



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5098/2  
Permit type: Area

### 1.2. Proponent details

Proponent's name: David Hugh Macpherson

### 1.3. Property details

Property: Mining Lease 45/1210  
Local Government Area: Town of Port Headland  
Colloquial name: Pindan Sands Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 10 April 2014

## 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 (GIS Database):

589: Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex soft spinifex; and

647: Hummock grasslands, dwarf-shrub steppe; *Acacia translucens* over soft spinifex.

A flora survey has not been undertaken over the additional application area. A flora and vegetation survey of the original application area was conducted by Coffey Environments (2011) in September 2011. This survey identified one vegetation community (Coffey Environments, 2011):

- Scattered Shrubs to Open Shrubland of *Acacia colei* var. *colei* and *Acacia tumida* var. *pilbarensis* to 2 metres over Low Open Shrubland to Low Shrubland of *Acacia stellaticeps* to 1 metre over Mid-dense Hummock Grassland of *Triodia epactia* to 1 metre on red/brown medium-grained sandy loam (Pindan Soils).

Aerial photography indicates that the vegetation type found in the additional application area is consistent with the original application area. This is supported by the homogenous soil type across the entire amended application area (GIS Database).

#### Clearing Description

Pindan Sands Project.

David Hugh Macpherson (Macpherson) proposes to clear 86.34 hectares of native vegetation within a total boundary area of 86.34 hectares for the purpose of mineral production. The proposal is approximately 15 kilometres south-east of Port Hedland, in the Town of Port Hedland.

#### Vegetation Condition

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);

To

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

#### Comment

The vegetation condition was assessed during a flora survey of the application area conducted by Coffey Environments (2011).

Clearing Permit CPS 5098/1 was granted by the Department of Mines and Petroleum (DMP) on 2 August 2012, and authorised the clearing of 78.43 hectares of native vegetation within a clearing permit boundary of 78.43 hectares.

### 3. Assessment of application against clearing principles

#### Comments

The amendment is to increase the amount of clearing authorised for the purpose of accommodating additional infrastructure. The amount of clearing and clearing permit boundary will increase by 7.91 hectares. The additional clearing will be conducted in an area directly north of the original permit boundary. During the 28-day notification period, the proponent also requested the permit duration be extended by 2 years.

A flora or vegetation survey has not been undertaken over the additional application area however, based on aerial photography and soil types; it appears the vegetation type is consistent with the original permit area (GIS Database). The vegetation type is common to the region and does not represent a remnant of vegetation in an area that has been extensively cleared (Government of Western Australia, 2013).

According to available databases there are no Threatened or Priority Ecological Communities within the amended application area (GIS Database).

There are no known populations of Threatened Flora species in the amended application area (DEC, 2014; GIS Database). The Priority 1 flora species *Heliotropium muticum* was recorded at 23 locations within the original permit boundary (Coffey Environments, 2011). This species can potentially occur within the additional application area given the consistency of vegetation across the site. *Heliotropium muticum* is a disturbance opportunist, most commonly recorded after fire or other disturbance (DEC, 2012). Macpherson has committed to rehabilitating the site post mining in accordance with *Mining Act 1978* approvals. As this species is known to flourish after disturbance, it is considered likely that this species will grow back after rehabilitation. The clearing of an additional 7.91 hectares of native vegetation is not likely to impact on this species.

A fauna survey has not been undertaken over the additional application area. The habitat types identified by Coffey Environments (2011) as occurring in the original permit boundary would likely occur in the additional application area based on the similar nature of the vegetation and landforms. Considering there were no conservation significant fauna species or core habitat for indigenous fauna recorded within the original permit boundary (Coffey Environments, 2011), the proposed amendment is not likely to significantly impact on fauna.

There are no watercourses or wetlands within the amended application area (GIS Database). Given the small scale increase in clearing, the proposed amendment is not likely to significantly impact on surface or groundwater, nor influence the incidence or intensity of flooding.

Current environmental information has been reviewed and the assessment of the clearing principles is consistent of the assessment in clearing permit decision report CPS 5098/2.

#### Methodology

Coffey Environments (2011)  
DEC (2012)  
DEC (2014)  
Government of Western Australia (2013)  
GIS Database:  
- DEC Tenure  
- Hydrography, Linear  
- IBRA WA (Regions – Subregions)  
- Pre-European Vegetation  
- Public Drinking Water Sources Areas PDWSAs  
- Rangeland Land System Mapping  
- Threatened and Priority Flora  
- Threatened Ecological Sites Buffered  
- Threatened Fauna

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

#### Comments

There is one Native Title Claim (WC2009/003) over the area under application (GIS Database). This claim 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 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 proponents' 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 amendment application was advertised on 3 March 2014 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received requesting a rehabilitation condition be placed on the permit. Rehabilitation requirements are dealt with under the *Mining Act 1978* to avoid duplication.

**Methodology** GIS Database:  
- Aboriginal Sites of Significance  
- Native Title Claims – Registered with the NNTT

#### 4. References

- Coffey Environments (2011) Level 1 Flora and Level 1 Fauna Assessment 70 Hectare Portion of M45/1210 Great Northern Highway, Port Hedland. Unpublished report prepared for Pilbara Earthmoving, dated October 2011.
- DEC (2007 - ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 11 March 2014.
- DEC (2012) Advice received from Department of Environment and Conservation Species and Communities Branch – Priority 1 Flora species *Heliotropium muticum*. Advice received 20 July 2012.
- Government of Western Australia (2011) 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). 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.

#### 5. Glossary

##### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>CALM</b>	Department of Conservation and Land Management (now DEC), Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia
<b>DEH</b>	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
<b>DEP</b>	Department of Environment Protection (now DEC), Western Australia
<b>DIA</b>	Department of Indigenous Affairs
<b>DLI</b>	Department of Land Information, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DoE</b>	Department of Environment (now DEC), Western Australia
<b>DoIR</b>	Department of Industry and Resources (now DMP), Western Australia
<b>DOLA</b>	Department of Land Administration, Western Australia
<b>DoW</b>	Department of Water
<b>EP Act</b>	Environmental Protection Act 1986, Western Australia
<b>EPBC Act</b>	Environment Protection and Biodiversity Conservation Act 1999 (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>RIWI Act</b>	Rights in Water and Irrigation Act 1914, Western Australia
<b>s.17</b>	Section 17 of the Environment Protection Act 1986, Western Australia
<b>TEC</b>	Threatened Ecological Community

##### Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1** **Priority One - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P2** **Priority Two - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3** **Priority Three - Poorly Known taxa:** taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4** **Priority Four – Rare taxa:** taxa which are considered to have been adequately surveyed and which, whilst

being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.

- R** **Declared Rare Flora – Extant taxa** (= *Threatened Flora = Endangered + Vulnerable*): taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X** **Declared Rare Flora - Presumed Extinct taxa**: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1** **Schedule 1 – Fauna that is rare or likely to become extinct**: being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct**: being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3** **Schedule 3 – Birds protected under an international agreement**: being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4** **Schedule 4 – Other specially protected fauna**: being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1** **Priority One: Taxa with few, poorly known populations on threatened lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2** **Priority Two: Taxa with few, poorly known populations on conservation lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3** **Priority Three: Taxa with several, poorly known populations, some on conservation lands**: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4** **Priority Four: Taxa in need of monitoring**: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5** **Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999*)**

- EX** **Extinct**: A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W)** **Extinct in the wild**: A native species which:  
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or  
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CR** **Critically Endangered**: A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN** **Endangered**: A native species which:  
(a) is not critically endangered; and  
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU** **Vulnerable**: A native species which:  
(a) is not critically endangered or endangered; and  
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD** **Conservation Dependent**: A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

**Principles for clearing native vegetation:**

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