



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5461/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Intermin Resources Limited

### 1.3. Property details

Property: Mining Lease 26/499  
Mining Lease 26/621  
Miscellaneous Licence 26/261  
Local Government Area: City of Kalgoorlie-Boulder  
Colloquial name: Teal Gold Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 21 July 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. Three Beard vegetation associations are located within the application area (GIS Database):

125: Bare areas; salt lakes;

468: Medium woodland; salmon gum & goldfields blackbutt; and

540: Succulent steppe with open low woodland; sheoak over saltbush.

A flora and vegetation survey was conducted over the application area by GHD in September 2010 (GHD, 2010). The application area comprised the following vegetation types;

LW1: Low woodland of *Eucalyptus oleosa* with scattered *Casuarina pauper* over *Eremophila interstans* subsp. *interstans*, *Santalum acuminatum*, *Eremophila scoparia*, *Senna artemisioides* subsp. *filifolia*, *Cratystylis conocephala*, *Halgania andromedifolia*, *Eremophila glabra* and *Scaevola spinescens* over *Maireana sedifolia* and *Eremophila parvifolia* subsp. *auricampa*.

LW2: Low woodland of *Eucalyptus salubris* over *Eremophila scoparia*, *Pimelea microcephala*, *Senna artemisioides* subsp. *filifolia*, *Eremophila ionantha*, *Eremophila maculata* subsp. *brevifolia* and *Lycium austral* over *Maireana sedifolia*.

OW1: Open mixed woodland of *Eucalyptus salmonophloia*, *E. salubris* and *E. oleosa* with occasional *E. celastroides* subsp. *celastroides* and *Casuarina pauper* over *Eremophila scoparia*, *Senna artemisioides* subsp. *filifolia*, *Eremophila glabra* and *Scaevola spinescens* over *Maireana sedifolia*.

OW2: Open mixed woodland of *Eucalyptus lesouefii*, *E. salubris*, *E. oleosa* and occasional *Casuarina pauper* over *Eremophila glabra* and *Lycium australe* over *Maireana sedifolia*.

S1: Mixed shrubland of *Eremophila scoparia*, *Senna artemisioides* subsp. *filifolia*, *Eremophila glabra*, *Acacia inceana* subsp. *inceana* and *Scaevola spiniscens* over *Maireana sedifolia* and *Cratystylis conocephala* over *Eremophila parvifolia* subsp. *auricampa* with occasional *Casuarina pauper*.

LS1: Low shrubland of *Cratystylis subspinescens*, *Atriplex vesicaria*, *Maireana amoena*, *Frankenia* spp, *Tecticornia disarticulata*, *Maireana georgei*, *Maireana glomerata* over *Disphyma crassifolium* with occasional *Callitris preissii*, *Eremophila miniata*, *Dodonaea viscosa* subsp. *angustissima*, and *Eremophila scoparia*.

LS2: Low shrubland of *Tecticornia indica*, *Atriplex vesicaria*, *Maireana amoena*, *M. glomerata*, *M. tomentosa* subsp. *tomentosa* and *Frankenia* spp over *Sclerolaena eurotioides* and *Disphyma crassifolium*.

LS3: Low shrubland of *Tecticornia peltata*, *Swainsona purpurea*, *Scaevola collaris*, *Gunnionsia quadrifida*, *Maireana glomerifolia*, *Frankenia pauciflora*, *Atriplex nana* and *Disphyma crassifolium*.

<b>Clearing Description</b>	Teal Gold Project Intermin Resources Limited proposes to clear up to 194.6 hectares of native vegetation, within an application area of approximately 194.6 hectares, for the purpose of mineral production. The project is located approximately 10 kilometres north-west of Kalgoorlie in the City of Kalgoorlie Boulder.
<b>Vegetation Condition</b>	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).
<b>Comment</b>	CPS 5461/1 was granted by the Department of Mines and Petroleum on 28 March 2013 and authorised the clearing of 80 hectares of native vegetation within a boundary of approximately 175 hectares. The clearing is for the development of a mine pit, waste rock dump, access tracks, firebreak deviation and rehabilitation stock piles for topsoil and caprock.  Intermin Resources Limited has applied to increase the amount of clearing to a total of 194.6 hectares and increase the permit boundary.

### 3. Assessment of application against clearing principles

#### Comments

Intermin Resources Limited applied to increase the amount of clearing authorised by 114.6 hectares to a total of 194.6 hectares and increase the permit boundary by approximately 19.3 hectares.

The amendment application area lies within the Eastern Goldfields (COO3) subregion of the Coolgardie Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). At a broad scale, vegetation of the Eastern Goldfields subregion consists of Mallees, acacia thickets and shrub-heaths on sandplains; Eucalyptus woodlands around salt lakes, on ranges and in valleys; dwarf shrublands of samphire and Dodonaea shrublands on basic graninulites of the Fraser Range (CALM, 2002). The area is rich in endemic acacias. The Rowles Lagoon and Clear and Muddy Lakes are located within this subregion and form the largest semi-permanent freshwater complex in the region (CALM, 2002).

According to available databases and flora survey results, there is no Threatened flora, Priority Ecological Communities, or Threatened Ecological Communities identified within the amendment application area (GHD, 2010; GIS Database). An individual of the Priority 1 flora species *Eremophila praecox* was identified within the amendment application area (GHD, 2010). It was found growing in the footprint of the proposed waste dump (GHD, 2010). It is known from seven records and its distribution ranges from just north of Kalgoorlie to near Coolgardie (GHD, 2010). The Department of Environment and Conservation (now the Department of Parks and Wildlife) has previously advised GHD that while it is likely to be *Eremophila praecox*, the specimen could not be confirmed as it was not flowering at the time of the survey (GHD, 2010). The removal of this individual is unlikely to have a significant impact on the species.

GHD (2010) conducted a desktop survey and reconnaissance investigation fauna survey of the application area and surrounds in September 2010. A total of four habitat types have been identified within the amended application area (GHD, 2010):

- Mixed woodland over mixed shrubs - considered to provide a medium level of habitat value to fauna (GHD, 2010). The vegetation has good structural diversity with medium sized eucalypts, mallees and a reasonable understorey of small and larger shrubs present;
- Mixed shrublands - the vegetation present was generally in very good to excellent condition and is also considered to provide a medium level of habitat for fauna (GHD, 2010). The dominant fauna are likely to be the highly mobile bird community, particularly thornbills (GHD, 2010). Ground dwelling reptile species are likely to be less prevalent, given the typically sparse understorey and litter layer with this habitat;
- Samphire/chenopod shrublands - generally less diverse than the woodland habitat, however the vegetation present was generally in excellent to very good condition and is considered to provide a medium level of habitat value to fauna (GHD, 2010). The fringing vegetation of the unnamed lake was relatively degraded with sparse vegetation cover and poor vegetation health;
- Cleared areas - highly disturbed areas devoid of most vegetation and offer little habitat value for fauna.

A total of 19 bird species, four mammal and three reptile species were recorded within the application area during the reconnaissance survey (GHD, 2010). The fauna habitats available within the amendment application

area are well represented in the region. Based on the habitats present, it is considered unlikely that the amendment application area represents significant habitat for fauna indigenous to Western Australia (GHD, 2010).

The fauna reconnaissance survey conducted by GHD (2010) identified 14 conservation significant fauna that have been previously recorded within a 20 kilometre radius of the application area. Most of these species are migratory or highly mobile and the application area may form part of a much larger home range or be subject to only seasonal visits (GHD, 2010).

The Malleefowl (*Leipoa ocellata* - Vulnerable) was identified as potentially occurring within the application area. The Malleefowl is typically located in semi-arid to arid shrublands and low woodlands, particularly those dominated by mallee and/or acacias (Benshemesh, 2007). The survey area is considered to be at the north-eastern periphery of its range (GHD, 2010). While Malleefowl may potentially occur within the woodlands of the survey area it is considered unlikely given the level of previous disturbance (GHD, 2010). No evidence of this species presence was recorded during the reconnaissance survey (GHD, 2010).

The flora survey conducted by GHD identified one vegetation community associated with a non-perennial salt lake (LS3) as occurring within the amendment application area. The lake is part of a broader chain of salt lakes orientated in a south-west direction (GHD, 2010). The lake is predominantly dry but may hold water following heavy rain (GHD, 2010). Only a small portion of this vegetation community occurs within the application area and it has been identified as being in poor condition (GHD, 2010). Furthermore, the proposed clearing within this area is for a pipeline, therefore the clearing will be linear in nature and will not impact a large amount of this community (Intermin Resources Limited, 2013).

The amendment to increase clearing from 80 hectares to 194.6 hectares within a boundary of approximately 194.6 hectares is not likely to result in any significant change to the environmental impacts of the proposed clearing.

The assessment against the clearing Principles remains consistent with the assessment contained in decision report CPS 5461/1.

**Methodology** Benshemesh (2007)  
CALM (2002)  
GHD (2010)  
Intermin Resources Limited (2013)

GIS Database:  
- Imagery  
- Threatened and Priority Flora

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

##### **Comments**

There are no Native Title Claim over the areas under application (DAA, 2016). However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DAA, 2016). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 13 June 2016 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received raising no objections to the amended clearing permit.

**Methodology** DAA (2016)

#### **4. References**

- Benshemesh, J (2007) National Recovery Plan for Malleefowl, Department for Environment and Heritage, South Australia.  
CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia.  
DAA (2016) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, <<http://maps.dia.wa.gov.au/AHIS2/>> (accessed 27 June 2016).

GHD (2010) Report for Teal Gold Project Biological Survey October 2010. Report prepared for Intermin Resources Limited, Kalgoorlie, Western Australia, by GHD October 2010.  
 Intermin Resources Limited (2013) Teal Gold Project: Kalgoorlie. Supporting Documentation to Application Teal Gold Project, November 2012.  
 Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

## 5. Glossary

### Acronyms:

<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
<b>TEC</b>	Threatened Ecological Community

### Definitions:

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

<b>T</b>	<p><b>Threatened species:</b>          Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).</p> <p><b>Threatened fauna</b> is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.</p> <p><b>Threatened flora</b> 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.</p> <p>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.</p>
<b>CR</b>	<p><b>Critically endangered species</b>          Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
<b>EN</b>	<p><b>Endangered species</b>          Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
<b>VU</b>	<p><b>Vulnerable species</b>          Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 3 of the Wildlife Conservation</p>

(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.