



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5809/2  
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:
138		Mechanical Removal	Mineral Production and Associated Activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 26 June 2014

## 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, 2012). According to APM (2013b), 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, 2012). According to APM (2013a), 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 138 hectares of native vegetation within a boundary of approximately 188.3 hectares for the purpose of mineral production and associated activities. The project area is located approximately 70 kilometres north east of Perenjori within 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**

The application area comprises two separate areas (approximately 7 kilometres apart). One is known as Mugs Luck (55 hectares) and the second area comprises several prospects including Blackdog, Highland Chief/Bobby McGee, Trench and Camp and is known as the Southern Deposits. The purpose of the application is to expand the existing pit at Highland Chief and develop new open cut pits at satellite deposits of Mugs Luck, Blackdog, Bobby McGee, Trench and Camp (APM, 2013b). These pits will form part of the larger Minjar Gold Project which involves development of new and expansion of previous mining operations over a 50 kilometre strike line.

The proposed clearing is for pit development, waste rock dumps, temporary run of mine (ROM) pads, haul and access roads and abandonment bunds (APM, 2013b). Clearing will be by mechanical means. Vegetation and topsoil will be stockpiled for use in rehabilitation and will be utilised progressively as required (APM, 2013b).

Vegetation condition rating was determined by Woodman (2003, 2004) and APM using various vegetation condition scales (APM, 2013b). These ratings were converted to the Keighery (1994) scale.

The flora and vegetation survey undertaken by APM in 2012 was conducted at the end of below average winter rainfall, hence conditions for field survey were not ideal and the below average rainfall appeared to affect the emergence of many spring herbs (APM, 2012). The rainfall also appeared to have been patchy across the tenements as the diversity and abundance of spring herbs differed greatly between habitats of similar soil, land form and vegetation composition (APM, 2012). However, many plants were in flower during the field survey

(APM, 2012).

It is estimated that the Woodman 2004 flora and vegetation survey only recorded approximately 65 to 70% of species present due to the time of the year the survey was conducted (Summer) (APM, 2013b).

CPS 5809/1 was granted on 16 January 2014 and authorised the clearing of 135.01 hectares within a boundary of 187 hectares.

### 3. Assessment of application against clearing principles

#### Comments

Minjar has applied to amend CPS 5809/1 to increase the area authorised to be cleared to 138 hectares and the permit boundary to 188.3 hectares. This is an increase of 2.99 and 1.3 hectares respectively. This increase is due to an altered pit design and road layout at the Blackdog Deposit.

The vegetation mapped within the additional area is similar to vegetation within the previous permit boundary (Woodman, 2004). There are no Threatened or Priority Ecological Communities recorded within the additional area (APM, 2012; GIS Database).

There is no additional habitat for the Threatened Flora species *Stylidium scintillans* with the additional area (APM 2014). The additional clearing has the potential to further impact on the following Priority Flora species (APM, 2014):

- *Acacia diallaga* (Priority 1 - an additional 11 plants)
- *Acacia karina* (Priority 1 - an additional 12 plants)
- *Grevillea scabrida* (Priority 1 - an additional 92 plants)
- *Grevillea subtiliflora* (Priority 3 - an additional 6 plants)
- *Persoonia pentasticha* (Priority 3 - an additional 10 plants)

Advice from the Department of Parks and Wildlife (DPaW) is that the additional clearing is not likely to have a significant impact on the viability of local populations of Priority Flora species (DPaW, 2014).

The additional area includes 0.5 hectares of habitat suitable for the Shieldback Trapdoor Spider (*Idiosoma nigrum* - Schedule 1). Based on extrapolations from previous surveys, there are a further 118 spiders that may be impacted by the additional clearing (APM, 2014). The original clearing had the potential to impact over 23,000 spiders (APM, 2013a). The additional impacts to the Shieldback Trapdoor Spider are not likely to have a significant impact on the local population.

The additional area is also located within former Warridar pastoral lease which has been purchased by the Department of Parks and Wildlife (GIS Database). The additional clearing will not have any significant impacts on the environmental values of the ex Warridar lease.

The proposed clearing will have a further impact on a minor drainage line that passes through the area (GIS Database). However, the additional clearing only represents a small proportion of vegetation associated with this watercourse (GIS Database).

The amendment is not likely to have any significant environmental impacts and the assessment of the clearing principles is consistent with the assessment in clearing permit decision report CPS 5809/1.

**Methodology** APM (2012)  
APM (2013a)  
APM (2014)  
DPaW (2014)  
Woodman (2004)  
GIS Database:  
- DEC Tenure  
- Hydrography, linear  
- Threatened Ecological Sites Buffered

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

#### Comments

There are two native title claims over the area under application: WC1996/098 and WC2012/005 (GIS Database). One claim has been filed at the Federal Court and the other registered with the 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*.

According to available databases, 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.

The larger Minjar Gold Project was referred to the Environmental Protection Authority (EPA) and the Department of Sustainability, Environment, Water, Population and Communities (DSEWPAC) (now Department of the Environment). DSEWPAC published a referral decision of 'not a controlled action if undertaken in a particular manner' on 3 April 2013. The manner in which the project must be undertaken is set out in the notification of referral decision document published on DSEWPAC's website. It is the proponent's responsibility to comply with DSEWPAC's decision.

The EPA published a decision of 'Not Assessed – Public Advice Given' on 15 April 2013. Public advice was given on terrestrial fauna, flora and vegetation and rehabilitation and closure factors. The terrestrial fauna and flora and vegetation factors were considered during the assessment of the clearing permit application. Rehabilitation and closure are considered under the *Mining Act 1978* applications.

The Department of Parks and Wildlife (DPaW) (2013) has advised that where it is likely that impacts on threatened species cannot be avoided, a permit or licence to take must be obtained pursuant to the requirements of the *Wildlife Conservation Act 1950*.

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 7 April 2014 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

**Methodology** DPaW (2013)  
GIS Database:  
- Aboriginal Sites of Significance  
- Native Title Claims – Filed at the Federal Court  
- Native Title Claims – Registered with the NNTT

#### 4. References

- APM (2012) 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 (2013a) Further Information provided by Animal Plant Mineral on 6, 16 and 20 December 2013 and 7 January 2014.
- APM (2013b) 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 (2014) Supporting information for clearing permit amendment application CPS 5809/2.
- DPaW (2013) Advice to the assessing officer for clearing permit application CPS 5809/1 and Flora Data Information. Received on 12 and 26 November and 13 December 2013 and 7 January 2014.
- DPaW (2014) Advice to assessing officer for clearing permit application CPS 5809/2. Received 10 June 2014.
- 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, Mug's 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>CALM</b>	Department of Conservation and Land Management (now DEC), Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia
<b>DEH</b>	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
<b>DEP</b>	Department of Environment Protection (now DEC), Western Australia
<b>DIA</b>	Department of Indigenous Affairs
<b>DLI</b>	Department of Land Information, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DoE</b>	Department of Environment (now DEC), Western Australia

DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

### **Definitions:**

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1 Priority One - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P2 Priority Two - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3 Priority Three - Poorly Known taxa:** taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4 Priority Four – Rare taxa:** taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
- R Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable):** taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X Declared Rare Flora - Presumed Extinct taxa:** taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1 Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2 Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3 Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4 Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1 Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2 Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3 Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

- P4**            **Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5**            **Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999*)**

- EX**            **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W)**        **Extinct in the wild:** A native species which:  
 (a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or  
 (b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CR**            **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN**            **Endangered:** A native species which:  
 (a) is not critically endangered; and  
 (b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU**            **Vulnerable:** A native species which:  
 (a) is not critically endangered or endangered; and  
 (b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD**            **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 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.