

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5284/2
Permit type: Purpose

1.2. Proponent details

Proponent's name: Minjar Gold Pty Ltd

1.3. Property details

Property: Mining Lease 59/420 Mining Lease 59/497

Miscellaneous Licence 59/61 Miscellaneous Licence 59/143

Local Government Area: Shire of Yalgoo

Colloquial name: Bugeye/South Island Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

32 Mechanical Removal Mineral Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 5 February 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 association is located within the application area (GIS Database):

420: Shrublands; bowgada and jam scrub.

Animal Plant Mineral (APM) conducted a Level 2 flora and vegetation assessment over the application area from 7 to 18 November 2011 (APM, 2011). The assessment was undertaken as part of a larger flora and vegetation assessment over five project areas including Austin, Windinne Well, Silverstone, Bugeye and Highland Chief. Vegetation mapping was sourced from three previous Mattiske Consulting Pty Ltd (Mattiske) surveys which covered the majority of the application area and were undertaken in 2009. This mapping was verified by APM (2011) and extended to include the entire application area. According to APM (2012), the following nine vegetation communities occur within the permit area.

Eucalypt Woodlands

- 1. E3: Low Woodland to Low Open Woodland of Eucalyptus loxophleba subsp. supralaevis over Eremophila pantonii, Acacia burkittii, Exocarpos aphyllus, Senna artemisioides subsp. filifolia and Eremophila spp. over Maireana triptera, Rhagodia drummondii, Ptilotus obovatus and chenopods on orange-brown sandy loam on flats
- 2. E4: Low Open Woodland of Eucalyptus loxophleba subsp. supralaevis with Eucalyptus striaticalyx over Eremophila pantonii, Exocarpos aphyllus over Tecticornia doleiformis, Maireana triptera, Maireana ?georgei, chenopods and annuals on white-brown clay loam on flats.

Acacia Shrublands

- 3. A11: Tall shrubland of *Acacia ramulosa* var *ramulosa* with *Acacia tetragonophylla* and *Acacia burkittii* over *Scaevola spinescens*, *Senna* sp. Austin and mixed low shrubs over *Ptilotus obovatus*, *Cheilanthes adiantoides* and annuals on orange sandy loam with rock cover on flats.
- 4. A12: Shrubland of Acacia ?kalgoorliensis with Eremophila oppositifolia subsp. angustifolia, Exocarpos aphyllus and Hakea preissii over Tecticornia doleiformis with Scaevola spinescens, Rhagodia drummondii, Frankenia ?setosa and Atriplex bunburyana on orange-brown sandy loam with rock cover on flats.
- 5. A13: Tall shrubland of Acacia ramulosa var. ramulosa with Acacia burkittii, Acacia tetragonophylla and Acacia acuminata over Ptilotus obovatus, mixed low shrubs and annuals on orange brown sandy loams on flats and slopes.
- 6. A14: Tall shrubland of Acacia ramulosa var. ramulosa with Acacia burkittii, Allocasuarina acutivalvis subsp. prinsepiana, Acacia sibina and Acacia ayersiana over Hibbertia arcuata and mixed low shrubs on brown orange

sandy loam with laterite pebbles on slopes.

Shrublands

7. S5: Shrubland of *Dodonaea inaequifolia*, *Thryptomene costata*, *Acacia tetragonophylla* and *Hybanthus floribundus* subsp. *curvifolius* with occasional emergent *Allocasuarina dielsiana* on brown orange sandy loam granite outcropping on slopes.

8. S6: Shrubland of Aluta aspera subsp. hesperia and Drummondita fulva (P3) with Eremophila latrobei subsp. latrobei with emergent Allocasuarina acutivalvis subsp. prinsepiana, Acacia ramulosa var. ramulosa, Grevillea obliquistigma subsp. obliquistigma and Acacia burkittii on light brown sandy loam with laterite pebbles on laterite breakaways and ridges.

9. S7: Tall open shrubland of *Melaleuca lateriflora* subsp. *lateriflora* and *Acacia burkittii* with *Eremophila oppositifolia* subsp. *angustifolia*, *Eremophila oldfieldii* subsp. *oldfieldii* and mixed shrubs over *Scaevola spinescens* and mixed low shrubs on light brown sandy loam with rock cover at the base of a laterite breakaway.

Clearing Description

Bugeye/South Island Project.

Minjar Gold Pty Ltd proposes to clear up to 32 hectares within a boundary of approximately 96.2 hectares for the purposes of mineral production and associated activities. The project is located approximately 76 kilometres south, south-east of Yalgoo, within the Shire of Yalgoo.

Vegetation Condition

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);

to

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

Comment

The application area has been the subject of previous mining operations with historic pits, waste rock dumps and roads present in the application area (APM, 2012). Drill lines are also present and 22.8 hectares of the application area has been previously cleared (APM, 2012).

APM (2012) also notes impacts from historic grazing and current grazing by feral goats.

The purpose of the application is to redevelop the Bugeye mine which includes pit expansion, enlarging the waste rock dump and construction of a temporary run of mine pad (APM, 2012). Clearing will be by mechanical means. Vegetation and topsoil will be stockpiled for use in rehabilitation (APM, 2012).

CPS 5284/1 was granted by the Department of Mines and Petroleum on 27 December 2012 and authorised the clearing of 32 hectares within a boundary of approximately 75.9 hectares. Minjar Gold Pty Ltd has applied to increase the clearing permit boundary to 96.2 hectares to allow for a change in pit design and road layout. They have also requested that Miscellaneous Licence 59/143 is added to the permit.

3. Assessment of application against clearing principles

Comments

Minjar Gold Pty Ltd has applied to increase the clearing permit boundary by an additional 20.3 hectares and add Miscellaneous Licence 59/143 to the permit.

There are five vegetation communities within the additional area (APM, 2011). All of these vegetation communities were previously mapped within the original permit boundary. There was no potential habitat for the Threatened flora species *Stylidium scintillans* identified within the additional areas (APM, 2014). There has been three Priority flora species recorded within the additional area; *Allocasuarina tessellata* (Priority 1), *Grevillea scabrida* (Priority 1) and *Persoonia pentasticha* (Priority 3). All three species were recorded within the original permit boundary. The amended permit boundary includes an additional 102 *Allocasuarina tessellata* individuals, 224 *Grevillea scabrida* individuals and an additional eight *Persoonia pentasticha* individuals (APM, 2014). The removal of the *Allocasuarina tessellata* and *Grevillea scabrida* individuals in the additional areas is significant at a local level. In the case of *Grevillea scabrida* their removal would make the local population unsustainable (DPaW, 2015). Whilst the proposed clearing has the potential to significantly impact these species at a local level, these species are still well represented at a regional level (DPaW, 2015). The proposed impacts to *Persoonia pentasticha* will not have a significant impact on this species.

The Shield-backed Trapdoor Spider (*Idiosoma nigrum* – Schedule 1; Vulnerable) is known within the permit boundary. A fauna survey covering the permit area identified approximately 50.54 hectares of potential Shield-backed Trapdoor Spider habitat (APM, 2014). Based on an average density of spiders, it is estimated that the proposed clearing will impact on 12,160 individuals (APM, 2014). A survey of all Minjar Gold's projects estimated the regional population to be 14,454,787 individuals (APM, 2014). The proposed clearing is not likely to have a significant impact on this species.

There are two additional ephemeral drainage lines that pass through the additional areas (GIS Database). The proposed clearing will only remove a small amount of vegetation associated with these watercourses and is not likely to have a significant impact on surface or groundwater quality.

The proposed amendment is not likely to have a significant environmental impact and the assessment of the clearing principles is consistent with the assessment in Clearing Permit decision report CPS 5284/1.

Methodology APM (2011)

APM (2014) DPaW (2015) GIS Database: - Hydrography, linear

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

Comments

There is one Native Title Claim over the permit area (WC1997/072) (GIS Database). This claim has been 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*.

There are no registered Aboriginal Sites of Significance within the permit 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 29 December 2014 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology

GIS Database:

- Aboriginal Sites of Significance
- Native Title Claims Registered with the NNTT

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 (2012) Vegetation Clearing Permit Application Support Information August 2012 Application for a Clearing Permit (Purpose Permit) for the Minjar Gold Project South Murchison Region, Western Australia. Bugeye M59/420, M59/497, L59/61. Unpublished report prepared by Animal Plant Mineral Pty Ltd for Minjar Gold Pty Ltd dated August 2012.

APM (2014) Supporting information for clearing permit amendment application CPS 5284/2, dated 12 December 2014. DPaW (2015) Advice to assessing officer for clearing permit amendment CPS 5284/2, 27 January 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.

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)

DER Department of Environment Regulation, Western Australia
DMP Department of Mines and Petroleum, Western Australia

DRF Declared Rare Flora

DotE Department of the Environment, Australian Government

DoW Department of Water, Western Australia

DPaW Department of Parks and Wildlife, Western Australia

DSEWPaC Department of Sustainability, Environment, Water, Population and Communities (now DotE)

EPA Environmental Protection Authority, Western Australia **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

PEC Priority Ecological Community, Western Australia

RIWI Act Rights in Water and Irrigation Act 1914, Western Australia

s.17 Section 17 of the Environment Protection Act 1986, Western Australia

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 *Calyptorynchus 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.