



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5202/3  
Permit type: Purpose

### 1.2. Proponent details

Proponent's name: **Big Bell Gold Operations Pty Ltd**

### 1.3. Property details

Property: Mining Leases 20/17, 20/21, 20/78, 20/99, 20/171, 20/192, 20/202, 20/252, 20/354, 21/7, 21/14, 21/44, 21/49, 21/65, 21/75, 21/89, 21/96  
Miscellaneous Licences 20/21, 20/40  
Local Government Area: Shire of Cue  
Colloquial name: Central Murchison Gold Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
80		Mechanical Clearing	Mineral Production

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 13 August 2015

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

**Vegetation Description** Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Eight Beard vegetation associations have been mapped within the permit area (GIS Database):

- 18: Low woodland; mulga (*Acacia aneura*);
- 39: Shrublands; mulga scrub;
- 125: Bare areas; salt lakes;
- 240: Succulent steppe with open scrub; scattered *Acacia sclerosperma* and bowgada over saltbush and bluebush;
- 268: Succulent steppe with open scrub; scattered *Acacia sclerosperma* over saltbush and bluebush;
- 313: Succulent steppe with open scrub; scattered *Acacia sclerosperma* and *Acacia victoriae* over bluebush;
- 1127: Mosaic: Saltbush and bluebush/samphire; and
- 2081: Shrublands; bowgada and associated spp. scrub.

A Level 1 flora and vegetation survey of the Central Murchison Gold Project (which includes the additional area) was undertaken by Outback Ecology Services (Outback Ecology) in 2012. There were 15 vegetation associations recorded within the previous permit boundary which are detailed in decision report CPS 5202/2. The following three vegetation associations were not within the previous permit boundary:

#### Cuddingwarra Area

1. *Tecticornia disarticulata*, *Maireana*, *Sclerolaena* spp., *Solanum lasiophyllum* Low Shrubland over *Aristida contorta* Open Tussock Grassland;
2. *Acacia aneura* and *A. pruinocarpa* Scattered Tall Shrubs over *Arista contorta* Very Open Tussock Grassland;
3. Mixed Low Open Shrubland over Scattered Herbland and Tussock Grassland on white quartz plain.

**Clearing Description** East Murchison Gold Project.  
Big Bell Gold Operations Pty Ltd proposes to clear up to 80 hectares of native vegetation within a total boundary of approximately 3,789 hectares for the purposes of mineral production. The project consists of the Day Dawn, Cuddingwara and Big Bell project areas located approximately four kilometres south-west, seven and 25 kilometres north-west of Cue respectively.

<b>Vegetation Condition</b>	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994);  to  Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
<b>Comment</b>	The vegetation condition was assessed by botanists from Outback Ecology (2012b).  The Cue area experienced uncharacteristically high rainfall in late 2010 and early 2011 (Outback Ecology, 2012a).  The project includes pit extensions, expanding waste landforms, dewatering pipelines and lay down areas (Outback Ecology, 2012a).  Clearing permit CPS 5202/1 was granted on 13 December 2012 and authorised the clearing of 50 hectares within a permit boundary of 427.5 hectares. CPS 5202/1 was amended on 26 April 2013 to increase the permit boundary from 427.5 hectares to 2,250 hectares.

### 3. Assessment of application against clearing principles

#### Comments

Big Bell Gold Operations Pty Ltd has applied to amend CPS 5202/2 to increase the amount of clearing authorised from 50 to 80 hectares and increase the clearing permit boundary from 2,250 hectares to 3,789 hectares. The permit boundary is expanding to include the Cuddinwarra project area and also expand the current boundary at the Day Dawn project area.

There were three vegetation associations identified at the Cuddingwarra area (Outback Ecology, 2012b). A significant portion of this area was also mapped as 'disturbed' due to previous mining activities (Outback, 2012b). The vegetation associations within the additional areas at Day Dawn were all present within the previous permit boundary. None of the vegetation associations within the additional areas have been identified as being a Threatened or Priority Ecological Community (GIS Database; Outback Ecology, 2012b).

There are no records of Threatened or Priority flora species within the additional areas (GIS Database; Outback Ecology, 2012b). The additional area at Day Dawn includes another instance of quartz outcrop which has the potential to provide habitat for the Threatened flora species *Eremophila rostrata* subsp. *rostrata* and *Eremophila rostrata* subsp. *trifida* (Western Australian Herbarium, 2015). The quartz outcrop habitat was also identified as being significant for local fauna species as it has the potential to provide refugia for small mammals and reptiles and also provide a vantage point for birds of prey (Outback Ecology, 2012b). Potential impacts to flora and fauna may be minimised by the implementation of a condition restricting the clearing of the quartz outcrop habitat.

No additional fauna habitats types are present within the amended permit boundary. The Cuddinwarra area only contained open stony plain habitat and disturbed areas (Outback Ecology, 2012b). The additional area surrounding Day Dawn also comprised mostly open stony plain habitat with a small area of drainage line habitat and an additional quartz outcrop area (Outback Ecology, 2012b). Along with the quartz outcrop habitat, the drainage line habitat has also been identified as significant for local fauna (Outback Ecology, 2012b). As there is a small amount of drainage line habitat present within the additional areas, the proposed amendment is not likely to have a significant impact on this habitat in the local area.

The permit boundary extends onto the former Lakeside Pastoral Lease which is managed by the Department of Parks and Wildlife (GIS Database). The proposed clearing on the former Lakeside Pastoral Lease is for a dewatering pipeline. The permit boundary and amount of clearing on the Lakeside Lease area has not changed from the previous permit. The proposed amendment will not have an increased impact on conservation areas above those of the previous permit.

The majority of the additional areas are comprised of the Austin land system with other smaller areas mapped as the Gabanintha land system (GIS Database). The Austin land system is generally not susceptible to erosion, however, the removal of vegetation on drainage tracts can lead to increased erosion (Curry et al., 1994). There are several ephemeral drainage lines within the additional areas (GIS Database). Potential impacts of erosion may be minimised by the staged clearing condition on the permit. The Gabanintha land is generally not susceptible to erosion (Curry et al., 1994).

The assessment of the clearing principles is consistent with that in decision report CPS 5202/2, where the proposed clearing is at variance to Principle (f), may be at variance to Principles (b) and (g), is not likely to be at variance to Principles (a), (c), (d), (h), (i) and (j) and is not at variance to Principle (e).

<b>Methodology</b>	Curry et al. (1994) Outback Ecology (2012b) Western Australian Herbarium (2015) GIS Database: - DPaW Tenure - Hydrography, linear
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- Imagery
- Rangeland Land System Mapping
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Flora

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

### Comments

There are is one native title claim over the area under application (WC2004/10) (Department of Aboriginal Affairs, 2015). However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

According to available databases, there are two registered Aboriginal Sites of Significance within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, Department of Parks and Wildlife and the Department of Water to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 8 June 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

**Methodology** Department of Aboriginal Affairs (2015)  
GIS Database:  
- Aboriginal Sites Register System

## 4. References

- Curry, P.J., Payne, A.L., Leighton, K.A., Hennig, P. and Blood, D.A. (1994) Technical Bulletin - An Inventory and Condition Survey of the Murchison River Catchment and Surrounds, Western Australia, No. 84. Department of Agriculture, Government of Western Australia, Perth, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Outback Ecology (2012a) Clearing Permit Application. Supporting information for clearing permit application CPS 5202/1, dated August 2012.
- Outback Ecology (2012b) Level 1 Vegetation, Flora and Fauna Assessment. Unpublished report dated July 2012.
- Western Australian Herbarium (2015) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <<http://florabase.dpaw.wa.gov.au/>> Accessed 3 July 2015.

## 5. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DPaW and DER)
<b>DER</b>	Department of Environment Regulation, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DotE</b>	Department of the Environment, Australian Government
<b>DoW</b>	Department of Water, Western Australia
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>s.17</b>	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

## Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

- T** **Threatened species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).  
Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.  
Rankings:  
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.  
EN: Endangered - considered to be facing a very high risk of extinction in the wild.  
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.
- X** **Presumed Extinct species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
- IA** **Migratory birds protected under an international agreement:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.  
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
- S** **Other specially protected fauna:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P1** **Priority One - Poorly-known species:**  
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
- P2** **Priority Two - Poorly-known species:**  
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.
- P3** **Priority Three - Poorly-known species:**  
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.
- P4** **Priority Four - Rare, Near Threatened and other species in need of monitoring:**  
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.  
(b) Near Threatened. Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.  
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.
- P5** **Priority Five - Conservation Dependent species:**  
Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

## Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (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.
- (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.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated

with a watercourse or wetland.

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