



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5947/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: GMA Garnet Pty Ltd

### 1.3. Property details

Property: Mining Lease 70/968  
Local Government Area: Shire of Northampton  
Colloquial name: Port Gregory Mine

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 23 April 2015

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

##### Vegetation Description

##### Vegetation Description:

Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation extent in a regional context. Two Beard vegetation associations have been mapped within the application area (GIS Database):

**17:** Shrublands; *Acacia rostellifera* thicket; and  
**371:** Low forest; *Acacia rostellifera*.

A flora survey was undertaken over the application area and the rest of the tenement by ecologists from GHD in August 2013. Five vegetation types were recorded during the survey and three of these were mapped within the application area (GHD, 2013a). These are described below.

##### **1: Mixed Open Heath on Sandy Limestone Ridge –**

High Open Shrubland of *Acacia rostellifera*, *Melaleuca cardiophylla*, *Grevillea argyrophylla*, over Shrubland of *Olearia* sp. *Kennedy Range*, *Hibiscus huegelii*, over Low Shrubland of *Pimelea angustifolia*, *Diplopeltis petiolaris*, *Acanthocarpus preissii* over Scattered Grasses of *\*Avena barbata*, *Austrostipa* spp., over Mixed Herbs of *\*Lysimachia arvensis*, *Goodenia beardiana*, *Erodium* sp. with Scattered Climbers of *\*Cuscuta* sp., *Dioscorea hastifolia*, *Commicarpus australis*;

##### **4: Melaleuca Thickets –**

Closed Scrub of *Melaleuca cardiophylla* with Mallee of Eucalyptus spp. over Low Shrubs of *Rhagodia latifolia*, *Lasiopetalum angustifolium* with Scattered Climbers of *Aphanopetalum clematideum*, *Dioscorea hastifolia*; and

##### **5: Cleared/Degraded –**

Cleared Tracks and firebreaks, old pits with regrowth of *Acacia rostellifera*, pasture grasses and weeds.

In addition to the above three vegetation types, GHD (2013a) surveyed an additional vegetation type within the amendment area (amendment application CPS 5947/2):

##### **3. Low Heath –**

Low Open Heath to Low Heath of *Melaleuca cardiophylla*, *Diplopeltis petiolaris*, *Bossiaea spinescens*, *Pimelea angustifolia*, *Opercularia vaginata*, over Scattered Grasses of *\*Avena barbata*, *Austrostipa* spp., over Mixed Herbs of *\*Sisymbrium irio*, *Zygophyllum billardieri*. with Scattered Climbers of *Dioscorea hastifolia*, with Open Rushes of *Desmodcladus asper*

\*introduced species

##### Clearing Description

Port Gregory Mine.  
GMA Garnet Pty Ltd proposes to clear up to 54.72 hectares of native vegetation, within a total boundary of approximately 67.75 hectares, for the purpose of mineral production. The project is located approximately 4 kilometres north-east of Port Gregory in the Shire of Northampton.

<b>Vegetation Condition</b>	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);  To:  Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).
<b>Comment</b>	The vegetation condition is based on a flora and vegetation survey by ecologists from GHD (2013a).  Vegetation will be cleared by dozers or graders. Vegetation and topsoil will be stockpiled for later use in rehabilitation or directly returned to previously cleared areas. The clearing will be up to 5 hectares per year.  Clearing permit CPS 5947/1 was granted by Department of Mines and Petroleum on 10 April 2014 and authorised the clearing of up to 30 hectares of native vegetation within an area totalling approximately 32 hectares. On 23 February 2015 GMA Garnet Pty Ltd applied to amend CPS 5947/1 for the purpose of increasing the amount of clearing to 54.72 hectares and increase the permit boundary to 67.75 hectares.

### 3. Assessment of application against clearing principles

#### Comments

GMA Garnet Pty Ltd (GMA Garnet) has applied to increase the area permitted to clear from 30 hectares to 54.72 hectares and the permit boundary from 32 hectares to 67.75 hectares.

A flora and vegetation survey of the amendment area conducted by GHD (2013a) identified one additional vegetation type and three existing vegetation types occurring within the extended permit boundary. These vegetation types are not considered to be of higher diversity than those assessed within clearing permit decision report CPS 5947/1. None of the vegetation units recorded are considered to be a Threatened or Priority Ecological Community (GHD, 2013a, 2014; GIS Database).

The application area is adjacent to a vegetation type '*Acacia rostellifera* scrub' which is similar to Beard vegetation association 371. Beard vegetation association 371 has approximately 10.7% of its pre-European extent remaining and is considered 'Vulnerable'. The proponent has advised a 10 metre buffer from this vegetation type will be maintained to minimise any potential impacts (GHD, 2014). Potential impacts to adjacent remnant vegetation as a result of the proposed clearing may be minimised by the implementation of an exclusion zone.

The application area forms part of an ecological linkage running north-west to south-east with Hutt Lagoon to the east and large areas of cleared farmland to the west (GIS Database). The proposed clearing partially disrupts the linkage and exposes the remaining vegetation to increased edge effects. Potential impacts to adjacent remnant vegetation as a result of the proposed clearing may be minimised by the implementation of a weed management condition. GMA Garnet Pty Ltd will be progressively rehabilitating cleared areas with the post-mining land use a return to native vegetation. The rehabilitation requirements are under the *Mining Act 1978* and rehabilitation procedures are detailed in the project Mining Proposal and Mine Closure Plan (GHD, 2013b).

A targeted flora survey for *Caladenia bryceana* subsp. *cracens* was undertaken by GHD (2014) between 13 and 14 August 2014. No Threatened Flora species were identified during the survey (GHD, 2014). Potential habitat for *Caladenia bryceana* subsp. *cracens* was identified within the application area, however it was in a 'degraded' condition due to weed invasion, historical grazing and continuous impacts from feral grazing (GHD, 2014). GHD (2014) identified two Priority Flora species within the application area; 23 individuals from three locations of *Melaleuca huttensis* (Priority 1) and 54 individuals from three locations of *Anthocercis intricata* (Priority 3).

GHD (2014) advise that larger populations of *Melaleuca huttensis* occur immediately adjacent to the application area, with one location recording in excess of 1,000 individual plants. GHD (2014) suggest that the removal of 23 individuals within the amendment area is likely to impact only less than 0.003% of the population within 10 kilometres of the application area. It is unlikely that the removal of these plants will impact on the status of this species within the local area. DPaW (2015) advise that the proposed clearing of *Melaleuca huttensis* within the application area will not impact the conservation significance of this species.

GHD (2014) surveyed *Anthocercis intricata* associated with previous disturbances and was recorded growing along existing the firebreaks track. Larger populations of this species were noted five kilometres south of the application area, with one population of in excess of 80 individual plants. GHD (2014) suggest that the removal of 54 individuals is likely to impact 5% of the population within 30 kilometres of the application area. DPaW (2015) advise that the proposed clearing of *Anthocercis intricata* within the application area will not impact the conservation significance of this species.

Therefore, the proposed clearing is not likely to be at variance to Principles (a), (c), (d) and (e).

Fauna habitats assessed in clearing permit decision report CPS 5947/1 remain consistent with those found in the amendment area. Therefore, the proposed clearing may be at variance to Principle (b).

Given the amendment is to increase the area authorised to clear, and the application area consists of deep

sands with a high to very high wind erosion risk (GHD, 2013a), potential land degradation impacts as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

Current environmental information has been reviewed and the assessment of clearing principles (f), (g), (h), (i) and (j) is consistent with the assessment in clearing permit decision report CPS 5947/1.

**Methodology** DPaW (2015)  
GHD (2013a)  
GHD (2013b)  
GHD (2014)  
Keighery (1994)  
GIS Database:  
- DEC Tenure  
- Evaporation Isopleths  
- Groundwater Salinity  
- Hydrography, linear  
- IBRA WA (Regions - Sub Regions)  
- Pre-European Vegetation  
- Public Drinking Water Source Areas  
- Rangeland Land System Mapping  
- Rainfall, Mean Annual  
- Threatened and Priority Flora  
- Threatened Ecological Sites Buffered

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

##### **Comments**

There is one Native Title claim over the area under application (GIS Database). The claim WC2000/001 has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

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

It is the proponent's responsibility to liaise with the Department of Environment Regulation, 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 16 March 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

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

#### **4. References**

- DPaW (2015) Advice regarding CPS 5947/2 from Species and Communities Branch, Department of Parks and Wildlife, April 2015.
- GHD (2013a) GMA Port Gregory Mine Tenement M70/968 Vegetation, Flora and Fauna Assessment. Report Prepared by GHD for GMA Garnet Pty Ltd, October 2013.
- GHD (2013b) Lynton Mine Extension M70/968 Mining Proposal. Report Prepared by GHD for GMA Garnet Pty Ltd, December 2013.
- GHD (2014) Report for Port Gregory Mine Targeted Flora Survey. Report prepared for GMA Garnet Pty Ltd, October 2014.
- 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>s.17</b>	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

### Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

- T**      **Threatened species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).  
  
Threatened Fauna and Flora are further recognised by DPaW according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.  
  
Rankings:  
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.  
EN: Endangered - considered to be facing a very high risk of extinction in the wild.  
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.
- X**      **Presumed Extinct species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
- IA**      **Migratory birds protected under an international agreement:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.  
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
- S**      **Other specially protected fauna:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P1**      **Priority One - Poorly-known species:**  
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
- P2**      **Priority Two - Poorly-known species:**  
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are

comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

**P3**

**Priority Three - Poorly-known species:**

Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

**P4**

**Priority Four - Rare, Near Threatened and other species in need of monitoring:**

- (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.
- (b) Near Threatened. Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

**P5**

**Priority Five - Conservation Dependent species:**

Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**Principles for clearing native vegetation:**

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.