



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4228/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Regis Resources Limited

1.3. Property details

Property: Mining Lease 38/283
Mining Lease 38/292
Mining Lease 38/352
Mining Lease 38/407
Mining Lease 38/802
Mining Lease 38/1249
Mining Lease 38/1250
Mining Lease 38/1251

Local Government Area: Shire of Laverton
Colloquial name: Garden Well Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1,375		Mechanical Removal	Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 12 September 2013

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

18: Low woodland; mulga (*Acacia aneura*).

The majority of the application area was surveyed by staff from Mattiske Consulting (Mattiske) (2010) between 19 and 22 October 2010. This survey identified the following eleven vegetation communities as occurring within the application area:

A1: Low open woodland of *Acacia aneura* var. *aneura* with *Acacia ayersiana* over *Acacia ramulosa* var. *linophylla*, *Acacia tetragonophylla*, *Eremophila pungens* (P4), *Eremophila punctata* and *Eremophila forrestii* subsp. *forrestii* on red-orange sandy loams on flats and slopes;

A2: Low open woodland of *Acacia aneura* var. *aneura* with *Acacia ayersiana* and *Grevillea berryana* over *Acacia ramulosa* var. *ramulosa*, *Acacia tetragonophylla* and mixed *Eremophila* spp. over *Ptilotus obovatus*, *Eragrostis eriopoda* and *Eriachne mucronata* on orange sandy/clay-loams on flats;

A3: Low open woodland of *Acacia aneura* and *Acacia aneura* var. *aneura* with *Acacia ayersiana* and occasional *Eucalyptus horistes* over *Acacia oswaldii*, *Acacia victoriae* and *Senna artemisioides* subsp. *filifolia* over *Ptilotus obovatus*, *Triodia scariosa* and *Enneapogon caeruleascens* on red-orange sandy-loams with calcrete and quartz pebbles on flats;

A4: Low open woodland of *Acacia aneura* and *Acacia aneura* var. *aneura* with *Acacia ayersiana* and occasional *Eucalyptus horistes* and *Grevillea nematophylla* subsp. *supraplana* over *Acacia tetragonophylla*, *Acacia aptaneura* and *Acacia victoriae* with *Senna artemisioides* subsp. *filifolia* and *Eremophila pungens* (P4) over *Ptilotus obovatus* and mixed Poaceae spp. on orange sandy-loams on flats and minor drainage lines;

A5: Low open woodland to open shrubland of *Acacia aneura* and *Acacia aneura* var. *aneura* with *Acacia ayersiana*, *Acacia burkittii* and *Acacia tetragonophylla* over *Senna artemisioides* subsp. *filifolia* over mixed

annual herbs on orange sandy-loams in minor drainage lines;

A6: Low open woodland of *Acacia aneura* var. *aneura* with *Acacia aptaneura*, *Acacia ayersiana* and *Grevillea berryana* over *Eremophila punctata* and *Eremophila latrobei* subsp. *latrobei* over *Eriachne mucronata* on orange sandy-loams with numerous chert outcropping on slopes and ridges;

A7: Low open woodland of *Acacia aneura* var. *aneura* over *Acacia craspedocarpa*, *Acacia tetragonophylla*, *Santalum spicatum*, *Eremophila georgei* and *Senna artemisioides* subsp. *filifolia* over *Sida calyxhymenia*, *Ptilotus obovatus* and *Eriachne mucronata* on orange sandy loams in minor drainage lines;

A8: Low open woodland to open shrubland of *Acacia ayersiana*, *Acacia aneura* var. *aneura* and *Acacia aptaneura* with *Acacia tetragonophylla* over *Eremophila latrobei* subsp. *filiformis*, *Ptilotus obovatus*, *Dianella revoluta* and *Eragrostis eriopoda* on orange sandy-loams on flats;

A9: Low open woodland of *Acacia aneura* var. *aneura* and *Acacia ayersiana* with occasional *Grevillea berryana* over *Acacia tetragonophylla*, *Acacia craspedocarpa* and *Eremophila pungens* (P4) over *Ptilotus obovatus*, *Sida calyxhymenia* and Poaceae spp. on orange sandy-loams on flats;

A10: Low open woodland of *Acacia aneura* and *Acacia aneura* var. *aneura* with occasional *Eucalyptus horistes*, *Grevillea berryana* and *Hakea lorea* over *Acacia burkittii* and *Acacia tetragonophylla* over *Senna artemisioides* subsp. *x artemisioides* and *Senna artemisioides* subsp. *filifolia* over *Ptilotus obovatus*, *Sida calyxhymenia* and Poaceae spp. on orange sandy/clay-loams in drainage lines; and

C1: Low open Chenopod shrubland of *Maireana pyramidata* and *Cratystylis subspinescens* with emergent *Acacia aneura* var. *aneura* and *Hakea preissii* over *Frankenia setosa*, *Maireana georgei*, *Maireana planifolia*, *Maireana tomentosa* and *Sclerolaena eriacantha* on orange clay-loams on flats.

Clearing Description

Garden Well Project. Regis Resources Limited proposes to clear 1,375 hectares of native vegetation within a boundary of approximately 2,392 hectares (GIS Database) for the purpose of mineral production. The project area is located within the Shire of Laverton and is approximately 73 kilometres north of Laverton (GIS Database).

Vegetation Condition

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).

Comment

The proposed clearing will enable the development of the Garden Well Project area including the proposed Garden Well open pit, tailings storage facility, waste rock dumps, ROM pad, processing plant, accommodation village, safety bunding, access roads and associated mine infrastructure (Regis Resources, 2011).

Clearing permit CPS 4228/1 was granted by the Department of Mines and Petroleum (DMP) on 7 April 2011 and allowed for the clearing of 960 hectares of native vegetation from 30 April 2011 to 31 July 2016. An application for an amendment to clearing permit CPS 4228/1 was submitted by Regis Resources Limited on 15 September 2011 and requested a change to the reporting date for the clearing permit from 31 July each year to 31 March each year. The amendment was granted by DMP on 24 November 2011.

An application for an amendment to clearing permit CPS 4228/2 was submitted by Regis Resources Limited on 31 July 2013. The application requested an increase to the amount of clearing authorised from 960 hectares to 1,375 hectares (i.e. an increase of 415 hectares) within the same permit boundary. There are no significant additional environmental impacts as a result of this amendment.

3. Assessment of application against clearing principles

Comments

Regis Resources Limited (Regis Resources) has applied to increase the amount of clearing authorised to 1,375 hectares within the existing permit boundary.

The vegetation survey conducted by Mattiske (2010) over the majority of the application area in October 2010 identified 11 vegetation associations, all of which were considered to be typical of the vegetation throughout the Murchison Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (Mattiske, 2010). Two Priority 4 flora species (*Baeckea* sp. Melita Station and *Eremophila pungens*) were recorded within the application area (Mattiske, 2010). However, *Baeckea* sp. Melita Station has since been delisted and is no longer a Priority Flora species (Western Australian Herbarium, 2013).

Eremophila pungens was identified at 32 floristic sites across eight vegetation associations within the broader Garden Well application area (Regis Resources, 2011). Between 501 and 997 plants of this taxa were recorded by Mattiske (2010) and it was estimated that between 218 and 450 of these plants may be removed by the clearing of 960 hectares. Additionally, adjacent clearing permit CPS 4321/2 was estimated to potentially impact between 141 and 276 of these plants. This is approximately 72 percent of the total number of individuals recorded within the broader project area by Mattiske (2010). According to Regis Resources (2013), the additional clearing of 415 hectares is estimated to impact between two and five of the plants recorded by Mattiske (2010). The number of individual plants for this species, in the area surrounding the application area, is estimated to be in the thousands (Regis Resources, 2011) and Florabase (Western Australian Herbarium, 2013) shows a relatively large distribution for this species. Given the large number of populations and individuals outside of the application area, as well as the variety of vegetation associations it occurs in (Regis

Resources, 2011), it is considered unlikely that the additional clearing of 415 hectares will impact upon the conservation status of this species. Based on the above, the assessment of Clearing Principle (a) is considered consistent with the initial assessment that the proposed clearing is not likely to be at variance to Principle (a).

Current environmental information has been reviewed and the assessment of clearing principles (b), (c), (d), (e), (f), (g), (h), (i) and (j) is consistent with the assessment in Clearing Permit Decision Report CPS 4228/2 (GIS Database).

Methodology Government of Western Australia (2013)
Mattiske (2010)
Regis Resources (2011)
Regis Resources (2013)
Western Australian Herbarium (2013)
GIS Database:
- DEC Tenure
- Evaporation Isopleths
- Groundwater Salinity, Statewide
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation
- Public Drinking Water Source Areas (PDWSAs)
- Rangeland Land System Mapping
- Threatened Ecological Sites Buffered
- Threatened and Priority Flora

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

Comments

There are no Native Title Claims over the area under application (GIS Database). 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 several 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 (formerly the Department of Environment and Conservation) 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 amendment application was advertised on 12 August 2013 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims – Determined by the Federal Court
- Native Title Claims – Filed at the Federal Court
- Native Title Claims - Registered with the NNTT

4. References

- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- 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 (2010) Flora and Vegetation Survey of Garden Well Mine and Infrastructure Areas. Prepared for Regis Resources Limited, December 2010.
- Regis Resources (2011) Vegetation Clearing Permit Application: Garden Well Gold Project. Documentation accompanying Clearing Permit Application for CPS 4228/1, Prepared by Regis Resources Limited, February 2011.
- Regis Resources (2013) Further Information provided to the assessing officer by Regis Resources Limited on 3 September 2013.
- Western Australian Herbarium (2013) Florabase - The Western Australian Flora. Department of Parks and Wildlife. Available online at <http://florabase.dpaw.wa.gov.au/> Accessed 30 August 2013.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	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.