



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 4920/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: **Boral Resources (WA) Ltd**

### 1.3. Property details

Property: Miscellaneous Licence 80/62  
Local Government Area: Shire of Wyndham-East Kimberley  
Colloquial name: Weaner Creek Quarry

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.79		Mechanical Removal	Quarry Access Road

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 24 May 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
Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. The following Beard vegetation association has been mapped within the application area (GIS Database):  835: Grasslands, high grass savanna woodland; grey box & <i>Eucalyptus foelschaeana</i> over spinifex & white grass.	Boral Resources (WA) Ltd (Boral) has applied to clear up to 0.79 hectares of native vegetation within an application area of the same size for the purpose of widening the quarry access road (GIS Database). The application area is located off the Victoria Highway approximately 27 kilometres west of Kununurra (GIS Database).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);  to  Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	The vegetation condition was determined by the assessing officer using aerial imagery (GIS Database).

## 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**  
No flora or vegetation surveys have been undertaken over the application area. A search by the assessing officer of DEC's NatureMap revealed records of eleven Priority Flora species within 20 kilometres of the application area (DEC, 2012). None of these species are within the application area itself. The application area has been previously disturbed by an existing road to the quarry. Given the relatively small nature of the proposed disturbance (0.79 hectares), there is not expected to be any significant impacts to biodiversity within the local area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** DEC (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**  
There has been no fauna surveys conducted over the application area. The potential fauna habitat within the application area is well represented throughout the bioregion (GIS Database). A search by the assessing

officer of DEC's NatureMap revealed records of a number of conservation significant fauna species within 20 kilometres of the application area (DEC, 2012). Nearly all of these species were birds which would be expected to relocate if they are present within the application area. There is an existing road within the application area and surrounding areas are largely uncleared, so the proposed clearing will not result in further fragmentation of the habitat (GIS Database). Given the small scale of the proposed clearing (0.79 hectares) for the widening of the quarry access road, it is not expected to have significant impacts on indigenous fauna within the local area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** DEC (2012)  
GIS Database:  
- Erskine 50cm Orthomosaic  
- Pre-European Vegetation

**(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**  
According to available databases, there are no records of any Threatened Flora within the application area (GIS Database). The nearest record of Threatened Flora is *Typhonium* sp. Kununurra located approximately 21 kilometres west of the application area (GIS Database). Habitat for this species is not likely to be present within the application area (Boral, 2012; Western Australian Herbarium, 2012). No on ground flora surveys have been conducted over the application area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** Boral (2012)  
Western Australian Herbarium (2012)  
GIS Database:  
- Threatened and Priority 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.**

**Comments** **Proposal is not likely to be at variance to this Principle**  
According to available databases, there are no records of any Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest record of a TEC is over 200 kilometres from the application area (GIS Database).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- Threatened Ecological Sites Buffered

**(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 at variance to this Principle**  
The application area falls within the Victoria Bonaparte Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 98.7% of the pre-European vegetation remains (see table) (GIS Database, Government of Western Australia, 2011).

Over 99% of Beard vegetation association 835 remains at both a state and bioregional level (Government of Western Australia, 2011). Therefore, the area proposed to be cleared does not represent a significant remnant of native vegetation within an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion – Victoria Bonaparte	1,871,371	1,847,489	~98.72	Least Concern	5.9
Beard veg assoc. – State					
835	74,618	74,480	~99.82	Least Concern	
Beard veg assoc. – Bioregion					
835	6,771	6,771	~100	Least Concern	

\* Government of Western Australia (2011)

\*\* Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

**Methodology** Department of Natural Resources and Environment (2002)  
Government of Western Australia (2011)  
GIS Database:  
- IBRA WA (Regions - Sub Regions)

**(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 at variance to this Principle**

There are no watercourses or wetlands within the application area (GIS Database). Based on aerial imagery and a desktop vegetation assessment by Astron Environmental Services (2008) the vegetation does not appear to be associated with any watercourses or wetlands (GIS Database).

Based on the above, the proposed clearing is not at variance to this Principle.

**Methodology** Astron Environmental Services (2008)  
GIS Database:  
- Erskine 50cm Orthomosaic  
- Hydrography, 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 application area has been mapped as being comprised of the Frayne land system (GIS Database). Most parts of this land system have a low susceptibility to erosion except one unit which has a moderate susceptibility to erosion (Payne and Schoknecht, 2011). The application area has been noted as having a low relief so the risk of increased runoff leading to erosion is low (Boral, 2012).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** Boral (2012)  
Payne and Schoknecht (2011)  
GIS Database:  
- Rangeland Land System Mapping

**(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 application area is not located within any conservation areas or DEC managed tenure (GIS Database). However, the application area is situated approximately 100 metres from the Ngamoowalem Conservation Park (GIS Database). These areas are separated by the Victoria Highway and given the small scale of the proposed clearing (0.79 hectares), it is not expected to have any significant impacts upon the environmental values of the Conservation Park.

Based on the above, the proposed clearing is not likely to 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 application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). There are no watercourses within the application area (GIS Database). The average annual rainfall is 861.6 millimetres and the average annual evaporation rate is over 2,800 millimetres (BoM, 2012; GIS Database). During normal rainfall events it would be expected that any surface water would evaporate quickly.

The groundwater salinity within the application area is below 500 milligrams per litre of Total Dissolved Solids (TDS) (GIS Database). This is considered to be fresh water. Given the small scale of the proposed clearing (0.79 hectares) it is not likely to cause the groundwater quality to alter.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** BoM (2012)  
GIS Database:  
- Evaporation Isoleths  
- Hydrography, linear  
- Public Drinking Water Source Areas (PDWSAs)

**(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**

Whilst the local area experiences a high average annual rainfall (861.6) most of this rainfall is from cyclonic events (BoM, 2012). Large rainfall events may result in the flooding of the area, however, the proposed clearing of 0.79 hectares is not likely to lead to an increase in incidence or intensity of flooding.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** BoM (2012)

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

**Comments**

There is one Native Title claim (WC04/4) over the area under application (GIS Database). This claim was determined by the Federal Court on 24 November 2006. 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 are no registered Aboriginal Sites of Significance located within the clearing permit application area (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 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 clearing permit was advertised on 19 March 2012 by the Department of Mines and Petroleum inviting submissions from the public. There was one submission received stating no objections to the proposed clearing.

**Methodology** GIS Database:  
- Aboriginal Sites of Significance  
- Native Title Claims – Determined by the Federal Court

#### **4. References**

- Astron Environmental Services (2008) Report for Molly Creek Quarry, Kununurra, Flora and Fauna Survey. Unpublished report for Boral, dated December 2008.
- BoM (2012) Climate Statistics for Australian Locations. A Search for Climate Statistics for Kununurra Aero WA, Australian Government Bureau of Meteorology, viewed 21 May 2012  
<[http://www.bom.gov.au/climate/averages/tables/cw\\_002056.shtml](http://www.bom.gov.au/climate/averages/tables/cw_002056.shtml)>
- Boral (2012) Supporting documentation for a clearing permit application. Dated February 2012.
- DEC (2012) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, viewed 11 May 2012, <<http://naturemap.dec.wa.gov.au>>.
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- 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.
- Payne and Schoknecht (2011) Land systems of the Kimberley Region, Western Australia Technical Bulletin No.98. December 2011. Department of Agriculture and Food.
- Western Australian Herbarium (2012) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/>

## 5. Glossary

### Acronyms:

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