



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 4544/1
<b>Permit Holder:</b>	BHP Billiton Nickel West Pty Ltd
<b>Duration of Permit:</b>	24 October 2011 – 24 October 2016

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 Goldfields Highway road upgrades.

**2. Land on which clearing is to be done**

Goldfields Highway road reserve, Wiluna

**3. Area of Clearing**

The Permit Holder must not clear more than 20 hectares of native vegetation within the areas hatched yellow on attached Plan 4544/1.

**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.

**5. Type of clearing authorised**

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the power to clear native vegetation for those activities under the *Main Roads Act 1930*, or any other written law.

**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:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

## 8. Weed control

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.

## 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:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) the species composition, structure and density of the cleared area;
  - (ii) 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;
  - (iii) the date that the area was cleared; and
  - (iv) the size of the area cleared (in hectares).

### 10. Reporting

- (a) The Permit Holder must provide to the CEO on or before 31 July of each year, a written report:
  - (i) of records required under condition 9 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 July and 30 June of the preceding year.
- (b) Prior to 23 June 2016, the Permit Holder must provide to the CEO a written report of records required under condition 9 of 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;

*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*.



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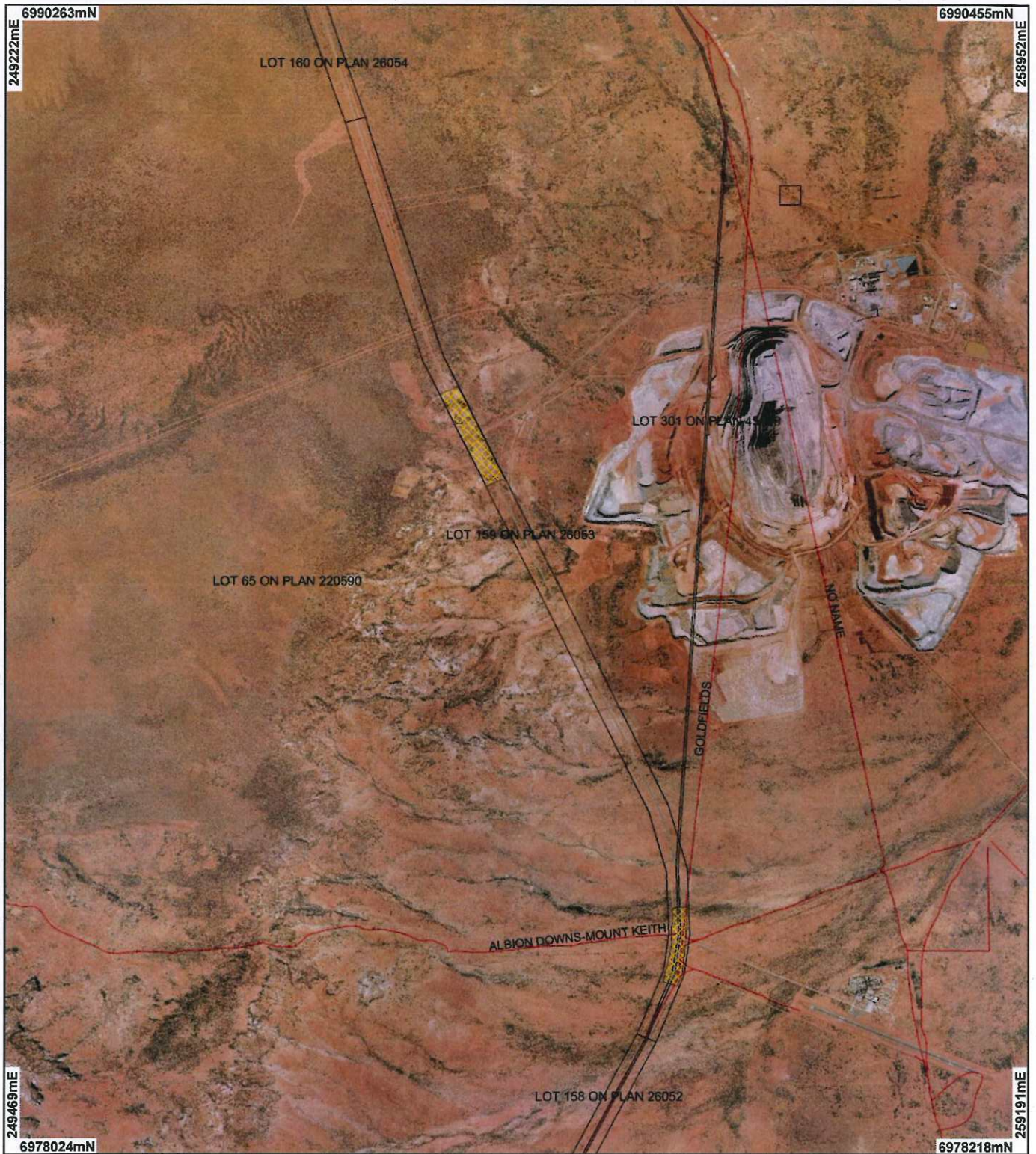
Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

29 September 2011




# Plan 4544/1

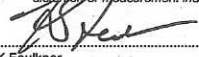


## LEGEND

- Road Centrelines
- Cadastre for labelling
- Clearing Instruments
- Areas Approved to Clear
- Yeelirrie 50cm Orthomosaic - Landgate 2005
- Mount Keith 50cm Orthomosaic - Landgate 2005

  
 0 ————— 1.5 km  
 Scale 1:55242  
 (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 29/9/11  
 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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\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.





## 1. Application details

### 1.1. Permit application details

Permit application No.: 4544/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: BHP Billiton Nickel West Pty Ltd

### 1.3. Property details

Property: LOT 159 ON PLAN 26053 ( WILUNA 6646)  
Local Government Area: Shire of Wiluna  
Colloquial name: Goldfields Highway road reserve

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
20		Mechanical Removal	Road construction or maintenance

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 29 September 2011

## 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
The mapped Beard vegetation association Wiluna 18 is described as low woodland, mulga ( <i>Acacia aneura</i> ).	The vegetation to be cleared is representative of the Murchison region with some areas highly degraded by road construction and maintenance (BHP, 2011). The northern proposed area borders the outskirts of a breakaway area and the southern proposed area consists of stony plains and crosses a narrow drainage line.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994)	The description and condition of the vegetation was determined by aerial imagery (Mt Keith 50cm Orthomosaic-Landgate 2005, Yeelirrie 50cm Orthomosaic- Landgate 2005) and photographs supplied by the applicant (BHP, 2011).

## 3. Assessment of application against clearing principles

### Comments **Proposal is not likely to be at variance to this Principle**

The proposed clearing of two roadside 10ha areas within the Goldfields Highway road reserve is associated with the Goldfields Highway upgrade project which involves construction of a slip lane at two intersections to improve safety of the Goldfields Highway (BHP, 2011).

The vegetation and habitat types occurring within the application areas are well represented within the surrounding region and given the past disturbances within the application areas such as road construction and maintenance, the vegetation under application is considered to be in a degraded (Keighery, 1994) condition and unlikely to comprise high biodiversity or habitat values.

DEC records identify 8 priority flora species that have been recorded in the local area (10kms) including the priority 1 species *Thryptomene sp. Leinster* (B.J. Lepschi & L.A. Craven 4362) which has been recorded 4kms northeast of the northern application area to the north of Mount Keith Operation mine site. This species occurs within the same vegetation type as the vegetation under application but different soil type (shallow stony earthy loams) (Northcote et al, 1960-68) therefore is not likely to occur within the application areas.

*Dasyercus cristicauda* (Crest-tailed Mulgara) (listed as Rare or Likely to become Extinct under the *Wildlife Conservation Act 1950*) and *Egernia kintorei* (Great Desert Skink) (listed as Vulnerable under the *Environment Protection Biodiversity Conservation Act 1999*) have been recorded in the local area and *Dasyercus cristicauda* (Crest-tailed Mulgara) is well known from the Mt Keith region (Biota, 2006). Both species inhabit burrows in arid, sandy areas containing spinifex grasslands and may occur within the two 10ha application areas (DEC, 2011). However, due to the highly vegetated surrounding landscape these species are capable of relocating to adjacent similar habitat in better condition and the areas under application are not considered significant habitat for these species.

The applicant has advised the cleared vegetation and topsoil will be stockpiled for later use in rehabilitation and

the stockpiles will be located in an area which will ensure they will not impact natural surface drainage (BHP, 2011).

The applicant has advised minor drainage lines occur within the proposed clearing areas (BHP, 2011).

Given the above, the assessment of the application identified that the clearing may be at variance to principle (f) and is not likely to be at variance to any of the principles.

#### Methodology

##### References:

BHP (2011)  
DEC (2011)  
DEC (2007- )  
Keighery (1994)  
Northcote et al (1960-68)

##### GIS databases:

- Pre-European Vegetation
- SAC Bio datasets (Accessed 16 August 2011)
- Aboriginal Sites of Significance
- Mt Keith 50cm Orthomosaic- Landgate 2005
- Yeelirrie 50cm Orthomosaic- Landgate 2005

### Planning instruments, Native Title, Previous EPA decisions or other matters.

#### Comments

No submissions from the public have been received.

The application area falls within the East Murchison Groundwater Area. Department of Water did not provide any advice (DoW, 2011).

There are two Aboriginal Heritage sites within the northern application area and the applicant has committed to avoiding these sites during the road works and will install appropriate protection and barricading to preserve access to the sites in consultation with BHP Billiton Nickel West Mt Keith's heritage department (BHP, 2011).

The applicant has provided authority from Main Roads WA to apply for a clearing permit for the proposed road works within the Goldfields Highway road reserve.

#### Methodology

##### References:

BHP (2011)  
DoW (2011)

### 4. References

- BHP (2011) BHP Billiton Nickel West Mt Keith Clearing Permit Application (Purpose Permit) supporting information for CPS 4544/1, BHP Billiton Nickel West Mt Keith Operation, Welshpool DC, WA.
- Biota (2006) Fauna Habitats and Fauna Assemblage Survey of the Mt Keith Mine Project Area- November 2006, Biota Environmental Services Pty Ltd, Leederville, WA.
- DoW (2011) Advice for Clearing Application CPS 4544/1. Department of Water, Goldfields Region, WA.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Shepherd, D.P. (2009) 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)