



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6657/3  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Regis Resources Limited

### 1.3. Property details

Property: Mining Leases 38/237, 38/250, 38/283, 38/292, 38/303, 38/316, 38/317, 38/343, 38/352, 38/354, 38/407, 38/498, 38/499, 38/500, 38/589, 38/802, 38/939, 38/940, 38/943, 38/1091, 38/1092, 38/1249, 38/1250, 38/1251, 38/1257, 38/1258, 38/1259, 38/1260, 38/1261, 38/1262, 38/1263; 38/1268;  
Miscellaneous Licences 38/133, 38/182, 38/234, 38/238, 38/242  
Local Government Area: Shire of Laverton  
Colloquial name: Duketon and Gloster Gold Projects

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2,250		Mechanical Removal	Mineral Production and Associated Infrastructure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 21 April 2016

## 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 is located within the permit area (GIS Database):

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

The vegetation associations and types found within the original permit area and CPS 6657/2 are described in the relevant decision reports (CPS 6657/1 and CPS 6657/2). The vegetation types mapped within the amendment area are described below.

Twelve vegetation communities have been described within the amendment area (Mattiske, 2015):

**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;

**A12:** Open shrubland of *Acacia incurvaneura* and *Acacia mulganeura* over *Acacia tetragonophylla* and *Eremophila oldfieldii* over *Ptilotus obovatus*, *Hibiscus burtonii* and *Solanum lasiophyllum* over mixed grasses on flats to lower slopes with red gravely clay soil and quartz pebbles.

**A20:** Open to semi-closed shrubland of *Acacia incurvaneura* and *Acacia quadrimarginea* over *Ptilotus obovatus*, *Baeckea* sp. *Melita* Station (H. Pringle 2738) and *Ptilotus schwartzii* over mixed grasses on red clay loams with numerous granitic outcropping on slopes and ridges.

**A21:** Scrub to open scrub of *Acacia* sect. *Juliflorae* (*A. aneura*, *A. ?incurvaneura* and *A. craspedocarpa*) over open low shrubland of *Eremophila spectabilis* subsp. *brevis* over *Eriachne helmsii* tussock grassland on red-orange sandy to clay loam (sometimes with gravel) on flats.

**A24:** Thicket of *Acacia* sect. *Juliflorae* (*A. ?aneura*, *A. incurvaneura* and *A. craspedocarpa*) with *Acacia tetragonophylla* over open low shrubland of *Eremophila forrestii* subsp. *forrestii*, *Ptilotus obovatus* and *Malvaceae* spp. over *Cheilanthes sieberi* subsp. *sieberi* over tussock grassland of mixed Poaceae spp. on red-orange sandy loam to clay loam in minor drainage lines.

**A25:** Thicket of *Acacia* sect. *Juliflorae* (*A. ?aneura*, *A. incurvaneura* and *A. ?caesaneura*) with *Acacia tetragonophylla* over open low shrubland of *Eremophila spectabilis*, *Psydrax suaveolens* and *Solanum lasiophyllum* over *Eragrostis eriopoda* and other mixed grasses on red-orange clay loam on flats with quartz and iron pebbles.

**A26:** Scrub to open scrub of *Acacia* sect. *Juliflorae* (*A. incurvaneura*, *A. macraneura* and *A. mulganeura*) over open low shrubland of *Ptilotus obovatus* and *Solanum lasiophyllum* over low chenopod shrubland of *Maireana triptera* and *Sclerolaena cuneata* on red-orange clay loam on flats and slopes (rarely) with quartz pebbles.

**A27:** Open scrub of *Acacia* sect. *Juliflorae* (*A. ?aneura* and *A. incurvaneura*) over open low shrubland of *Solanum lasiophyllum*

and *Maireana convexa* over mixed grasses on red-orange clay loam on flats with quartz and iron pebbles.

**C5:** Low open Chenopod shrubland of *Maireana pyramidata* and *Eriochiton sclerolaenoides* with emergent *Acacia* sect. *Juliflorae* (*A. ?aneura* and *A. pteraneura*) and *Acacia tetragonophylla* over *Frankenia setosa* and *Maireana georgei* on red-orange clay-loams on flats with quartz and iron pebbles.

**C6:** Low open Chenopod shrubland of *Maireana triptera*, *Sclerolaena eurotioides*, *Maireana trichoptera* and *Sclerolaena cuneata* with emergent *Acacia* sect. *Juliflorae* (*A. incurvaneura* and *A. craspedocarpa*) over *Ptilotus obovatus* and *Scrophulariaceae* spp. on red-brown clay to clay-loams on flats.

**C7:** Low open Chenopod shrubland of *Sclerolaena eurotioides*, *Sclerolaena cuneata* and *Maireana appressa* with emergent *Acacia incurvaneura* over *Frankenia laxiflora* and *Atriplex ?nana* over mixed grasses on orange clay-loams on slopes.

**D1:** Mulga low forest A over mixed open scrub to dwarf scrub over mixed open low grasses

Note: The amendment area also comprises some previously cleared areas.

<b>Clearing Description</b>	Gloster Gold Mine Project Regis Resources Limited proposes to clear up to 2,250 hectares of native vegetation within a total boundary of approximately 9,744 hectares, for the purpose of mineral production. The project is located approximately 140 kilometres north of Laverton in the Shire of Laverton.
<b>Vegetation Condition</b>	Completely degraded: No longer intact; completely/almost completely without native species (Keighery, 1994). To: Pristine: No obvious signs of disturbance (Keighery, 1994).
<b>Comment</b>	Clearing Permit CPS 6657/1 was granted by the Department of Mines and Petroleum (DMP) on 15 October 2015 and authorised the clearing of up to 1,450 hectares of native vegetation within a clearing permit boundary of approximately 7,862 hectares. The clearing was authorised for the purpose of mineral production and associated infrastructure. CPS 6657/1 consolidated five existing permits into one new permit and resulted in an increase in the total amount of clearing by 95 hectares.  Clearing permit CPS 6657/2 was granted by DMP on 11 February 2016 and authorised the clearing of up to 1,900 hectares within a clearing permit boundary of approximately 8,767 hectares. This amendment was required in order to allow for the development of the Gloster Gold Mine Project.  The assessment of the original permit area can be found within decision report CPS 6657/1 and the assessment of the CPS 6657/2 permit area can be found within decision report CPS 6657/2. The contents of this assessment against the clearing principles applies to the additional proposed clearing (350 hectares) within Mining Lease 38/1091 and Miscellaneous Licence 38/242, which is required for a haul road, connecting the Gloster Gold mine area to the Greater Duketon Gold Project.  The condition of the vegetation in the current amendment area (CPS 6657/3) was determined via a flora and vegetation survey conducted by Mattiske Consulting Pty Ltd (2015).

### 3. Assessment of application against Clearing Principles

#### Comments

The assessment of the original permit area and the area approved under CPS 6657/2 can be found within the relevant decision reports for CPS 6657/1 and CPS 6657/2. Both assessments found the proposed clearing not likely to be at variance to Principles (a), (b), (c), (d), (h), (i) and (j), not at variance to Principle (e), may be at variance to Principle (g) and at variance to Principle (f).

The area subject to this amendment (the amendment area), applies to the haul road that connects the Gloster Gold mine area to the Greater Duketon Gold Project. The proposed amendment will result in an increase in clearing of 350 hectares and an increase in the clearing permit boundary.

According to available information, no Threatened Ecological Communities or Priority Ecological Communities (TECs or PECs) are known within the amendment area (GIS Database) and none were identified during the flora and vegetation survey (Mattiske, 2015). A Level 2 flora and vegetation survey of the amendment area and surrounding areas (Gloster Project area) did not identify the presence of any TECs or PECs (Mattiske, 2015). The closest known PEC is located more than 50 kilometres east (GIS Database).

There are no Threatened flora species known to occur within the amendment area (DPaW, 2016; GIS Database), no Threatened flora species have been previously recorded near the amendment area and none were recorded during a Level 2 flora and vegetation survey (Mattiske, 2015; Regis, 2015).

A Level 1 fauna survey was conducted over the amendment area and surrounding area (Gloster project area). Terrestrial Ecosystems (2015) identified four broad fauna habitats; flat open mulga woodland over scattered shrubs on a stony sandy-clay substrate; flat open mulga woodland over scattered shrubs on a sandy-clay substrate; floodways with few trees and shrubs on a red clay substrate and highly disturbed areas due to exploration activity. The fauna habitats present within the amendment area are common and widespread in the subregion with vast tracts of similar habitat in adjacent areas (Terrestrial Ecosystems, 2015; Regis, 2015).

No fauna species of conservation significance have been recorded within 20 kilometres of the amendment area (DPaW, 2016). Following the Level 1 fauna survey of the amendment area, Terrestrial Ecosystems (2015) considers that the proposed clearing is unlikely to impact on any species of conservation significance. Conservation significant species identified as potentially occurring in the vicinity are either migratory or able to

relocate easily into neighbouring areas (Terrestrial Ecosystems, 2015). It is possible that some local fauna species (mostly small vertebrates) may be adversely impacted by proposed clearing activities; however given the amount of native vegetation remaining in the local area, such impacts are unlikely to be detrimental once clearing activities cease (Terrestrial Ecosystems, 2015). The proponent will implement fauna management procedures to mitigate potential impacts to local fauna species.

The mapped Beard vegetation association for the amendment area (Beard vegetation association 18) is well represented, retaining at least 99% of pre-European vegetation within the state and bioregion (Government of Western Australia, 2014). The vegetation within the amendment area is not considered to be providing, or contributing to, important ecological linkages or fauna movement corridors (Terrestrial Ecosystems, 2015).

Six land systems have been mapped within the amendment area; Nuveb, Felix, Bevon, Violet, Ararak, Pan and Steer (GIS Database). The Nuveb, Violet and Pan land systems are moderately susceptible to erosion (Pringle *et al.* 1994), and while the Felix and Bevon land systems are generally not prone to erosion as stone mantles provide effective protection (Pringle *et al.* 1994), the proposed clearing has the potential to cause soil erosion by breaking protective stony mantles and exposing underlying soils that may be susceptible to erosion. The proponent will implement management procedures to mitigate potential land degradation issues. The continued implementation of the existing staged clearing condition on the permit may further minimise erosion impacts.

Minor non-perennial watercourses occur throughout the previously approved areas (CPS 6657/1 & CPS 6657/2) and a further six intersect the amendment area. Vegetation type A24 is considered to be growing in association with minor drainage lines and was recorded within the amendment area and previously approved areas. Given that the amendment area is located in an area of low rainfall, where watercourses only flow after sporadic rainfall events (Regis, 2015; BoM, 2016); significant impacts to vegetation growing in association with a watercourse and surface water quality are unlikely. The proponent will implement management procedures to mitigate potential impacts to watercourses and the associated vegetation. The continued implementation of the existing watercourse management condition on the permit may minimise impacts to watercourses and associated vegetation.

Groundwater within the amendment area ranges from marginal to brackish (500 – 3000 TDS mg/L). The local area and region is well vegetated and the proposed clearing of an additional 350 hectares of native vegetation, spread over a distance of approximately 24 kilometres is unlikely to significantly impact on the quality of underground water. While clearing activities may be unlikely to result in impacts, mining activities do have the potential to impact on groundwater quality. The proponent will implement management procedures to mitigate potential impacts to the quality of underground water.

The weed species *Bidens bipinnata* was recorded within the amendment area and a number of other weed species are known from the local area (Mattiske, 2015). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

While a relatively large increase in the amount of vegetation to be cleared is proposed, no significant additional environmental impacts have been identified. The assessment of the proposed clearing against the clearing principles remains consistent with the assessment in decision report CPS 6657/1 and CPS 6657/2.

#### Methodology

BoM (2016)  
CALM (2002)  
DPaW (2016)  
Government of Western Australia (2014)  
Mattiske (2015)  
Pringle *et al.* (1994)  
Regis (2015)  
Terrestrial Ecosystems (2015)

GIS Database:  
- DPaW Tenure  
- IBRA WA (Regions - Sub Regions)  
- Imagery  
- Hydrography, linear  
- Landsystems Rangelands  
- Pre-European Vegetation  
- Public Drinking Water Source Areas (PDWSAs)  
- Threatened and Priority Flora List  
- Threatened and Priority Ecological Communities Buffers  
- Threatened and Priority Ecological Communities Boundaries

## Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

### Comments

There are no native title claims over the permit area (DAA, 2016; GIS Database). 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 four Sites of Aboriginal Significance within the permit area (GIS Database; DAA, 2015). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the 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 amendment application was advertised on 21 March 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

**Methodology** DAA (2016)

## 4. References

- BoM (2016) Climate Statistics for Australian Locations. A Search for Climate Statistics, Australian Government Bureau of Meteorology. <<http://www.bom.gov.au>> (Accessed March 2016).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.
- DAA (2016) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs, Perth, Western Australia < <http://maps.dia.wa.gov.au>> (Accessed March 2016).
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- DPaW (2016) NatureMap, Department of Parks and Wildlife <<http://naturemap.dec.wa.gov.au>> (Accessed March 2016).
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. 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 (2015) Flora and Vegetation Survey of the Gloster Project Area. *Supporting Information for CPS 6657/2*. Mattiske Consulting Pty Ltd. Kalamunda, Western Australia.
- Pringle, H. J. R., Van Vreeswyk, A. M.E. and Gilligan, S.A. (1994). An inventory and condition survey of the north-eastern Goldfields, Western Australia, Technical Bulletin No. 87, Department of Agriculture, Western Australia, Perth.
- Regis (2015) Application to Amend Purpose Permit 6657/2, Gloster Gold Mine (M38/1238) - *Supporting Information for CPS 6657/3*. Regis Resources Ltd. Subiaco, Western Australia.
- Terrestrial Ecosystems (2015) Level 1 Fauna Risk Assessment for the Gloster Project and Haul Road. *Supporting Information for CPS 6657/3*. Terrestrial Ecosystems. Mt Claremont, Western Australia.

## 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

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 *Wildlife Conservation Act 1950*, 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 *Wildlife Conservation Act 1950*, 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 *Wildlife Conservation Act 1950*, 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 *Wildlife Conservation Act 1950*, 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 *Wildlife Conservation Act 1950*, 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.