GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3596/1
Permit Holder:	BHP Billiton Iron Ore Pty Ltd
Duration of Permit:	19 September 2010 – 19 September 2015

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 bridge strengthening, bridge protection and associated works.

2. **Land on which clearing is to be done**
   Great Northern Highway Road Reserve (Lot 176 on Plan 219293)

3. **Area of Clearing**
   The Permit Holder must not clear more than 0.8 hectares of native vegetation within the area hatched yellow on attached Plan 3596/1.

4. **Clearing not authorised**
   This Permit does not authorise the permit holder to clear native vegetation where it does not have lawful authority to access land.

5. **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.

6. **Compliance with Assessment Sequence and Management Procedures**
   Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. **Avoid, minimise etc clearing**
   In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:
   (a) avoid the clearing of native vegetation;
   (b) minimise the amount of native vegetation to be cleared; and
   (c) reduce the impact of clearing on any environmental value.

8. **Weed control**
   (a) 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*:
      (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
      (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
      (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

(b) At least once in each 12 month period for the *term* of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

PART III - RECORD KEEPING AND REPORTING

9. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit in relation to the clearing of native vegetation authorised under this Permit:

(a) the species composition, structure and density of the cleared area;

(b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;

(c) the date that the area was cleared; and

(d) the size of the area cleared (in hectares).

10. Reporting

(a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 9of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.

(b) Prior to 19 June 2015, the Permit Holder must provide to the CEO a written report of records required under condition 9of this Permit where these records have not already been provided under condition 10(a) of this Permit.

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;

term means the duration of this Permit, including as amended or renewed;

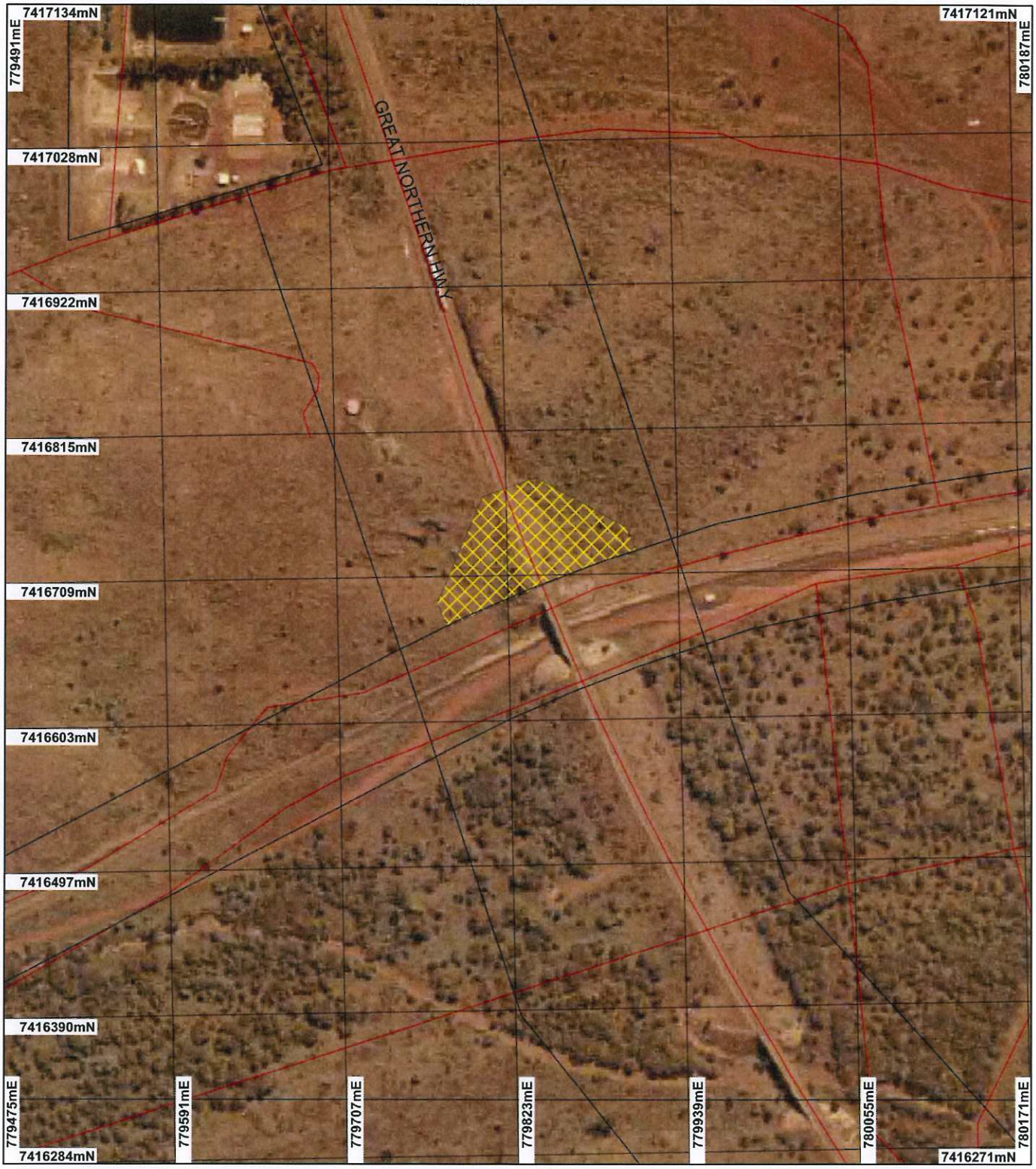
weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976.*

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

19 August 2010

Plan 3596/1



LEGEND

Clearing Instruments

- Areas Approved to Clear
- Road Centrelines
- Cadastre

Newman 1.4m Orthomosaic - Landgate 2003

N

0 ~100 m

Scale 1:3876
(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.

K Faulkner ..... Date 19/8/10

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 acknowleged by the agency acronym in the legend.

Department of Environment and Conservation

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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3596/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **BHP Billiton Iron Ore Pty Ltd**

1.3. Property details

Property: LOT 176 ON PLAN 219293 (NEWMAN 6753)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.8		Mechanical Removal	Infrastructure Maintenance

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 18: Low woodland; mulga (Acacia aneura). Shepherd (2007)	The proposed clearing is required as part of BHP Billiton Iron Ore's Newman to Port Hedland railway duplication. The clearing is for the purpose of bridge strengthening, protection and associated works and will occur entirely within the Great Northern Road Reserve. The bridge is situated over the existing railway line. The vegetation within the applied area is described as Triodia Hummock Grassland (Hummock grassland, low tree steppe; Snappy Gum (Eucalyptus leucophloia subsp. leucophloia) over Triodia wiseana). The condition of the vegetation within the applied area ranges from excellent to completely degraded (Keighery, 1994); however only a very small area under application is considered to be in excellent condition as the area is adjacent to existing roads (sealed road and unsealed access track) and rail infrastructure (ENV, 2009a cited in BHPBIO, 2010).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition and description of the vegetation under application was determined via aerial imagery and a flora survey results conducted by ENV (2009a) and cited in BHPBIO (2010).
As above	As above	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	As above
As above	As above	Good: Structure	As above

		significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	
As above	As above	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	As above
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

Comments

The proposed clearing is required as part of BHP Billiton Iron Ore's Newman to Port Hedland railway duplication. The clearing is for the purpose of bridge strengthening, protection and associated works and will occur entirely within the Great Northern Road Reserve. The bridge is situated over the existing railway line.

A flora and fauna survey has been undertaken within the application area and local area. No rare or priority listed flora or threatened ecological communities were recorded within the applied area during the flora survey (ENV, 2009a cited in BHPBIO, 2010) nor are there any known records of such occurrences.

No conservation significant fauna species were identified within the applied area during the fauna survey and the habitat types identified within the application area are well represented throughout the region, with similar habitat types adjacent to the applied area (ENV, 2009b cited in BHPBIO 2010).

DEC (2010) advise that only minimal ground disturbance is proposed and given that the application area is adjacent to existing road/rail infrastructure, is likely to be in degraded (Keighery, 1994) condition and unlikely to contain species of conservation significance.

Given the above, the assessment recommendation considers it unlikely that the proposed clearing will be at variance to any of the clearing principles. However it is recommended that the proponent implement weed hygiene and control methods to reduce the risk of introduction or spread of weeds (DEC, 2010).

Methodology

References:
- DEC (2010)
- BHPBIO (2010)
- Keighery (1994)
- Shepherd (2007)

GIS Databases:
- Newman 1.4m Orthomosaic - Landgate 2003
- SAC Biodatasets - accessed 19 March 10
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Pre European Vegetation - DA 01/01
- Dec tenure (28 October 2009)
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall (30-09-2001)
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02
- Hydrogeology, Statewide 05 Feb 2002

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

Comments

The application area falls within the Newman Water Reserve, a Public Drinking Water Supply Area (PDWSA) with a priority level yet to be assigned. The application area is also within the Pilbara Groundwater Area, which is an area covered by the Rights in Water and Irrigation Act 1914 (RIWI). DoW advised that the construction of the bridge and associated works is unlikly to have a significant impact on quality or quantity of groundwater (DoW, 2010).

An Aboriginal site of significance (site ID: 17394, site name: Pumping Station) does exisit over the application area.

Native title notification was sent to the Nyiyapari native title claimants (Trim Ref: DOC120759 & 120758). A response is yet to be received.

Main Roads Western Australia (MRWA) has approved the BHPBIO bridge design and have advised that an application to undertake works in the road reserve be completed prior to the commencement of any works within the road reserve (DEC Ref: A325795).

Methodology

4. References

BHPBIO (2010) Great Northern Highway Bridge Strengthening Project, Application to Clear Native Vegetation (Purpose Permit) Under The Environmental Protection Act 1986, Trim Ref: DOC119554.

DEC (2010) Regional advice, Department of Environment and Conservation, Western Australia (TRIM Ref. DOC123790).

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.

5. 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)