



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Purpose Permit Number: 3324 /2
File Number: DEC 13163
Duration of Permit: From 22 November 2009 to 22 November 2014

PERMIT HOLDER

BHP Billiton Iron Ore Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Great Northern Highway Road Reserve, Boodarie 6722 (PIN 11437400)

PURPOSE FOR WHICH THE CLEARING MAY BE DONE

Clearing for the purpose of road upgrades

CONDITIONS

1. The Permit Holder must not clear more than 0.4 hectares of native vegetation within the area hatched yellow on attached Plan 3324/2.
2. When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:
 - (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

Definitions

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

fill means material used to increase the ground level, or fill a hollow;

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;

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

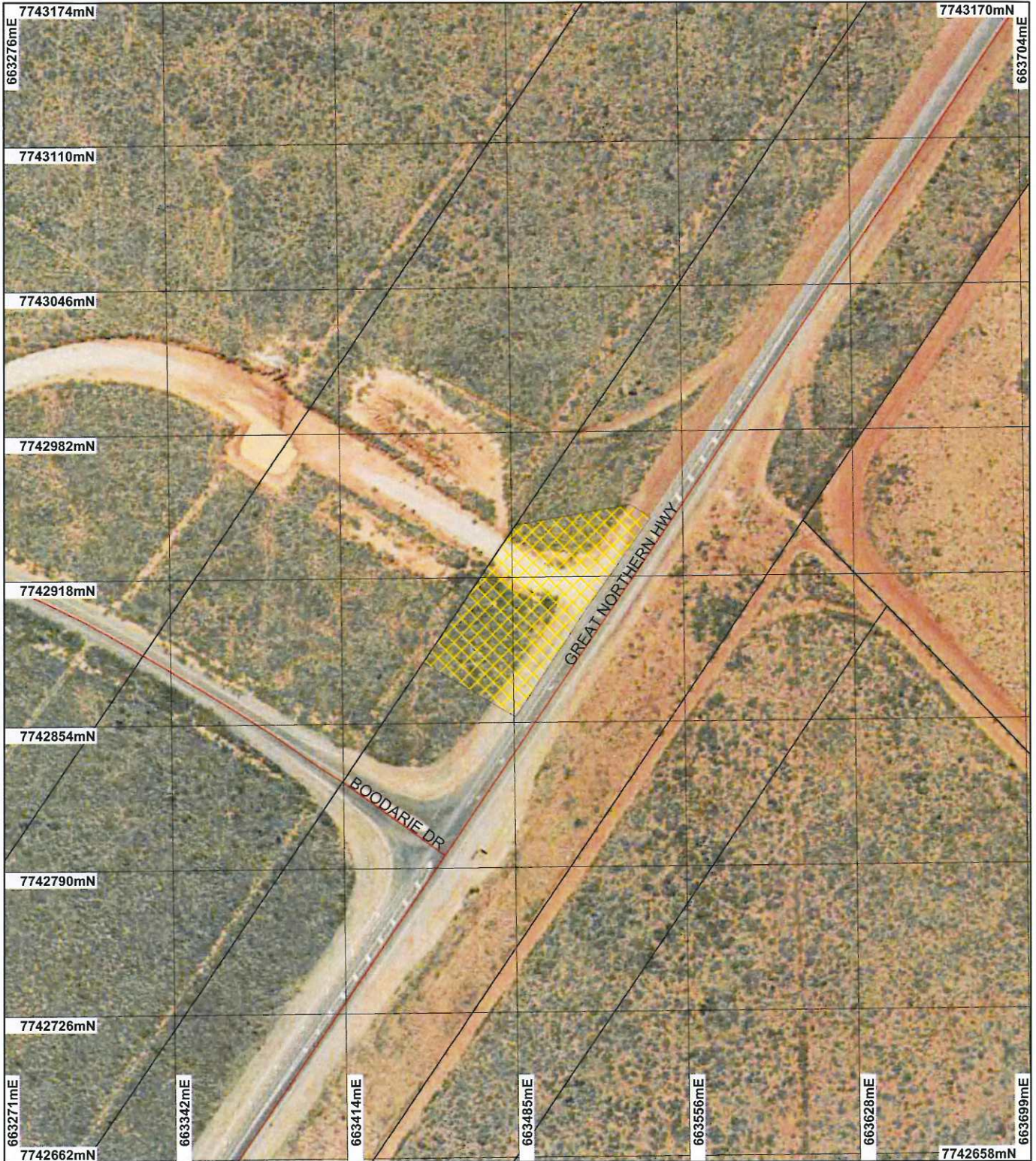
A handwritten signature in black ink, appearing to be "KF", written over a horizontal line.

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

18 March 2010

Plan 3324/2



LEGEND

Clearing Instruments

-  Areas Approved to Clear
-  Road Centrelines
-  Cadastre

Port Hedland 50cm
Orthomosaic - Landgate
2004



Scale 1:2356

(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.

 Date 18/3/10

K Faulkner

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

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1. Application details

1.1. Permit application details

Permit application No.: 3324/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

1.3. Property details

Property: ROAD RESERVE (BOODARIE 6722)
ROAD RESERVE (BOODARIE 6722)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.4		Mechanical Removal	Road upgrades

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 589 Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex. (Shepherd 2007)	The vegetation under application has been described as Triodia epactia hummock grassland with a low open Acacia stellaticeps shrubland with scattered Acacia tumida var. pilbarensis shrubs (BHP Billiton 2009; ENV Australia, 2010; ENV Australia, 2009). The vegetation is considered to be in Good condition with areas of Completely Degraded recorded along the road verge (BHP Billiton 2009; ENV Australia, 2010; ENV Australia, 2009).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition and description of the vegetation under application was determined via the use of aerial imagery and flora survey conducted by ENV Australia (2009).
As above	As above	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	As above

3. Assessment of application against clearing principles

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

Comments

This application is a result of an amendment to CPS 3324/1. An additional area of 0.15 hectares of native vegetation is intended to be cleared on the northern intersection of the existing road bypass road within Great Northern Highway. The increase in area is required to widen the existing road bypass which will enable the transport of oversized modules by road from the Port Hedland wharf to a staging yard at Boodarie. The total area to be cleared will now be 0.4 hectares.

The vegetation is considered to be in good (Keighery 1994) condition, with some areas of completely degraded vegetation along the roadside (BHP Billiton 2009).

Two rare fauna species have been recorded within a 20km radius of the application area. Additionally 5 priority fauna species and 6 priority flora species have been recorded within the local area. However, flora and fauna surveys conducted throughout the vegetation recorded no occurrences of species of conservation significance within the applied area (BHP Billiton 2009, ENV Australia 2009).

The mapped Beard vegetation association (589) retains approximately 100% of the pre-European extent of native vegetation (Shepherd 2007). The large extent of native vegetation surrounding the application area greatly reduces the conservation and habitat significance of the vegetation under application.

The application does not intersect any mapped watercourses or wetlands, and given the small area of the proposed clearing (0.4ha) land or water degradation is not likely to occur as a result.

The clearing may introduce or spread weeds into the surrounding vegetation, and as such conditions to reduce these risks will be imposed on the permit.

The assessment recommendation is that the proposed clearing is not likely to be at variance to any of the clearing principles.

Methodology

Shepherd (2007)
DEC (2010)
Keighery (1994)
BHP Billiton (2009)
ENV Australia (2009)

GIS database:

- DEC Tenure - DEC 13/10/09
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- SAC Biodatasets - accessed 10 Oct 09
- Hydrography linear (hierarchy) - DoW 13/7/06
- Soils, Statewide DA 11/99
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

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

Comments

The proposed clearing area is within the Great Northern Highway Road Reserve, vested with Main Roads. The applicant has been provided with consent from Main Roads to access and clear within the area under application (BHP Billiton 2009; Trim Ref: DOC120623).

The Town of Port Hedland has no objection to the proposed clearing (Trim Ref: DOC120616).

No submissions have been received regarding this application.

Methodology

BHP Billiton (2009)

GIS database:

- Cadastre - Landgate Dec 07

4. Assessor's comments

Comment

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 the assessment recommendation is that:

- All of the principles are not likely to be at variance

5. References

- BHP Billiton (2009). Widening of Boodarie Drive Road Bypass and Underground Power Line Relocation - Application to Clear Native Vegetation (Purpose Permit). TRIM ref DOC101102.
- DEC (2010) Regional Advice, Pilbara Region, Department of Environment and Conservation. Trim Ref: DOC120894
- ENV Australia (2009). Port Hedland Transmission Lines Flora and Fauna Assessment. TRIM ref DOC101102.
- ENV Australia (2010) Boodarie Drive Intersection, Summary report on findings from ENV Flora and Vegetation survey (ENV, 2009) and site reconnaissance information (Trim DOC119337).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.

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 (now DEC)
DMP	Department of Mines and Petroleum (ex DoIR)
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)