



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6657/7  
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, 38/302, 38/303, 38/316, 38/317, 38/319, 38/343, 38/344, 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, 38/1247, 38/1249, 38/1250, 38/1251, 38/1257, 38/1258, 38/1259, 38/1260, 38/1261, 38/1262, 38/1263, 38/1264, 38/1268, 38/1269, 38/1270, 38/1277;  
Miscellaneous Licences 38/29, 38/133, 38/182, 38/226, 38/234, 38/238, 38/239, 38/242, 38/315  
Local Government Area: Shire of Laverton  
Colloquial name: Duketon, Gloster and Banyego Gold Projects

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4,946		Mechanical Removal	Mineral Production and Associated Infrastructure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 28 February 2019

## 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. Two Beard vegetation associations have been mapped within the application area (i.e. the area previously approved under CPS 6657/1, 6657/2, 6657/3, CPS 6657/4, CPS 6675/5 and the proposed amendment area for CPS 6657/6). Only Beard vegetation association 18 is mapped within the amendment area) (GIS Database):

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

The vegetation associations and types found within the previously approved areas (CPS 6657/1, CPS 6657/2, CPS 6657/3, CPS 6675/4, CPS 6657/5 and CPS 6657/6) are described in the relevant decision reports. The vegetation types mapped within the amendment area are described below:

A total of 27 vegetation communities were identified within the amendment area during Level 2 flora and vegetation assessments (Mattiske, 2016a, 2016b, 2017a, 2017b; Regis, 2017). Eleven vegetation communities were defined and mapped within the Tooheys Well section of the amendment area, six vegetation communities were defined and mapped at both Anchor and Dogbolter-Coopers and seven vegetation communities were delineated within the Banyego haul road project area (Regis, 2017).

#### Anchor

**A2:** Low open woodland of *Acacia incurvaneura* over *Acacia tetragonophylla* and mixed *Eremophila* spp. over *Eragrostis eriopoda* and *Eriachne mucronata* on orange sandy/clay-loams on flats.

**A6:** Low open woodland of *Acacia aneura* with *Acacia incurvaneura*, *Acacia mulganeura* and *Grevillea berryana* over *Eremophila forrestii* subsp. *forrestii* and *Eremophila latrobei* subsp. *latrobei* over *Eragrostis eriopoda*, *Eriachne mucronata* and *Triodia* species on orange sandy-loams with numerous chert outcropping on slopes and ridges.

**A8:** Low open woodland to open shrubland of *Acacia incurvaneura*, *Psudras latifolia* and *Acacia quadrimarginea* over *Acacia tetragonophylla* over *Eremophila galeata* and *Eremophila latrobei* subs. *latrobei* over *Ptilotus schwartzii* var. *georgi*, *Solanum lasiophyllum*, *Eriachne mucronata* and *Eragrostis eriopoda* on orange sandy-loams on flats;

**A12:** Open shrubland of *Acacia aneura*, *Acacia incurvaneura*, *Acacia ?pteraneura* over *Acacia tetragonophylla* and *Eremophila latrobei* subsp. *latrobei* over *Ptilotus obovatus* var. *obovatus*, *Ptilotus schwartzii* var. *georgei* and *Solanum lasiophyllum* over mixed grasses on flats to lower slopes with red gravelly clay soil and quartz pebbles.

**A23:** Low open woodland of *Acacia aneura* and *Acacia incurvaneura* over *Eremophila latrobei* subsp. over *Sida* sp., *Ptilotus obovatus* var. *obovatus* and *Eragrostis eriopoda* on orange sand-loams in minor drainage lines.

**D1:** Low forest of *Acacia aneura*, *Acacia incurvaneura*, *Acacia pteraneura* and *Psyrax latifolia* over *Acacia tetragonophylla*, *Psyrax suaveolens*, *Psyrax rigidula* and *Eremophila latrobei* subsp. *latrobei* over *Ptilotus obovatus* var. *obovatus* and *Solanum lasiophyllum* over *Eragrostis eriopoda* and *Aristida obscura* on flowlines and drainage lines.

**CL:** Cleared

#### **Dogbolter-Coopers**

**A1:** Low open woodland of *Acacia caesaneura*, *Acacia craspedocarpa* and *Acacia incurvaneura* over *Acacia ramulosa* var. *linophylla*, *Eremophila punctata* and *Eremophila latrobei* subsp. *latrobei* over mixed grasses on red-orange sandy loams on flats and slopes.

**A2:** Low open woodland of *Acacia incurvaneura* over *Acacia tetragonophylla* and mixed *Eremophila* spp. over *Eragrostis eriopoda* and *Eriachne mucronata* on orange sandy/clay-loams on flats.

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

**A6:** Low open woodland of *Acacia aneura* with *Acacia incurvaneura*, *Acacia mulganeura* and *Grevillea berryana* over *Eremophila forrestii* subsp. *forrestii* and *Eremophila latrobei* subsp. *latrobei* over *Eragrostis eriopoda*, *Eriachne mucronata* and *Triodia* species on orange sandy-loams with numerous chert outcropping on slopes and ridges.

**A20:** Open to semi-open shrubland of *Acacia caesaneura*, *Acacia craspedocarpa* and *Acacia ?pteraneura* over *Ptilotus obovatus* var. *obovatus*, *Scaevola spinescens* and *Senna artemisioides* subsp. *filifolia* over mixed grasses and chenopods on red clay loams with numerous granitic outcropping on slopes and ridges.

**A23:** Low open woodland of *Acacia aneura* and *Acacia incurvaneura* over *Eremophila latrobei* subsp. *latrobei* over *Sida* sp., *Ptilotus obovatus* var. *obovatus* and *Eragrostis eriopoda* on orange sandy-loams in minor drainage lines.

#### **Tooheys Well**

**GE:** Grassland of *Eriachne pulchella* and *Sporobolus actinocladus*, over mixed annuals with emergent *Acacia* sect. *Juliflora*, on seasonally inundated, cracking clay soaks.

**CH1:** Sparse shrubland of *Acacia tetragonophylla*, *Senna artemisioides* and *Hakea preissii*, over low shrubland of *Maireana pyramidata*, *Frankenia* species, and *Tecticornia* species, over open low herbland of *Maireana* and *Sclerolaena* species, with emergent *Acacia* sect. *Juliflora*, on ironstone and quartz, stony clay floodplains.

**SA1:** Shrubland of *Acacia burkittii*, *Senna artemisioides* and *Scaevola spinescens*, over low shrubland of *Eremophila spectabilis*, *Eremophila falcata* and *Sida ectogama*, with emergent *Acacia* sect. *Juliflora*, on ironstone stony clay-loam slopes.

**SA2:** Shrubland of *Acacia burkittii*, *Acacia oswaldii* and *Senna artemisioides*, over low shrubland of *Sida ectogama*, *Maireana pyramidata* and *Enchylaena tomentosa*, with emergent *Acacia* sect. *Juliflora* and occasional *Eucalyptus lucasii*, on sandy major channels.

**SA3:** Tall shrubland of *Acacia* sect. *Juliflora*, over open shrubland of *Acacia tetragonophylla* and *Eremophila galeata*, over sparse low shrubland of *Hibiscus burtonii*, over low mixed annual herbs and grasses, on orange clay flats.

**SA4:** Low forest of *Acacia* sect. *Juliflora*, over open shrubland of *Acacia tetragonophylla* and *Senna artemisioides*, over low open shrubland of *Eremophila forrestii*, *Ptilotus obovatus* and *Abutilon cryptopetalum*, on orange clay-loam flowlines and floodplains.

**SA5:** Tall shrubland of *Acacia* sect. *Juliflora*, over open shrubland of *Eremophila latrobei* and *Psyrax suaveolens*, over open low shrubland of *Solanum lasiophyllum* and *Ptilotus schwartzii*, over open grassland of *Eriachne mucronata*, *Monachather paradoxus* and *Eragrostis eriopoda*, with occasional *Eremophila pungens* (P4), on orange clay-loam flats.

**SA6:** Tall shrubland of *Acacia* sect. *Juliflora*, over open shrubland of *Grevillea excelsior*, *Eremophila latrobei* and *Eremophila punctata*, over low sparse shrubland of *Ptilotus schwartzii* and *Sida* sp. *Golden calyces glabrous* (H.N. Foote 32), over open grassland of *Eriachne mucronata*, with occasional *Calytrix uncinata* (P3), on orange stony clay ridges, with banded ironstone outcropping.

**SA7:** Tall shrubland of *Acacia* sect. *Juliflora*, over open shrubland of *Acacia tetragonophylla* and *Senna artemisioides*, over low open shrubland of *Ptilotus obovatus*, *Solanum lasiophyllum* and *Sida ectogama*, over low grassland of *Eragrostis eriopoda*, on orange clay-loam flats.

**SA8:** Tall thicket of *Acacia* sect. *Juliflora*, over open shrubland of *Acacia tetragonophylla*, *Eremophila latrobei* and *Psyrax suaveolens*, over open low shrubland of *Sida ectogama*, *Solanum lasiophyllum* and *Dianella revoluta*, over open grassland of *Eriachne mucronata*, *Eragrostis eriopoda* and *Aristida obscura*, on orange clay-loam flowlines and floodplains.

**SA9:** Tall shrubland of *Acacia* sect. *Juliflora*, over open shrubland of *Acacia tetragonophylla*, *Acacia quadrimarginea* and *Eremophila galeata*, over low sparse shrubland of *Sida ectogama*, *Ptilotus schwartzii* and *Solanum lasiophyllum*, with occasional emergent *Casuarina pauper*, *Eucalyptus clelandii* and *Eucalyptus platycorys*, on orange stony clay-loam slopes with shallow outcropping.

#### **Baneygo Haul Road**

**CH1:** Sparse shrubland of *Acacia tetragonophylla*, *Senna artemisioides* and *Hakea preissii*, over low shrubland of *Maireana pyramidata*, *Frankenia* species, and *Tecticornia* species, over open low herbland of *Maireana* and *Sclerolaena* species, with emergent *Acacia* sect. *Juliflora*, on ironstone and quartz, stony clay floodplains.

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

**C3:** Open Chenopod shrubland of *Tecticornia pergranulata*, *Maireana pyramidata*, *Frankenia georgei* and *Sclerolaena fusiformis* on flats with red clay soil and quartz pebbles.

**A7:** Low open woodland of *Acacia* sect. *Juliflora* (*A. aneura*, *A. incurvaneura* and *A. pteraneura*) over *Acacia craspedocarpa*, *Acacia tetragonophylla*, *Santalum spicatum*, *Eremophila georgei* and *Senna artemisioides* subsp. *filifolia* over *Sida calyxhymeria*, *Ptilotus obovatus* and *Eriachne mucronata* on orange sandy-loams in minor drainage lines.

**A13:** Semi-closed to open shrubland of *Acacia mulganeura*, *Acacia incurvaneura*, *Acacia tetragonophylla* and *Acacia craspedocarpa* over *Ptilotus obovatus*, *Hibiscus burtonii* and *Solanum lasiophyllum* on flats with red clay soil and quartz pebbles.

**A26:** Scrub to open scrub of *Acacia* sect. *Juliflora* (*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.

**A28:** Scrub to open scrub of *Acacia* sect. *Juliflora* (*A. aneura*, *A. incurvaneura* and *A. pteraneura*) over open low shrubland of *Cratystylis subspinescens*, *Ptilotus obovatus*, *Senna artemisioides* subsp. *xsturtii*, *Solanum lasiophyllum* over *Maireana pyramidata* on red-orange clay loam on flats and slopes with quartz and iron pebbles.

**A29:** Thicket to scrub of *Acacia tetragonophylla*, *Acacia* sect. *Juliflora* (*A. aneura* and *A. incurvaneura*) and *Acacia burkittii* with emergent *Hakea recurva* subsp. *arida* over low shrubland of *Senna artemisioides* subsp. *xartemisioides*, *Cratystylis subspinescens*, *Eremophila youngii* and *Ptilotus divaricatus* over mixed grasses on red-orange clay loam to sandy loam on minor drainage lines.

<b>Clearing Description</b>	Gloster Gold Mine Project, Greater Duketon Gold Project and Banyego Gold Mine Project Regis Resources Limited proposes to clear up to 4,946 hectares of native vegetation within a total boundary of approximately 14,743 hectares, for the purpose of mineral production and associated infrastructure. 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) (now the Department of Mines, Industry Regulation and Safety (DMIRS)) 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.  Clearing permit CPS 6657/3 was granted by DMP on 21 April 2016 and authorised the clearing of up to 2,250 hectares within a clearing permit boundary of approximately 9,744 hectares. This amendment was required in order to allow for the construction a haul road connecting the Gloster Gold Mine area to the Greater Duketon Gold Project area.  Clearing permit CPS 6657/4 was granted by DMP on 27 October 2016 and authorised the clearing of up to 2,759 hectares within a clearing permit boundary of approximately 11,447 hectares. This amendment was required in order to allow for the recommencement and expansion of mining at the Banyego Gold Mine area.  Clearing permit CPS 6657/5 was granted by DMIRS on 28 September 2017 and authorised the clearing of up to 3,767 hectares within a clearing permit boundary of approximately 13,702 hectares. This amendment was required in order to allow for the development of the Anchor, Dogbolter-Coopers and Tooheys Well satellite open pit mines and the Banyego to Rosemont haul road to the existing Duketon Gold Project.  Clearing permit CPS 6657/5 was granted by DMIRS on 26 April 2018 and authorised the clearing of up to 4,167 hectares within a clearing permit boundary of approximately 14,003 hectares. This amendment was required in order to allow for an alternative location for the Garden Well TSF.  Regis Resources Limited has applied to amend CPS 6657/6 for the purpose of increasing the permit boundary by 740 hectares, the amount of approved clearing by 779 hectares, and to include additional tenure. This amendment is required for further development of the Petra Gold Deposit within the Duketon Gold Project area.  The condition of the vegetation in the amendment area (CPS 6657/7) was determined via flora and vegetation surveys conducted by Mattiske Consulting Pty Ltd (2016a, 2016b, 2017a and 2017b) and summary information provided by Regis (2017).

### 3. Assessment of application against Clearing Principles

#### Comments

Under the proposed amendment, an additional 779 hectares is proposed within a clearing permit boundary which has increased by approximately 740 hectares. The proposed amendment will result in the clearing of up to 4,946

hectares, over the Petra Gold Deposit within the Duketon Gold Project area, within a total clearing permit boundary of 14,743 hectares.

The amendment area is located within the East Murchison subregion of the Murchison Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). The East Murchison subregion is characterised by internal drainage, extensive areas of elevated red desert sandplains with minimal dune development, salt lake systems associated with the occluded paleodrainage system, broad plains of red-brown soils and breakaway complexes, as well as red sandplains (CALM, 2002). Vegetation is dominated by Mulga woodlands which are often rich in ephemerals; hummock grasslands, saltbush shrublands and *Halosarcia* shrublands (CALM, 2002).

The condition of the vegetation within the amendment area varies from 'Completely Degraded' to 'Pristine' (Mattiske, 2016a, 2016b, 2017a, 2017b; Regis, 2018). Areas of 'Completely Degraded' to 'Degraded' vegetation occur as a result of historical mining activities and pastoral use (Regis, 2018). Based on aerial imagery and survey data, the majority of the vegetation within the amendment area is considered to be in an 'Excellent' condition or better and shows little to no signs of disturbance. Despite the lack of disturbance, the health of plants was regarded to be very poor at the time of survey, with little to no fertile material available (lacking flowers and fruits). This is likely a result of water stress (Regis, 2018).

Level 2 flora and vegetation surveys have been conducted by Mattiske Consulting Pty Ltd over the majority of the Petra Deposit amendment area.

No Threatened flora species were recorded within the amendment area, although the Priority 4 flora species *Eremophila pungens* was identified within the Petra survey area (Regis Resources, 2018). Priority flora species were recorded at Anchor, Dogbolter-Cooper and the Tooheys Well areas, but were not recorded within areas proposed for clearing within the Baneygo haul road disturbance area (Mattiske, 2016a, 2016b, 2017a, 2017b; Regis, 2018).

There were a number of limitations noted within the flora survey, such as below average rainfall in the lead up to the survey and signs of vegetation stress which inhibited the confirmation of some taxa to species level. Many specimens of annual and ephemeral species were unable to be identified past genus or confirmed to species level due to lack of fertile material.

Despite survey limitations, based on available survey data and records, large scale impacts to flora species of conservation significance (including Priority flora species) are considered unlikely, therefore it is not anticipated that the proposed clearing will adversely impact on Priority flora species at a population or species level. To reduce potential adverse impacts to Priority flora species, the proponent will implement a number of management procedures. These management measures are outlined within the Regis (2018) Native Vegetation Clearing Permit Application Supporting Document and include such activities as implementing clearance and disturbance protocols, ensuring personnel have an awareness of conservation significant flora known or recorded in the area, minimising clearing, undertaking progressive rehabilitation and delineating recorded occurrences of Priority flora.

Twenty seven vegetation communities were identified during flora surveys, all of which are considered to be well represented outside the amendment area (Mattiske 2016a, 2016b, 2017a and 2017b). No Threatened or Priority Ecological Communities are known to occur within the amendment area and none were recorded during flora surveys. The closest community (a Priority Ecological Community) is located more than 30 kilometres south (GIS Database).

The fauna habitats present within the amendment area are common and widespread in the landscape and bioregion, with vast tracts of similar habitat in adjacent areas (Terrestrial Ecosystems, 2016a; 2016b; 2017). The vegetation within the amendment area is not considered to be providing, or contributing to, important ecological linkages or fauna movement corridors (Terrestrial Ecosystems, 2016a; 2016b; 2017).

No fauna species of conservation significance were recorded within the amendment area during fauna surveys (Terrestrial Ecosystems 2016a, 2016b and 2017), however a number of species were identified as having the potential to persist or occur within the amendment area and surrounds. Following further analysis of these species and the habitat on offer, Terrestrial Ecosystems (2012, 2016a, 2016b and 2017) considered that the proposed clearing (and previous clearing activities) is unlikely to impact on any species of conservation significance. Conservation significant species identified as potentially occurring in the vicinity are either migratory, able to relocate easily into neighbouring areas, or preferred habitat is not present (Terrestrial Ecosystems 2012, 2016a, 2016b and 2017).

No introduced (weed) species have been recorded within the amendment area (Regis Resources, 2018). 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 continued implementation of a weed management condition.

Several non-perennial watercourses have been mapped within the amendment area (GIS Database) and a number of the vegetation communities identified within the amendment area are considered to be growing in association with minor drainage lines (Mattiske, 2016a; Mattiske, 2016b; Mattiske, 2017a; Mattiske 2017b; Regis, 2018). Potential impacts to vegetation growing in association with a watercourse or wetland as a result of the proposed clearing may also be minimised by the continued implementation of a watercourse management condition.

Four land systems have been mapped within the amendment area; Hootanui, Steer, Brooking, Bevon and Violet (GIS Database). The Hootanui land system is susceptible to water erosion in areas where perennial shrub cover is substantially reduced or the soil surface is disturbed (Pringle *et al.* 1994). The Steer, Bevon and Brooking land systems are generally not prone to erosion as stone mantles provide effective protection (Pringle *et al.* 1994), although 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 (Pringle *et al.* 1994). The Violet land system is also protected by abundant mantles over most areas, except where the soil surface is disturbed. Following disturbance, the soil becomes moderately susceptible to water erosion (Pringle *et al.* 1994).

The proponent has committed to implementing management procedures to mitigate potential land degradation issues. These management measures are outlined within the Regis (2018) Native Vegetation Clearing Permit Application Supporting Document. Potential land degradation as a result of the proposed clearing may be further minimised by the continued implementation of a staged clearing condition.

The amendment area is not located within or adjacent to any conservation areas (GIS Database). The closest conservation area (De La Poer Range Nature Reserve) is situated approximately 25 kilometres north-north east of the northern most section of the application area (the Anchor project area) (GIS Database).

The amendment area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The amendment area is located within an arid environment with an average annual rainfall of approximately 236 millimetres and experiences mean annual evaporation of approximately 3,400 millimetres (BoM, 2019). Although there are a number of minor ephemeral watercourses located in the amendment area, it is likely these drainage lines would only flow for short periods following significant rainfall events (Regis, 2018). Considering there are no permanent watercourses within the amendment area, the proposed clearing is unlikely to impact on surface water quality.

Groundwater quality within the amendment area ranges from marginal to brackish (500 – 3000 TDS mg/L) (GIS Database). The local area and region is well vegetated and the proposed clearing of hectares of native vegetation 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 has committed to implementing management procedures to mitigate potential impacts to the quality of surface and groundwater. These management measures are outlined within the Regis (2018) Native Vegetation Clearing Permit Application Supporting Document. It is also expected that rehabilitation activities will be undertaken as per Mining Act approvals, conditions and requirements for the related mining proposal.

The amendment area is located in the Murchison region, where evaporation far exceeds annual rainfall (BoM, 2018). Given the climatic conditions of the Murchison region and the large amount of remaining vegetation in the local area, the proposed clearing is unlikely to result in a significant increase in the incidence or intensity of flooding.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision reports CPS 6657/1, CPS 6657/2, CPS 6657/3, CPS 6657/4, CPS 6657/5 and CPS 6675/6.

#### **Methodology**

BoM (2019)  
CALM (2002)  
Mattiske (2016a)  
Mattiske (2016b)  
Mattiske (2017a)  
Mattiske (2017b)  
Regis (2018)  
Regis Resources (2018)  
Terrestrial Ecosystems (2016a)  
Terrestrial Ecosystems (2016b)  
Terrestrial Ecosystems (2017)

#### GIS Database:

- IBRA Australia
- Imagery
- Pre-European vegetation
- Threatened Ecological Sites Buffered

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

### Comments

All proposed mining activities and operations within the application area permit boundary (14,003 hectares) have either already been approved under the *Mining Act 1978*, or are currently under assessment. Within the approved associated mining proposals, the proponent has committed to implementing management measures to reduce potential environmental impacts. In addition to this, a Mine Closure Plan (MCP) has been developed and continues to be revised to address mine closure issues. Within the MCP, the proponent has committed to conducting rehabilitation activities post mining. It is anticipated that additional areas currently under assessment will include management measures to reduce potential environmental impacts.

There are no native title claims over the previously approved application area (CPS 6657/5) or the amendment area (DPLH, 2018; 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*.

No Sites of Aboriginal Significance are known from the amendment area; however, a number of Sites of Aboriginal Significance are located throughout other areas of the application area (DPLH, 2018; GIS Database). 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 Water and Environmental Regulation and the Department of Biodiversity Conservation and Attractions, 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 January 2019 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received.

**Methodology** DPLH (2019)

## 4. References

- BoM (2019) Climate Statistics for Australian Locations. A Search for Climate Statistics, Australian Government Bureau of Meteorology <<http://www.bom.gov.au>> Accessed February 2019.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.
- DPLH (2019) Aboriginal Heritage Inquiry System, Department of Planning, Lands and Heritage, Perth, Western Australia <<http://maps.daa.wa.gov.au>> Accessed February 2019.
- 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 (2016a) Flora and Vegetation Survey of the Dogbolter and Coopers Project Area. Report prepared for Regis Resources Limited, by Mattiske Consulting Pty Ltd, March 2016.
- Mattiske (2016b) Flora and Vegetation Survey of the Tooheys Well Project Area. Report prepared for Regis Resources Limited, by Mattiske Consulting Pty Ltd, December 2016.
- Mattiske (2017a) Flora and Vegetation Survey of the Anchor Project Area. Report prepared for Regis Resources Limited, by Mattiske Consulting Pty Ltd, March 2017.
- Mattiske (2017b) Flora and Vegetation Survey of the Banyego Haul Road Project Area. Report prepared for Regis Resources Limited, by Mattiske Consulting Pty Ltd, July 2017.
- 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 (2018) Application to Amend Purpose Permit 6657/5 Duketon Gold Project. Tooheys Well Tenure M38/1251, M38/1277. Native Vegetation Clearing Permit Application Supporting Document. Regis Resources Ltd, Western Australia. 20 February 2018.
- Regis Resources (2018) Application to Amend Purpose Permit 6657/6 Duketon Gold Project, Petra Tenure: :38/226, L38/315, M38/1247 & M38/1264. Native Vegetation Clearing Permit Application Supporting Document. Regis Resources Ltd, Western Australia. December 2018.
- Terrestrial Ecosystems (2012) Level 1 Fauna Risk Assessment for the Anchor Project. Report prepared for Regis Resources Limited, by Terrestrial Ecosystems, February 2012.
- Terrestrial Ecosystems (2016a) Level 1 Fauna Risk Assessment for the Dogbolter-Coopers Project. Report prepared for Regis Resources Limited, by Terrestrial Ecosystems, December 2016.
- Terrestrial Ecosystems (2016b) Level 1 Fauna Risk Assessment for the Tooheys Project. Report prepared for Regis Resources Limited, by Terrestrial Ecosystems, December 2016.
- Terrestrial Ecosystems (2017) Level 1 Fauna Risk Assessment for the Proposed Haul Road to the Banyego Project. Report prepared for Regis Resources Limited, by Terrestrial Ecosystems, July 2017.

## 5. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia (now DPLH)
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia (now DPIRD)
<b>DBCA</b>	Department of Biodiversity Conservation and Attractions, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
<b>DEE</b>	Department of the Environment and Energy, Australian Government
<b>DER</b>	Department of Environment Regulation, Western Australia (now DWER)
<b>DMIRS</b>	Department of Mines, Industry Regulation and Safety, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia (now DMIRS)
<b>DPIRD</b>	Department of Primary Industries and Regional Development, Western Australia
<b>DPLH</b>	Department of Planning, Lands and Heritage, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DoE</b>	Department of the Environment, Australian Government (now DEE)
<b>DoW</b>	Department of Water, Western Australia (now DWER)
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia (now DBCA)
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
<b>DWER</b>	Department of Water and Environmental Regulation, Western Australia
<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
<b>TEC</b>	Threatened Ecological Community

### Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

#### **T**      **Threatened species:**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

**Threatened fauna** is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

**Threatened flora** is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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 in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

#### **EN**      **Endangered species**

Threatened species considered to be “facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU

**Vulnerable species**

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

**Extinct Species:**

EX

**Extinct species**

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW

**Extinct in the wild species**

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

**Specially protected species:**

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI

**Migratory species**

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD

**Species of special conservation interest (conservation dependent fauna)**

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS

**Other specially protected species**

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P

**Priority species:**



Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.