Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5917/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Holcim (Australia) Pty Ltd**

1.3. Property details

Property: Mining Lease 70/1046
Local Government Area: City of Rockingham
Colloquial name: Baldivis Sand Quarry Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7.85		Mechanical Removal	Sand Extraction

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 16 January 2014

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 associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Two Beard vegetation associations have been mapped within the application area (GIS Database): 998: Medium woodland; tuart; and 1001: Medium very sparse woodland; jarrah, with low woodland; banksia and casuarina. The flora and vegetation of the application area comprises rehabilitated vegetation (URS, 2013). The application was previously pine plantation that was cleared in 2007 by the Forest Products Commission due to the presence of the European House Borer. Listed below are the species planted during 2008 (URS, 2013): - *Acacia acuminata* (Jam Wattle) - *Acacia lasiocarpa* (Glow Wattle) - *Agonis flexuosa* (Western Australian Peppermint) - *Callistemon glauca* (Dawson River Weeper) - *Callistemon phoeniceus* (Lesser Bottlebrush) - *Corymbia calophylla* (Marri) - *Eucalyptus botryoides* (Southern Mahogany) - *Eucalyptus gomphocephala* (Tuart) - *Eucalyptus grandis* (Flooded Gum) - *Eucalyptus lehmannii* (Bushy Yate) - *Melaleuca lanceolata* (Mouse Ears) - *Melaleuca nesophila* (Showy Honey-myrtle) Other scattered native species may also occur within the application area with natural regrowth likely in the six years following clearing.	Baldivis Sand Quarry Project. Holcim (Australia) Pty Ltd has applied to clear 7.85 hectares of native vegetation for the purpose of sand extraction. The project is an expansion of the existing Baldivis Sand Quarry Stage 1 Project. The application area is located approximately 50 kilometres south of Perth and 14 kilometres south-southeast of Rockingham.	Degraded: Structure severely distrubed; regeneration to good condition requires intensive management (Keighery, 1994); To: Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).	The vegetation condition has been inferred from previous land uses and aerial photography.

3. Assessment of application against clearing principles

Comments

The application to clear up to 7.85 hectares of native vegetation for the purpose of a sand quarry is unlikely to have any significant environmental impacts. The flora and vegetation of the application area comprises of young rehabilitation and regrowth. The application area was previously a pine plantation which was cleared in 2007 by the Forest Products Commission (FPC) due to the presence of the European House Borer (URS, 2013). The application area was rehabilitated following the FPC clearing. The biodiversity of the application area is expected to be low.

A number of small remnant vegetation areas are located in the local area and Bennett Environmental Consulting Pty Ltd undertook a botanical survey of the adjacent explosives reserve in September 2006 (Bennett Environmental Consulting Pty Ltd, 2006). The application area itself was classified as pine planation at the time of the 2006 survey and the vegetation condition was rated as degraded (Bennett Environmental Consulting Pty Ltd, 2006). No Threatened Flora or Threatened Ecological Communities were recorded during the survey (Bennett Environmental Consulting Pty Ltd, 2006). Two Priority Flora species, *Dillwynia dillwynioides* (Priority 3) and *Schoenus capillifolius* (Priority 3), were recorded during the survey outside of the application area (Bennett Environmental Consulting Pty Ltd, 2006). Both of these are wetland species (Bennett Environmental Consulting Pty Ltd, 2006; Western Australian Herbarium, 2014) and the application area is unlikely to provide suitable habitat for either species. The seed list for the rehabilitation of the application area did not include any Threatened or Priority Flora (URS, 2013).

There are no defined surface water channels within the application area (URS, 2013; GIS Database). Drainage in the vicinity of the application area is generally to the east towards the Serpentine River and floodplain. However, the Serpentine River and floodplain is separated from the application area by the Kwinana Freeway and it is unlikely that any surface flow from the site would reach the Serpentine River and floodplain (URS, 2013). In addition, there are a number of wetlands in the vicinity including conservation significant wetlands (URS, 2013; GIS Database). Surface runoff rarely occurs within the larger project site as the infiltration capacity of the sandy soil is rarely exceeded by the rainfall intensity (URS, 2013). No surface water quality impacts to the nearby wetlands of conservation signficance are likely to occur as all rainfall and surface rainfall will be collected in the active quarry area. The active quarry area will act as a pond collecting rainfall and surface runoff and releasing it to the local groundwater system through infiltration (URS, 2013).

A number of Bush Forever sites occur within the vicinity of the application area (URS, 2013; GIS Database). None of the Bush Forever sites are located within or adjacent to the application and will not be directly impacted by the proposed clearing. Given the vegetation of the application area comprises of young rehabilitation, and was previously pine plantation, it is unlikely to act as a linkage to any Bush Forever site.

Part of the application area is within Reserve 37090 which is vested in the Department of Parks and Wildlife and the Department of Mines and Petroleum for the purposes of forestry and explosives (GIS Database). The site previously comprised a pine plantation that was cleared prior to the construction of the adjacent existing Stage 1 Baldivis Sand Quarry Project (URS, 2013).

The assessment of the application identified that the clearing is not likely to be, or not, at variance to any of the clearing principles.

Methodology

Bennett Environmental Consulting Pty Ltd (2006)
URS (2013)
Western Australian Herbarium (2014)
GIS Database:
- Bushforever
- DEC Tenure
- EPP, SCP Lakes
- Geomorphic Wetlands (Management Categories), Swan Coastal Plain
- Hydrography, Linear

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

Comments

There are are two Native Title Claims over the area under application: WC2003/006 and WC998/058 (GIS Database). One claim has been filed at the Federal Court and the other claim has been registered with the Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There is one registered Aboriginal Site of Significance within the application area, Site ID 3582 (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation (formerly the Department of Environment and Conservation) and the Department of Water, to determine whether a Works

Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The Baldivis Sand Quarry Stage 1 Expansion was referred to the Environmental Protection Authority (EPA) by the proponent, Holcim (Australia) Pty Ltd. On 9 December 2013 the EPA made a decision of 'Not Assessed – Public Advice Given'. The EPA identified one preliminary environmental factor which was amenity (noise and dust). Both the noise and dust related to the proposed operations rather than the clearing of native vegetation.

The clearing permit application was advertised on 9 December 2013 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology

GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims – Filed at the Federal Court
- Native Title Claims – Registered with the NNTT

4. References

Bennett Environmental Consulting Pty Ltd (2006) Flora and Vegetation of Baldivis Explosives Reserve. Report Prepared by Bennett Environmental Consulting Pty Ltd for Strategen, November 2006.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

URS (2013) Mining Proposal Baldivis Sand Quarry Stage 1 Project Expansion M70/1046. Report Prepared by URS Australia Pty Ltd for Holcim (Australia) Pty Ltd, November 2013.

Western Australian Herbarium (2014) FloraBase – the Western Australian Flora. Department of Parks and Wildlife. http://florabase.dpaw.wa.gov.au.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

P1	**Priority One - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
P2	**Priority Two - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations, at

least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

P3 **Priority Three - Poorly Known taxa**: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.

P4 **Priority Four – Rare taxa**: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.

R **Declared Rare Flora – Extant taxa** *(= Threatened Flora = Endangered + Vulnerable)*: taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

X **Declared Rare Flora - Presumed Extinct taxa**: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

Schedule 1 **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.

Schedule 2 **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.

Schedule 3 **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.

Schedule 4 **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

P1 **Priority One: Taxa with few, poorly known populations on threatened lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P2 **Priority Two: Taxa with few, poorly known populations on conservation lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P3 **Priority Three: Taxa with several, poorly known populations, some on conservation lands**: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P4 **Priority Four: Taxa in need of monitoring**: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.

P5 **Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999)*

EX **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.

EX(W) **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

CR **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.

EN **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

VU **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

CD **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

Principles for clearing native vegetation:

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

(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.

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

(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.

(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.

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

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

(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.

(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.

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.