing to be at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Remaining %
IBRA Bioregion*			
Jarrah Forests	450, 6655	244, 0940	54.16
City of Swan*	104,246	45,925	44.0
Local Area (~5km radius)	7850	~6769	~86.2
Mattiske vegetation complex**			
Dwellingup 2	860, 918	779, 190	90.5
Heddle vegetation complex			
Dwellingup Complex:	No Data	No Data	No Data
Beard type in Bioregion*			
3	239, 0590	165, 7274	69.3

* (Shepherd 2007)
** (Mattiske and Havel 1998)

Methodology References
- Mattiske and Havel (1998)
- Commonwealth of Australia (2001)
-Land Insights (2009)
- Shepherd (2007)
GIS Database
-SAC Bio Databases (26/06/2009)
-Heddle Vegetation Complexes
-NLWRA, Current Extent of Native Vegetation
-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 not likely to be at variance to this Principle**

There nearest wetland to the area under application is a Multiple Use Wetland, occurring 4.8 km north of the areas under application. The nearest watercourse, Susannah Brook, occurs 400m north of the areas under application.

Given the distance to the nearest watercourse and wetland and the lack of wetland dependent vegetation identified within the area under application (Land Insights 2009), it is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology References
-Land Insights (2009)
GIS Databases
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
-Hydrography, linear

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

Comments **Proposal may be at variance to this Principle**
The chief soils within the area under application consist of ironstone gravels with sandy and earthy matrices (Northcote et al. 1960-68) which are considered to have a high risk of water erosion (Department of Agriculture 2005). The area under application is mapped as having a low salinity risk.

The main land degradation risk associated with the removal of vegetation on the identified soil type is considered to be water erosion. The area under application is located on top and along the sloping sides of overburden piles and it is considered that the removal of vegetation from these piles may increase surface water runoff resulting in soil erosion.

Given that the proposed clearing may cause water erosion resulting in appreciable land degradation the proposal therefore may be at variance to this Principle.

The risk of water erosion will be short term as the proposed use of the overburden piles is to fill in the existing evacuation pit for rehabilitation which will then eliminate the risk of surface water runoff.

Methodology References
-Department of Agriculture (2005)
-Northcote et al. (1960-68)
GIS Databases
-Salinity Risk
-Soils, 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 is not likely to be at variance to this Principle**
The closest conservation area is the John Forrest National Park occurring 1.2 km south of the area under application. No Bush Forever sites occur in the local area (~5km radius).

Given the small area to be cleared (2.5 ha), the degraded condition of the vegetation and the distance to the nearest conservation area, it is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology GIS Databases
-Bushforever
-DEC Managed Lands and Waters
- Perth Metropolitan Area North 20cm Orthomosaic - Landgate 2007

(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**
There nearest wetland to the areas under application is a Multiple Use Wetland, occurring 4.8 km north of the area under application. The nearest watercourse, Susannah Brook, occurs 400m north of the areas under application.

The areas under application are not within a Priority Drinking Water Source Area (PDWSA) and have a low salinity risk. Therefore, it is unlikely for the proposed clearing to cause deterioration to the quality of underground water.

Given the distance to the closest wetlands and watercourse, the small area to be cleared and low salinity risk, it is not considered likely for the proposed clearing to cause deterioration in surface water quality or groundwater.

Methodology GIS Databases

-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
-Hydrography, linear
-Priority Drinking Water Source Area (PDWSA)
-Salinity Risk

(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

There nearest wetland to the area under application is a Multiple Use Wetland, occurring 4.8 km north of the area under application. The nearest watercourse, Susannah Brook, occurs 400m north of the area under application.

Given the distance to the nearest watercourse and wetlands and clearing of 2.5 ha of degraded condition, it is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology

GIS Databases
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
-Hydrography, linear

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

Comments

The proposal is to clear 2.5ha for the purpose of rehabilitation of a decommissioned quarry. The areas under application are overburden mounds which are now required for the re-contouring and revegetation of the pit. There is no requirement under any pervious approval for rehabilitation of the pit to occur.

The area under application is zoned Rural under the Metropolitan Regional Scheme and zoned Resource under the Town Planning Scheme.

No evacuation has occurred on the pit for the last 20-30 years and Midland Brick does not currently hold an extractive industry licence for the property (Land Insights 2009). Midland Brick is not required to obtain any approvals to re-contour the land.

Midland Brick plan to use old logs that have been stockpiled in the area under application within the rehabilitated area to provide habitat for native fauna (Land Insights 2009).

A rehabilitation and revegetation management plan does not currently exist for the site. However, Midland Brick is planning to adopt the approved Excavation and Rehabilitation Management Plan for a quarry directly south of the area under application (Land Insights 2009).

Submission (2009) stated that there are no objections to the proposal. However, it is request that progressive rehabilitation of the mine area takes place to ensure effective revegetation for water balance purposes i.e. deep rooted perennials and local indigenous species should be included in the revegetation mix.

Methodology

References
-Land Insights (2009)
-Submission (2009)
GIS Databases
- Metropolitan Regional Scheme Zones
- Town Planning Scheme Zones

4. Assessor's comments

Comment

The assessable criteria have been addressed and the proposed clearing may be at variance to Principle (g).

5. References

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

DEC (2007) DEC Fauna Habitat Notes.xls. February 2007. Department of Environment and Conservation, Western Australia.

Department of Agriculture (2005) AgMaps Land Manager CD-rom for the Shires of Serpentine-Jarrahdale, Kwinana, Rockingham, Mandurah, Murray, Boddington, Waroona and Harvey. Department of Agriculture, Western Australia. ISSN: 1448-235X.

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 Insights (2009) Clearing Application and Supporting Documents. Trim Ref. DOC87123.

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. (2007). 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

Submission (2009) Direct Interest Submission - Ellen Brockman Integrated Catchment Group. TRIM Ref DOC90206

Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Environment and Conservation. http://florabase.dec.wa.gov.au/ (Accessed 26/06/2009).

6. 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)