



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 6646/1
Permit Holder:	Boral Resources (WA) Ltd
Duration of Permit:	7 November 2015 – 23 September 2018

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 extractive industry.
- 2. Land on which clearing is to be done**
Lot 29 on Deposited Plan 232355, Bowes
Lot 52 on Deposited Plan 138083, Bowes
- 3. Area of Clearing**
The Permit Holder must not clear more than 8 hectares of native vegetation within the area hatched yellow on attached Plan 6646/1.
- 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.

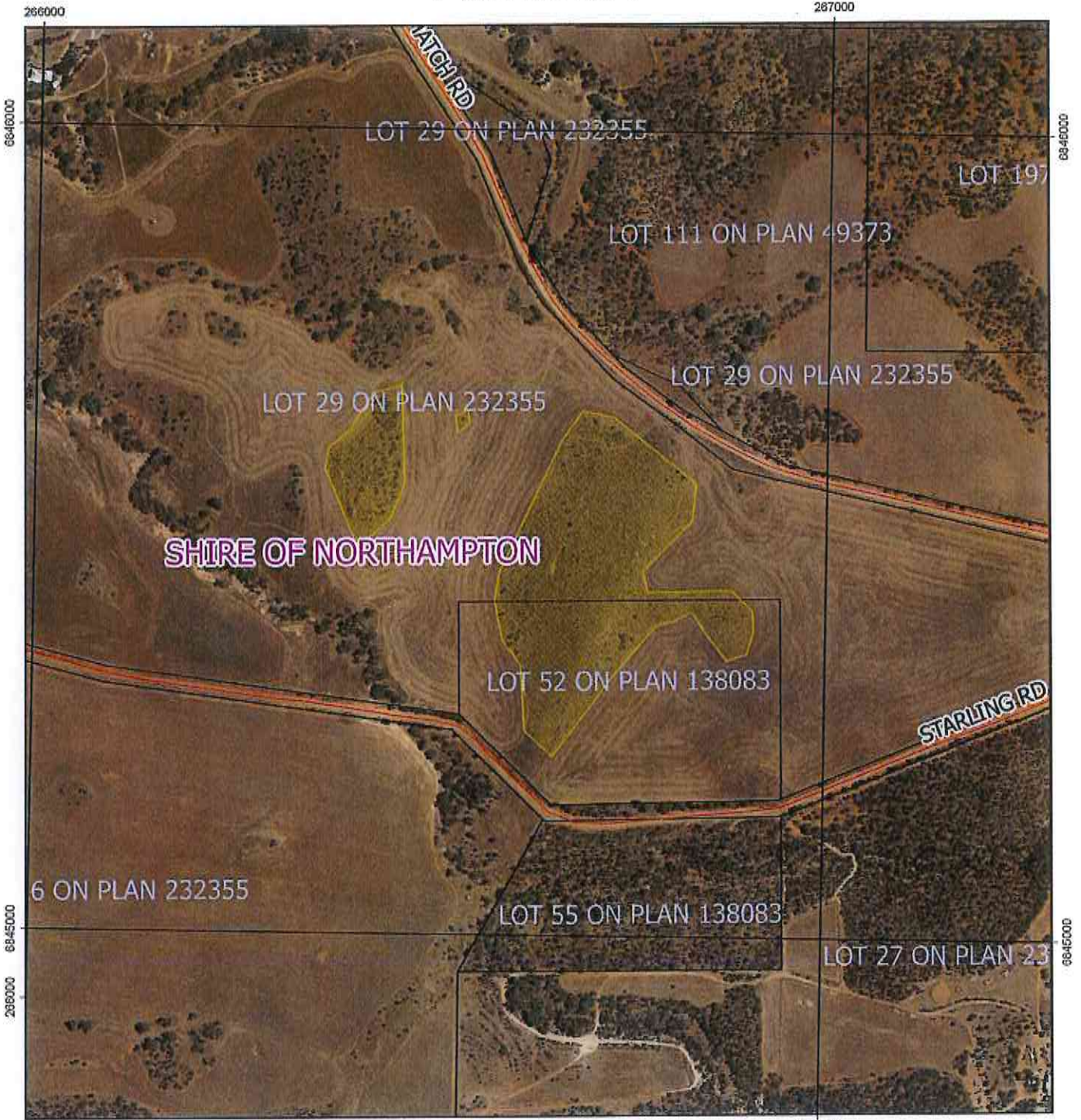
A handwritten signature in black ink, appearing to read "M Warnock", written over a horizontal line.

M Warnock
SENIOR MANAGER
CLEARING REGULATION


*Officer delegated under Section 20
of the Environmental Protection Act 1986*

8 October 2015

Plan 6646/1



Legend

-  Areas approved to clear
 -  Local Govt. Authorities (LGA)
 -  Roads
 -  cadastre_land_tenure_flattened
- Virtual Mosaic



1:8,000

MGA 94
Geocentric Datum of Australia 1994

M Wamock Date 8/10/15
M Wamock

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



GOVERNMENT OF
WESTERN AUSTRALIA



1. Application details

1.1. Permit application details

Permit application No.: 6646/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Boral Resources (WA) Ltd

1.3. Property details

Property: LOT 29 ON PLAN 232355, BOWES
LOT 52 ON PLAN 138083, BOWES

Colloquial name:
Local Government Authority: NORTHAMPTON, SHIRE OF
DER Region: Midwest
DPaW District: GERALDTON
LCDC: CHAPMAN VALLEY
Localities: BOWES

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 08 October 2015

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 Association 35 (Shepherd et al. 2001) is described as jam scrub with scattered York gum. An onsite inspection of the applied area noted that the vegetation within the applied area was predominately Hakea recurva, Acacia tetragonaphylla and Pimelea microcephala (DEC 2009).	To clear 8 hectares of native vegetation within Lot 29 on Deposited Plan 232355 and Lot 52 on Deposited Plan 138083, Bowes for the purpose of extractive industry.	Completely Degraded; No longer intact, completely/almost completely without native species (Keighery 1994).	The vegetation condition was determined through digital aerial photography, a site survey of the applied area (Northampton Geological Report 2008) and a site visit by the Department of Environment Conservation officers (DEC 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 **Proposed clearing is not likely to be at variance to this Principle**
The application is to clear eight hectares of native vegetation in completely degraded (Keighery 1994, DEC 2009) condition for the purpose of constructing a quarry.

The vegetation under application has been predominately cleared for pasture and contains scattered native regrowth. There are also two ridges within the application area which have not been cleared for pasture, however both ridges have been heavily impacted by grazing (Northampton Geological Report 2008).

A site survey noted ten native species within the applied area, all of which were shrubs or groundcover species (Northampton Geological Report 2008). The vegetation under application is dominated by Hakea recurva, Acacia tetragonaphylla and Pimelea microcephala (DEC 2009).

There are four recorded occurrences of Priority Ecological Communities (PECs) within the local area (10 kilometre radius), all of which are described as Melaleuca sp. and Hakea sp. thickets on Moresby Range. The application area does not fall within the buffers for these PECs and the proposed clearing is unlikely to impact on their environmental values.

Given the condition of the vegetation under application and history of disturbance, the application area is not likely to contain a high level of biodiversity.

Therefore the proposed clearing is not likely to be at variance to this principle.

Methodology References:
DEC (2009)
Keighery (1994)
Northampton Geological Report (2008)

GIS Databases:
Parks and Wildlife Tenure
Pre European Vegetation
NLWRA, Current Extent of Native Vegetation
SAC Biodatasets - accessed September 2015

(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 Proposed clearing is not likely to be at variance to this Principle

The area under application has been predominately cleared for pasture and grazing. There are two small ridges that contain native vegetation, however they have been extensively grazed and are in a completely degraded (Keighery 1994) condition (Northampton Geological Report 2008, DEC 2009).

The local area (10 kilometre radius) retains approximately 15 per cent native vegetation. However, given the condition of the vegetation, the application area is not likely to provide significant habitat for native fauna.

Remnant native vegetation south to south east and along the watercourse to the west and north of the application area are in better condition than the vegetation under application and would provide superior habitat for native fauna.

Given that the application area is predominately void of native vegetation and the occurrence of more suitable habitat in close proximity to the application area, the proposed clearing is not likely to be at variance to this principle.

Methodology References:
DEC (2009)
Keighery (1994)
Northampton Geological Report (2008)

GIS Databases:
Hydrography linear
NLWRA, Current Extent of Native Vegetation
Parks and Wildlife Tenure
SAC Biodatasets - accessed September 2015

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

Comments Proposed clearing is not likely to be at variance to this Principle

Three of the known records of rare flora occurring within the local area (10 kilometre radius) are known to occur within the same vegetation association and soil type as the application area.

A site survey of the application area noted 10 native species within the area, however none were rare or priority flora (Northampton Geological Report 2008).

The area under application has been predominately cleared for pasture and is in a completely degraded (Keighery 1994) condition (Northampton Geological Report 2008, DEC 2009).

Given the condition of the vegetation and the history of extensive disturbance to the application area, the proposed clearing is not likely to be at variance to this principle.

Methodology References:
DEC (2009)
Keighery (1994)
Northampton Geological Report (2008)

GIS Databases:
Pre European Vegetation
SAC Biodatasets - accessed September 2015

(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 **Proposed clearing is not likely to be at variance to this Principle**
There are no known records of Threatened Ecological Communities within the local area (10 kilometre radius).

Therefore the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:
SAC Bio Datasets - accessed September 2015

(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 **Proposed clearing is not likely to be at variance to this Principle**
The areas under application are located within the Geraldton Sandplains Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 45 per cent of its pre-European vegetation extent remaining (Government of Western Australia 2014).

The vegetation under application is mapped as Beard Vegetation Association 35 which has approximately 16 per cent of its pre-European extent remaining within the Geraldton Sandplains bioregion (Government of Western Australia 2014).

The National Objectives and Targets for Biodiversity Conservation includes a target that prevents the clearance of ecological communities with an extent below 30 per cent of that present pre-European settlement (Commonwealth of Australia 2001).

Digital aerial imagery indicates that the local area (10 kilometre radius) retains approximately 15 per cent native vegetation cover.

A site inspection of the application area noted that the vegetation under application is not consistent with the mapped Beard Vegetation Association of the area, being dominated by *Hakea recurva*, *Acacia tetragonophylla* and *Pimelea microcephala* (DEC 2009).

The vegetation under application is in a completely degraded (Keighery 1994) condition (Northampton Geological Report 2008, DEC 2009). Much of the application area has been cleared for pasture, however some scattered vegetation occurs within two ridges that have been heavily grazed (Northampton Geological Report 2008).

Given the condition of the vegetation and that the vegetation under application is not representative of Beard Vegetation Association 35, the application area is not considered to be a significant remnant of native vegetation in an extensively cleared landscape.

Therefore the clearing as proposed is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregions*				
Geraldton Sandplains	3,136,038	1,404,375	45	40
Shire*				
Northampton	1,258,429	930,229	74	25
Beard Vegetation Complex in Bioregion* 35	184,502	30,088	16	3

Methodology References:
DEC (2009)
*Government of Western Australia (2014)
Keighery (1994)
Northampton Geological Report (2008)
Shepherd et al. (2001)

GIS Databases:
Interim Biogeographic Regionalisation of Australia
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** **Proposed clearing is not likely to be at variance to this Principle**
There are no wetlands or watercourses within the application area. The closest mapped watercourse is approximately 55 metres south west of the applied area.
- As the application area does not include a mapped wetland or watercourse and is not within the recommended buffer (DoW 2006) of nearby watercourses, the proposed clearing is not likely to be at variance to this principle.
- Methodology** Reference:
DoW (2006)
- GIS Databases:
EPP Lakes Policy Area
Geomorphologic 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** **Proposed clearing is not likely to be at variance to this Principle**
A site survey of the application area identified the soils onsite as consisting predominately of red brown loams to sandy loams over stony and paler subsoils. As the soils under application can be hard-setting as a result of compaction from grazing (Northampton Geological Report 2008) and wind erosion of the soils from pasture production, the proposed clearing is not likely to result in further wind erosion on site.
- The vegetation under application is in a completely degraded (Keighery 1994) condition with remaining vegetation dominated by shrubs and groundcover vegetation (DEC 2009). Given the absence of deep rooted perennial vegetation within the application area, clearing of the existing vegetation is not likely to increase salinity.
- Given the condition and composition of the native vegetation under application, the proposed clearing is not likely to cause appreciable land degradation.
- Therefore the clearing as proposed is not likely to be at variance to this principle.
- Methodology** References:
DEC (2009)
Keighery (1994)
Northampton Geological Report (2008)
- GIS Databases:
Average Annual Rainfall Isohyets
Hydrogeology, statewide
Hydrography, linear
Salinity
Soils, Statewide
Topographic contours 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** **Proposed clearing is not likely to be at variance to this Principle**
There are five areas of conservation significance managed by the Department of Environment and Conservation (DEC) within the local area (10 kilometre radius).
- The closest known conservation area is Nilligarri Nature Reserve, located approximately 50 metres south of the applied area.
- Given the application area is within a larger area that has been predominantly cleared for pasture, the proposed clearing is not likely to impact on the environmental values of the nearby conservation area and is therefore not likely to be at variance to this clearing principle.
- Methodology** GIS Databases:
Hydrography, linear
Parks and Wildlife 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 **Proposed clearing is not likely to be at variance to this Principle**
There are no wetlands or watercourses within the applied area. The closest mapped watercourse is approximately 55 metres south west of the applied area.

Given the above, and the maintenance of the recommended buffer (DoW 2006) between the proposed clearing and the nearby watercourses, the proposed clearing is not likely to cause deterioration in the quality of surface or groundwater in the vicinity of the applied area.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology Reference:
DoW (2006)

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

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

Comments **Proposed clearing is not likely to be at variance to this Principle**
The vegetation under application is in a completely degraded (Keighery 1994) condition with remaining vegetation dominated by shrubs and groundcovers (DEC 2009). Given the absence of deep rooted perennial vegetation within the application area, clearing of the existing vegetation is not likely to cause or exacerbate the incidence or intensity of flooding.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology References:
DEC (2009)
Keighery (1994)

GIS Databases:
Hydrography, linear
Soils, Statewide
Topographic contours statewide

Planning instruments and other relevant matters.

Comments A clearing permit (CPS 2958/1) for the same area and purpose as CPS 6646/1 expired in 2011. A Works Approval for the premises was issued 17 September 2009, the expiry date of which has been amended to 23 September 2018. Planning approval from the Shire of Northampton has been obtained previously, however, this has since expired. The Shire has stated that the applicant is required to submit a new planning application given the time that has elapsed since the expiry of the previous approval, coupled with the change in planning framework (Shire of Northampton 2015).

The area under application is within the Gascoyne groundwater area. A licence to take water, or construct a well, on the subject land may be required for the purpose above. The applicant is advised to liaise with the Department of Water regarding this matter.

Methodology Reference:
Shire of Northampton (2015)

Database:
RIWI areas

4. References

- DEC (2009) Advice to Assessing Officer and Site Inspection Report, Midwest Region, Department of Environment and Conservation, unpublished document, DOC77286.
- DoW (2006) Water Quality Protection Note 6: Vegetation Buffers to Sensitive Water.
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, 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.
- Northampton Geological Report (2008) Bill Marshall and Tim Hunter, prepared for Boral Resources (WA) Ltd, unpublished document, DOC71617.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Shire of Northampton (2015) Advice received in relation to clearing permit application CPS 6646/1 received 3 August 2015. Shire of Northampton (DER Ref: A944671).

