



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7684/1
Permit Holder:	BHP Billiton Nickel West Pty Ltd.
Duration of Permit:	25 November 2017 – 25 November 2022

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 constructing accommodation facilities, wastewater treatment plant, landfill site, firebreaks, seepage management and a golf course.

2. Land on which clearing is to be done

Lot 512 on Deposited Plan 72427, Leinster
Lot 163 on Plan 30116, Leinster

3. Area of Clearing

The Permit Holder must not clear more than 31.2 hectares of native vegetation within the combined areas cross-hatched yellow on attached Plan 7684/1.

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.

PART II – MANAGEMENT CONDITIONS

5. Avoid, minimise etc clearing

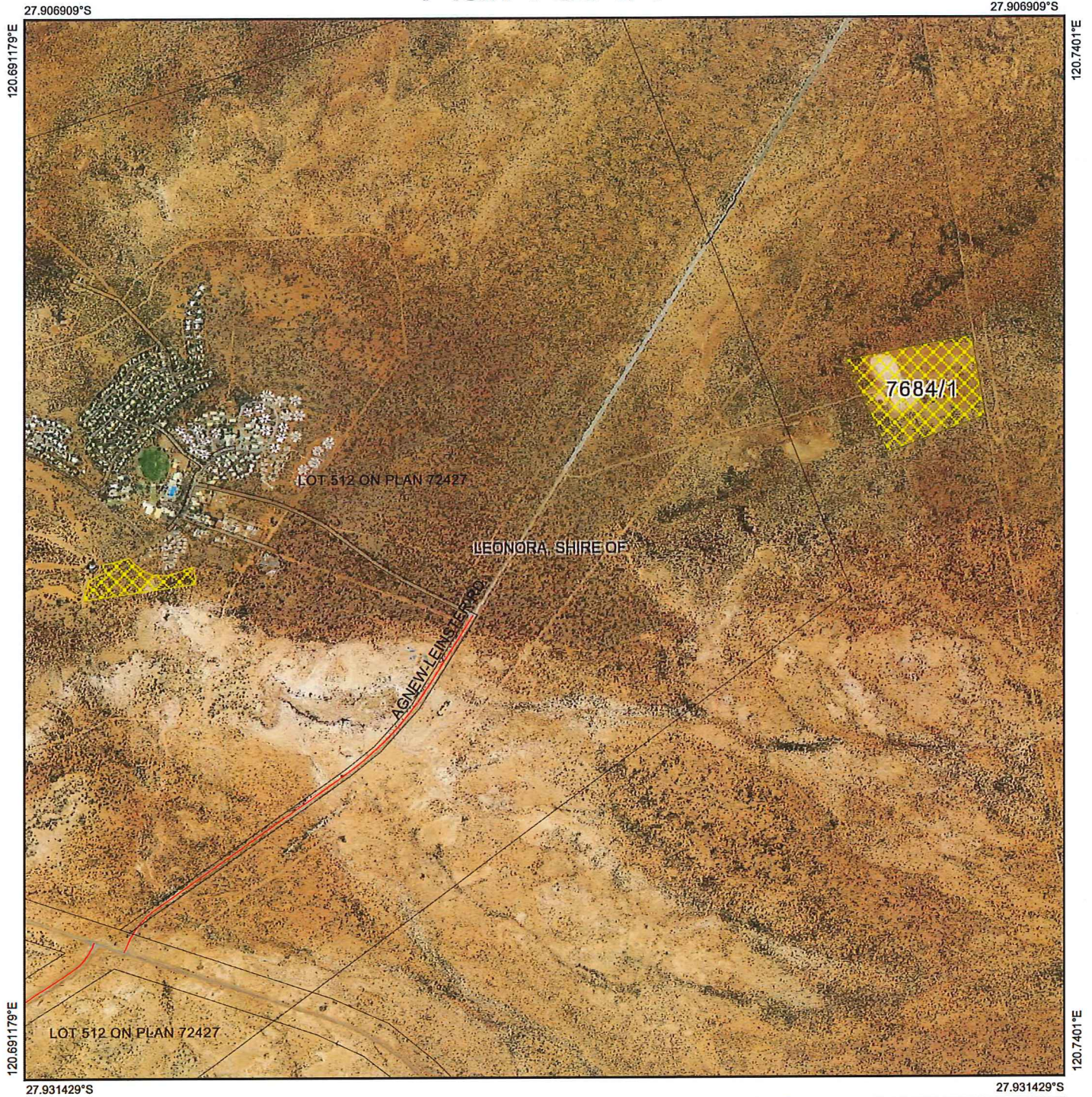
In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (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.




Mathew Gannaway
MANAGER
CLEARING REGULATION

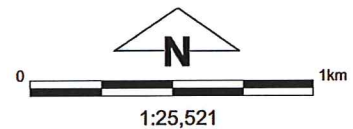
*Officer delegated under Section 20
of the Environmental Protection Act 1986*

Plan 7684/1




Legend

-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



(Approximate when reproduced at A4)
GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

 Date 27/10/2017

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



1. Application details

1.1. Permit application details

Permit application No.: 7684/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: BHP Billiton Nickel West Pty Ltd

1.3. Property details

Property: Lot 512 on Deposited Plan 72427, Leinster
Lot 163 on Plan 30116, Leinster

Local Government Authority:

DER Region: Leonora, Shire of
DPaW District: Goldfields
Localities: Leinster

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
31.2		Mechanical Removal	Building or structure

1.5. Decision on application

Decision on Permit Application: Granted

Decision Date: 27 October 2017

Reasons for Decision: The clearing permit application was received on 3 July 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing is not likely to be at variance to any of the clearing principles.

The Delegated Officer has determined that the proposed clearing is not likely to result in any significant environmental impacts.

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 application area is mapped as Beard vegetation association 18 described as "Low woodland; mulga (<i>Acacia aneura</i>)" (Shepherd et al., 2001).	The application is to clear 31.2 hectares of native vegetation within Lot 512 on Deposited Plan 72427 and Lot 163 on Plan 30116, Leinster, for the purpose of constructing accommodation facilities and associated infrastructure.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994) To Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).	The condition of the vegetation within the application area was determined via a review of aerial imagery, regional advice from Department of Biodiversity Conservation and Attractions (DBCA, 2017) and a Report on a Habitat Mapping Project of Leinster Town site and Bore fields (Cockerton and Stratford, 1997).

3. Assessment of application against clearing principles

Comments

The application is to clear 31.2 hectares of native vegetation within Lot 512 on Deposited Plan 72427 and Lot 163 on Plan 30116, Leinster, for the purpose of constructing accommodation facilities and associated infrastructure.

The vegetation within the application area appears to be in a degraded to completely degraded (Keighery, 1994) condition as a result of previous clearing in adjacent areas. This clearing appears to have been undertaken under Clearing Permit CPS 1197/6 for the purposes of expanding accommodation facilities, wastewater treatment plant, landfill site, firebreaks and seepage management. Additionally, based on available aerial imagery, the majority of the eastern area under application (approximately 20 hectares) has been previously cleared under CPS 1197/6.

According to available databases, no rare flora species and five priority flora species were recorded within the local area (10 kilometre radius). Given the condition of vegetation, there is a low risk of impacts to rare or priority flora as a result of the proposed clearing. DBCA advised "there are likely no threatened or priority flora to be impacted by this proposed clearing" (DBCA, 2017).

No threatened or priority ecological communities are mapped within the application area or in the local area.

According to available data bases, one fauna species listed as rare or likely to become extinct (Malleefowl (*Leipoa ocellata*)) and one species listed as other specially protected fauna (Peregrine Falcon (*Falco peregrinus*)) under the *Wildlife Conservation Act 1950* have been recorded within a 40 kilometre radius of the application area (DBCA, 2007-). Given the application area is in degraded to completely degraded (Keighery, 1994) condition due to previous disturbance, and the availability of fauna habitat in better condition in the local area, the application area is not likely to comprise of significant habitat for fauna indigenous to Western Australia.

The application area is located within the Murchison Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and the Shire of Leonora which both retain approximately 99 per cent of their pre-European vegetation extents (Government of Western Australia, 2016).

The application area is mapped as Beard vegetation associations 18, of which there is approximately 99 per cent of the pre-European extent remaining within the Murchison IBRA bioregion (Government of Western Australia, 2016).

The national objectives and targets for biodiversity conservation includes a target to prevent the clearance of ecological communities with an extent below 30 per cent of that present pre-European settlement (Commonwealth of Australia, 2001). Given the condition of native vegetation within the application area and the extent of Beard vegetation association 18 remaining within the Murchison IBRA bioregion, the application area is not likely to be significant as a remnant of native vegetation in an area that has been extensively cleared.

According to available databases, no watercourses or wetlands have been mapped within the application area.

The application area does not intersect with any conservation areas. No conservation areas occur within the local area.

The western area under application is mapped as the Bullimore Land System and the eastern area under application is mapped as the Tiger land system.

The Bullimore Land System is described as sandplain supporting spinifex grasslands with mallees and acacia shrubs (Department of Primary Industries and Regional Development (DPIRD), 2017). The Tiger Land System is described as gravely hard pan plain and sandy banks with mulga shrublands and wanderrie grasses (DPIRD, 2017).

The Tiger land system is generally not susceptible to soil erosion; however impedance to sheet flow may cause water starvation and consequent loss of vigour in vegetation downslope (DPIRD, 2017). Noting the application area that is mapped as the Tiger land system is largely cleared from previous activities, it is considered unlikely that the area under application will cause appreciable land degradation.

Due to the mapped soil types and previous disturbance, the proposed clearing is not likely to deteriorate the quality of groundwater or surface water, cause or exacerbate flooding or cause appreciable land degradation.

Noting the above, the proposed clearing is not likely to be at variance to any of the clearing principles.

Methodology

References:
Commonwealth of Australia (2001)
DBCA (2007-)
DBCA (2017)
Government of Western Australia (2016)

GIS datasets:
- Hydrography linear
- Parks and Wildlife Tenure

Planning instruments and other relevant matters.

Comments	<p>The application was advertised on the Department of Water and Environmental Regulation's (DWER) website on 28 July 2017 for a 21 day submission period. No submissions were received during this period.</p> <p>The Shire of Leonora advised it has no objections to the proposed clearing (Shire of Leonora, 2017).</p> <p>The application area is located within the Goldfields Groundwater Area as proclaimed under the <i>Rights in Water and Irrigation Act 1914</i>. DWER's Land Use Planning Section advised they have no comments to provide on the proposed clearing (DWER, 2017).</p> <p>No registered Aboriginal Sites of Significance occur within the application area.</p>
Methodology	<p>References:</p> <p>DWER (2017)</p> <p>Shire of Leonora (2017)</p> <p>GIS datasets:</p> <p>Aboriginal Sites of Significance</p>

4. References

- Cockerton and Stratford (1997) Habitat mapping project Leinster Townsite and Borefields. Prepared by Landcare Services Pty Ltd, June 1997.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed 17 July 2017
- Department of Biodiversity, Conservation and Attractions (DBCA) (2017) Regional advice for Clearing Permit Application CPS 7684/1, 15 September 2017, Government of Western Australia DWER Ref: A1525117.
- Department of Water and Environmental Regulation (DWER) (2017) Swan Avon Land Use Planning advice for Clearing Permit Application CPS 7684/1, 16 August 2017, Government of Western Australia DWER Ref: A1510920.
- Department of Primary Industries and Regional Development (DPIRD) (2017). NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed 9 October 2017).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Government of Western Australia. (2016). 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. WA Department of Parks and Wildlife, Perth.
- 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 Leonora (2017), Planning Advice for Clearing Permit Application CPS 7684/1. Received on 26 July 2017, DWER Ref: A1510919.