



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5809/4  
Permit type: Purpose

### 1.2. Proponent details

Proponent's name: Minjar Gold Pty Ltd

### 1.3. Property details

Property: Mining Lease 59/380  
Mining Lease 59/425  
Mining Lease 59/431  
Mining Lease 59/460  
Miscellaneous Licence 59/135  
Local Government Area: Shire of Perenjori  
Colloquial name: Minjar Gold Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
166.5		Mechanical Removal	Mineral Production and Associated Activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 9 July 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. The following Beard vegetation associations are located within the application area (GIS Database):

**355:** Shrublands; bowgada and jam scrub with scattered York gum and red mallee;

**420:** Shrublands; bowgada and jam scrub; and

**434:** Shrublands; *Acacia quadrimarginea* and jam scrub with scattered York gum and *Allocasuarina huegeliana*.

The application area comprises two separate areas. One is known as Mugs Luck and the second comprises several prospects including Blackdog, Highland Chief/Bobby McGee, Trench and Camp (Southern Deposits).

#### **MUGS LUCK**

Several flora and vegetation surveys have been conducted over Mugs Luck and the Minjar Gold tenements. Vegetation mapping for Mugs Luck is sourced from flora and vegetation surveys undertaken by Woodman Environmental Consulting Pty Ltd (Woodman) and Animal Plant Mineral (APM). Most of the mapping is sourced from a Woodman survey conducted on 19 to 22 January 2004 (Woodman, 2004). APM mapped a small area along the eastern boundary of the application area. This survey also included a targeted Threatened and Priority Flora survey. The APM survey included several other Minjar prospects and was undertaken from 29 August to 5 September 2012, 13 to 24 September 2012 and 4 to 14 October 2012 (APM, 2012b). According to APM (2013), the following ten vegetation communities occur within the Mugs Luck application area:

#### **Woodlands**

1. W1: Open Low Woodland of mixed Eucalyptus species over Thicket to Scrub of *Acacia* species over a Dwarf Scrub of mixed species over Herbs on red loamy soils with gravel.

2. W3: Open Low Woodland of *Eucalyptus ?kochii* subsp. *plenissima* over Thicket of mixed *Acacia* species on red loamy-clay.

#### **Thickets and Scrubs**

3. T1: Thicket to Dense Thicket dominated by *Acacia ramulosa* var. *ramulosa* over a Low Scrub of mixed species over Herbs on red loamy soils with some gravel.

4. T3: Thicket to Open Scrub of mixed *Acacia* species over Heath dominated by *Thryptomene costata* or *Aluta aspera* subsp. *hesperia* on red silty-clay with gravel.

5. T4: Thicket to Scrub dominated by *Melaleuca hamata*, *Allocasuarina acutivalvis* ?subsp. *prinsepiana* and *Acacia* species on red loamy-clay on rocky ground.

6. T6: Scrub to Heath of mixed *Acacia* and *Eremophila* species, with emergent *Eucalyptus* species on red clay-loam on lower slopes and water-gaining flats.

#### **Melaleuca Thicket**

7. maT1: *Melaleuca atroviridis* thicket, over *Acacia effusifolia* scattered shrubs, over mixed open seasonal herbland. Occurred on minor drainage lines with orange brown clay.

#### **Acacia Scrub**

8. aeS2: *Acacia effusifolia* (*Acacia quadrimarginea*) scrub, over *Acacia tetragonophylla* open shrubland, over scattered seasonal herbs. Occurred on flat plains with orange brown clay-loam.

#### **Acacia Open Scrub**

9. aqOS5: *Acacia quadrimarginea* open scrub, over *Thryptomene costata* open heath, over *Borya sphaerocephala* and seasonal mixed herbland. Occurred on slopes and hill crests with orange brown clay-loam associated with basalt.

#### **Eucalyptus Open Woodland**

10. elsOW1: *Eucalyptus loxophleba* subsp. *supralaevis* open woodland, over mixed *Acacia ramulosa* var. *ramulosa*, *Eremophila oldfieldii* subsp. *oldfieldii*, *Exocarpos aphyllus* open scrub, over *Ptilotus obovatus* var. *obovatus* scattered low shrubs over scattered seasonal herbs. Occurred on flat plains with orange brown clay-loam.

### **SOUTHERN DEPOSITS**

Several flora and vegetation surveys have been conducted over the Southern Deposits. Vegetation mapping is sourced from a flora and vegetation survey undertaken by Woodman in September 2003 (Woodman, 2003). Targeted Threatened and Priority Flora surveys were conducted by APM in November 2011 and September and October 2012 (APM, 2011; APM, 2012b). According to APM (2013), the following seven vegetation communities occur within the Southern Deposits application area:

#### **Woodlands**

1. W1: Open Low Woodland of mixed *Eucalyptus* species over Thicket to Scrub of *Acacia* species over a Dwarf Scrub of mixed species over Herbs on red loamy soils with gravel.

2. W2: Open Low Woodland of *Eucalyptus salmonophloia* and *Eucalyptus loxophleba* subsp. *supralaevis* over Open Scrub on red silty clay with quartz pebbles.

3. W4: Low Woodland of *Eucalyptus sheathiana* and *Eucalyptus ?striaticalyx* over Low Scrub of mixed shrubs over Open Herbs on red loamy-clay on rocky ground.

4. W9: Low Woodland to Scrub dominated by *Allocasuarina acutivalvis* ?subsp. *prinsepiana* on red-brown soils on rocky ground.

#### **Thickets and Scrubs**

5. T1: Thicket to Dense Thicket dominated by *Acacia ramulosa* var. *ramulosa* over a Low Scrub of mixed species over Herbs on red loamy soils with some gravel.

6. T3: Thicket to Open Scrub of mixed *Acacia* species over Heath dominated by *Thryptomene costata* or *Aluta aspera* subsp. *hesperia* on red silty-clay with gravel.

7. T4: Thicket to Scrub dominated by *Melaleuca hamata*, *Allocasuarina acutivalvis* ?subsp. *prinsepiana* and *Acacia* species on red loamy-clay on rocky ground.

#### **Clearing Description**

Minjar Gold Project.

Minjar Gold Pty Ltd (Minjar) proposes to clear 166.5 hectares of native vegetation within a total boundary of approximately 258.68 hectares for the purpose of mineral production and associated activities. The project is located approximately 70 kilometres north east of Perenjori, in the Shire of Perenjori.

#### **Vegetation Condition**

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);

to

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

#### **Comment**

Clearing Permit CPS 5809/1 was granted by the Department of Mines and Petroleum (DMP) on 16 January 2014 and authorised the clearing of 135.01 hectares of native vegetation for mineral production and associated activities within a total boundary of approximately 180 hectares.

Amended Permit CPS 5809/2 was granted by the DMP on 26 June 2014 and authorised the clearing of 138 hectares of native vegetation within a total boundary of approximately 180 hectares.

Amended Permit CPS 5809/3 was granted by the DMP on 11 December 2014 and authorised the clearing of 165 hectares of native vegetation within a total boundary of approximately 257 hectares.

On 21 May 2015, Minjar applied to amend CPS 5809/3 to increase the authorised clearing area by 1.5 hectares and the approved clearing boundary by 1.68 hectares in order to accommodate for an altered pit design and abandonment bunding of the Camp deposit.

### 3. Assessment of application against clearing principles

#### Comments

The clearing permit amendment is to increase the authorised clearing area by 1.5 hectares and the approved clearing boundary by 1.68 hectares in order to accommodate for an altered pit design and abandonment bunding of the Camp deposit.

There are no known Threatened Flora, Threatened Ecological Communities or Priority Ecological Communities located within the proposed amendment area (APM, 2015; GIS Database).

One Priority Flora species *Acacia sulcataulis* (P1) was recorded within the proposed amendment area during the flora and vegetation survey (APM, 2012b). It is expected that the project will have a cumulative impact of 3.77% on the local population of this species (APM, 2015). It is therefore not considered likely that the proposed clearing will have a significant impact on this species.

One Threatened Fauna species (*Idiosoma nigrum* (VU); Shield-backed Trapdoor Spider) was recorded within the proposed amendment area during the fauna survey (APM, 2012a). The proposed clearing permit amendment will result in an additional 1.5 hectares of suitable habitat for the Shield-backed Trapdoor Spider being removed (APM, 2015). Given that approximately 934 hectares of suitable habitat has been mapped for this species in the local area, the proposed amendment area is likely to have an impact of less than 1% on the local population of Shield-backed Trapdoor Spider (APM, 2015). Therefore the proposed clearing is unlikely to have a significant impact on the local population of this species.

There are no permanent or non-perennial watercourses or water bodies mapped within the proposed amendment area (APM, 2015; GIS Database).

The land systems associated with the amendment area are not overly susceptible to erosion and the additional clearing is not likely to cause a deterioration in the quality of surface or underground water or increase the incidence or intensity of flooding (GIS Database).

The application area is not located within any conservation areas (GIS Database). There are no conservation areas within 50 kilometres of the application area (GIS Database).

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986* and is consistent with the assessment contained in decision report CPS 5809/3.

#### Methodology

APM (2012)  
APM (2015)  
GIS Database:  
- DPaW Tenure  
- Hydrography, linear  
- Pre-European Vegetation  
- Rangeland Land System Mapping  
- Threatened and Priority Flora  
- Threatened Ecological Sites Buffered

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

#### Comments

There are two Native Title claims over the application area (WC1996/098 & WC2012/005) (DAA, 2015). These claims have been registered with the National Native Title Tribunal on behalf of the claimant group. 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*.

There are no 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 22 June 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

#### Methodology

DAA (2015)  
GIS Database:  
Aboriginal Sites Register System

## 4. References

- APM (2011) Minjar Gold Biological Survey Minjar Gold Mine Expansion Flora and Vegetation Assessment November 2011. Unpublished report prepared by Animal Plant Mineral Pty Ltd for Minjar Gold Pty Ltd dated November 2011.
- APM (2012a) Fauna Assessment Austin, Blackdog, Bobby McGee, Bugeye, Camp, Highland Chief, Keronima, M1, Monaco, Mugs Luck, Riley, Silverstone, Trench and Windinne Well Projects. Unpublished report prepared by Animal Plant Mineral Pty Ltd for Minjar Gold Pty Ltd dated August – October 2012.
- APM (2012b) Minjar Gold Mine Expansion Level 1 Flora and Vegetation Assessment and Targeted Search for Flora of Conservation Significance Austin, Blackdog, Camp, Highland Chief, Keronima, Mugs Luck, Riley and Trench. Unpublished report prepared by Animal Plant Mineral Pty Ltd for Minjar Gold Pty Ltd dated August – October 2012.
- APM (2013) Minjar Gold Pty Ltd Clearing Permit (Purpose Permit) Application Supporting Information Application for a Native Vegetation Clearing Permit (Purpose Permit) for the Minjar Gold Southern Deposits Expansion Project South Murchison Region, Western Australia Mugs Luck - M59/431, L59/133 and L59/135 Blackdog, Highland Chief / Bobby McGee, Trench and Camp - M59/425, M59/460 and L59/133. Unpublished report prepared by Animal Plant Mineral Pty Ltd for Minjar Gold Pty Ltd dated August 2013.
- APM (2015) Amendment Application for CPS 5809/3 – Minjar Gold Pty Ltd. Unpublished report prepared by Animal Plant Mineral Pty Ltd for Minjar Gold Pty Ltd, 20 May 2015.
- DAA (2015) Department of Aboriginal Affairs (WWW Search – Aboriginal Heritage Inquiry System). Retrieved from <http://maps.dia.wa.gov.au/AHIS2/> on 26 June 2015.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Woodman (2003) Vegetation Survey of the Highland Chief and Monaco Areas Minjar Gold Project. Unpublished report prepared by Woodman Environmental Consulting Pty Ltd for Gindalbie Gold N.L. dated October 2003.
- Woodman (2004) Flora and Vegetation Survey of the Keronima, Western Corridor, Austin, Mugs Luck, Bobby McGee, Apollo and Promises Project Areas Minjar Gold Project. Unpublished report prepared by Woodman Environmental Consulting Pty Ltd for Gindalbie Gold N.L. dated March 2004.

## 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 <i>the 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 DPaW 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.