



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6369/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Minjar Gold Pty Ltd

1.3. Property details

Property: Mining Lease 59/379
Mining Lease 59/380

Local Government Area: Shire of Perenjori
Colloquial name: Keronima Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 2 February 2017

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. One Beard vegetation association has been mapped within the application area (GIS Database):

420: Shrublands; bowgada and jam scrub.

A flora and vegetation survey was conducted over the application area by Mattiske (2009) and Terratree (2014). A total of five vegetation communities were identified within the application area, including:

Eucalypt Woodlands:

E7: Low Woodland of *Eucalyptus loxophleba* subsp. *supralaevis* with occasional *Eucalyptus horistes* over *Acacia tetragonophylla*, *Acacia ramulosa* var. *ramulosa* and *Acacia effusifolia* with *Alyxia buxifolia* and *Eremophila* spp. over mixed low shrubs over chenopods and annuals on orange-brown clayey loam drainage flats.

E8: Low Woodland of *Eucalyptus horistes* with *Eucalyptus loxophleba* over *Acacia effusifolia* with *Acacia ramulosa* var. *ramulosa*, *Allocasuarina acutivalvis* subsp. *prinsepiana* and *Hakea recurva* over *Eremophila clarkei* and *Philothea brucei* subsp. *brucei* over *Ptilotus* spp. and mixed low shrubs over annuals on orange clay on flats.

Acacia Shrublands:

A20: Tall Shrubland of *Acacia ramulosa* var. *ramulosa* and *Acacia sibina* with *Acacia burkittii* and occasional *Melaleuca lateriflora* subsp. *acutifolia* over *Eremophila* spp., *Hibbertia arcuata* and mixed low shrubs over annuals, with occasional emergent *Eucalyptus horistes* on orange/red clayey loam on flats.

A21: Shrubland of *Acacia burkittii* over *Eremophila forrestii* subsp. *forrestii* over mixed low shrubs over annuals on orange clayey flats.

Shrublands:

S10: Shrubland of *Aluta aspera* subsp. *hesperia* and *Acacia sibina* with *Acacia burkittii* over *Philothea deserti* subsp. *deserti* over annuals on orange sandy loam with pebbles, on flats.

Clearing Description	Keronima Project. Minjar Gold Pty Ltd proposes to clear up to 112 hectares of native vegetation within a total boundary of approximately 114.2 hectares, for the purpose of mineral production. The project is located approximately 92 kilometres west of Morawa, 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	The vegetation condition and descriptions were derived from a flora and vegetation survey undertaken by Mattiske Consulting (2009). Clearing permit CPS 6369/1 was granted by the Department of Mines and Petroleum on 22 January 2015, authorising the clearing of up to 112 hectares of native vegetation within a boundary of approximately 113.75 hectares for the purpose of mineral production. On 22 December 2016, the permit holder applied to amend CPS 6369/1 to increase the clearing permit boundary by 0.45 hectares. The number of hectares approved to clear remains the same (112 hectares).

3. Assessment of application against clearing principles

Comments	<p>The application area is located in the Talling subregion of the Yalgoo IBRA region (GIS Database). The Yalgoo bioregion is situated between the South-western bioregion and the Murchison bioregion (Desmond and Chant, 2001). It is characterised by low to open woodlands of <i>Eucalyptus</i>, <i>Acacia</i> and <i>Callitris</i> on red sandy plains of the Western Yilgarn Craton and the southern Carnarvon Basin (Desmond and Chant, 2001).</p> <p>No additional Threatened or Priority flora to that discussed under CPS 6369/1 were recorded within the proposed amendment permit boundary (Terratree, 2014). The additional 0.45 hectares to be added to the existing permit boundary does not fall within a Threatened or Priority Ecological Community and consists of vegetation which is considered to be widespread throughout the surrounding area (APM, 2014; Terratree, 2014; GIS Database). The assessment against clearing Principles (a), (c) and (d) remains consistent with the assessment contained in decision report CPS 6369/1.</p> <p>Several fauna surveys have been conducted over the Keronima Prospect, including Mattiske (2009), APM (2012) and Terratree (2014). Two fauna species of conservation significance are considered to have the potential to occur within the additional 0.45 hectares:</p> <ul style="list-style-type: none"> • <i>Leipoa ocellata</i> – Malleefowl • Western Spiny-tailed Skink – <i>Egernia stokesii badia</i> <p>No Malleefowl mounds have been recorded within the additional 0.45 hectares (Terratree, 2014). However active and inactive mounds have been recorded within the surrounding area. Potential impacts to Malleefowl as a result of this amendment may be minimised by an existing Malleefowl condition.</p> <p>The Eucalypt woodland that occurs within the application area is considered to be suitable habitat for the Western Spiny-tailed Skink, as it provides hollow Eucalypt trees and branches (APM, 2014; Terratree, 2014). However, most hollows were considered to be unsuitable, as some were inhabited by termites, some had cracked and left the hollow exposed to predators, and some were elevated and therefore unable to be accessed from ground level (APM, 2014). Furthermore, APM (2014) advised that while the Western Spiny-tailed Skink prefers large piles of hollow logs, most hollows within the application area consisted of single branches or trees. Targeted searches conducted by APM (2012) and Terratree (2014) found no individuals or secondary evidence of occupation within the application area. While some suitable habitat for the Western Spiny-tailed Skink does occur within the application area, it is of varying quality and unlikely to represent significant habitat for this species. The assessment against clearing Principle (b) remains consistent with the assessment contained in decision report CPS 6369/1.</p> <p>The proposed small scale increase in the clearing permit boundary (0.45 hectares) is unlikely to result in an increase in land degradation or the incidence and intensity of flooding. It is unlikely to significantly impact surface water or groundwater. The additional 0.45 hectares does not consist of vegetation growing in association with a watercourse or wetland and does not represent a remnant of native vegetation in an area that has been extensively cleared (Government of Western Australia, 2015; GIS Database).</p> <p>The assessment against the clearing Principles (e), (f), (g), (h), (i) and (j) remains consistent with the assessment contained in decision report CPS 6369/1.</p>
Methodology	<p>APM (2012) APM (2014) Desmond and Chat (2001) Government of Western Australia (2015) Mattiske (2009) Terratree (2014)</p>

GIS Database:

- Hydrography, linear
- Hydrographic Catchments – Catchments
- IBRA Australia
- Pre-European Vegetation
- 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 two Native Title Claims (WC 1996/098 and WC 1997/072) over the area under application (DAA 2017). 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 that intersect with the application area (DAA, 2017). 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, the Department of Water, and the Department of Parks and Wildlife, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

Methodology: DAA (2017)

4. References

- APM (2012) Fauna Assessment Austin, Blackdog, Bobby McGee, Bugeye, Camp, Highland Chief, Keronima, M1, Monaco, Mugs Luck, Riley, Silverstone, Trench and Windinne Well Projects. Report prepared for Minjar Gold Pty Ltd by Animal Plant Mineral Pty Ltd, October 2012.
- APM (2014) Minjar Gold Pty Ltd Clearing Permit (Purpose Permit) Application Supporting Information: Application for a native vegetation clearing permit (purpose permit) for the Minjar Gold Keronima Deposit South Murchison Region, Western Australia. Report prepared for Minjar Gold Pty Ltd by Animal Plant Mineral Pty Ltd, October 2014.
- DAA (2017) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs.< <http://maps.dia.wa.gov.au/AHIS2/>> (Accessed 19 January 2017).
- Desmond, A. and Chant, A. (2001) Yaloo (Yal). In A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002 (J. E. May & N. L. McKenzie). Department of Conservation and Land Management, Western Australia.
- Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Department of Environment and Conservation, Western Australia, 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.
- Mattiske (2009) Flora and vegetation Survey of the Keronima Project Area within Tenement M59/420, Minjar Project Area. Report prepared for Minjar Gold Pty Ltd by Mattiske Consulting, December 2009.
- Terratree (2014) Targeted Survey of Keronima for Malleefowl (*Leipoa ocellata*), Western Spiny-tailed Skink (*Egernia stokesii* subsp. *badia*), and Declared Rare and Priority Flora. Report prepared for Minjar Gold Pty Ltd by Terratree, September 2014.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T	Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora). Threatened fauna is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act. Threatened flora is flora that has been declared to be ‘likely to become extinct or is rare, or otherwise in need of special protection’, pursuant to section 23F(2) of the Wildlife Conservation Act. The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.
CR	Critically endangered species Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
EN	Endangered species Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
VU	Vulnerable species Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
EX	Presumed extinct species Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

- IA Migratory birds protected under an international agreement**
Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- CD Conservation dependent fauna**
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- OS Other specially protected fauna**
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P Priority species**
Species which are poorly known; or
Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.
- P1 Priority One - Poorly-known species:**
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
- P2 Priority Two - Poorly-known species:**
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
- P3 Priority Three - Poorly-known species:**
Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations 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 locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
- 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 are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

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.