



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6486/1

Permit type: Purpose

### 1.2. Proponent details

Proponent's name: Tronox Management Pty Ltd

### 1.3. Property details

Property: Mining Lease 70/1204  
Mining Lease 70/1205  
Mining Lease 70/1207  
Mining Lease 70/1208  
Mining Lease 70/1209  
Mining Lease 70/1215

Local Government Area: Shire of Irwin

Colloquial name: Dongara Exploration Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application:

Decision Date:

## 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 and are useful to look at vegetation in a regional context. The following two Beard vegetation associations have been mapped within the application area (GIS Database):

378: Shrublands; scrub-heath with scattered *Banksia* spp., *Eucalyptus todtiana* and *Xylomelum angustifolium* on deep sandy flats in the Geraldton Sandplain Region; and

392: Shrublands; *Melaleuca thyoides* thicket.

Vegetation mapping has been previously mapped over the application area as part of mapping for several tenements in the Dongara area by Woodman Environmental Consulting (2015). The following floristic community types have been mapped within the application area (Woodman Environmental Consulting, 2015);

3: Open Low Woodland to Heath of *Banksia* spp. over mixed shrubs commonly including *Melaleuca leuropoma*, *Eremaea beaufortioides* and *Scholtzia laxiflora* on yellow sand on lower to mid slopes;

4: Low Woodland to Thicket of *Banksia attenuata* and *Banksia menziesii* over mixed shrubs dominated by myrtaceous species on brown or yellow sand on lower to mid slopes and plains;

5a: Species rich Woodlands and Heaths on grey sand in the eastern portion of the Eneabba sandplain. Common species include *Conospermum boreale* subsp. ?*boreale*, *Ecdeiocolea monostachya*, *Eremaea beaufortioides*, *Hakea polyanthema* and *Banksia candolleana*;

5b: Thicket dominated by *Banksia hookeriana* and/or *Banksia attenuata*, with emergent *Banksia prionotes* on yellow sand on upper slopes and dune crests;

10b: Shrublands and Thickets dominated by *Melaleuca* spp. and *Banksia* spp. on grey or brown sandy clays and sandy loams with some lateritic gravel on flats, depressions and creek-lines.

**Clearing Description** Dongara Exploration Project.  
Tronox Management Pty Ltd (Tronox) proposes to clear 3.7 hectares within a boundary of 12.12 hectares for the purposes of mineral exploration. The project is located approximately 30 kilometres south-east of Dongara in the Shire of Irwin.

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

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

**Comment**

The vegetation condition was derived from a report prepared by Woodman Environmental Consulting (2015).

### 3. Assessment of application against clearing principles

**Comments**

The proposed clearing of 3.7 hectares relates to a portion of the total planned drilling as part of the Dongara exploration programme that occurs within an Environmentally Sensitive Area. Native vegetation clearing will be minimised by driving over vegetation where possible. In areas where vegetation is too dense to employ this technique a rubber tyred front end loader will flatten vegetation using a raised blade. A number of drill lines are located on existing tracks in order to minimise disturbance to vegetation. None of the floristic communities are considered to represent a Threatened or Priority Community (GIS Database; Woodman Environmental Consulting, 2015). The application area has been mapped as Beard vegetation associations 378 and 392 which both have greater than 50% remaining at a state and bioregional level (Government of Western Australia, 2015).

A botanical survey of the application area was undertaken from 3-7 November 2014. The survey identified the Threatened flora species *Paracaleana dixonii* within the application area (Woodman Environmental Consulting, 2015). The species was identified at six locations within the application area with one individual recorded at each location (Woodman Environmental Consulting, 2015). An additional 22 locations of this species were identified within 50 metres of the application area (Woodman Environmental Consulting, 2015). Advice from DPaW (2015) is that the proposed clearing is not likely to have a significant impact on this species at a local or regional level.

The flora survey also identified nine species of Priority flora within the application area; *Lasiopetalum ogilvieanum* (Priority 1), *Schoenus* sp. Eneabba (Priority 2), *Guichenotia alba* (Priority 3), *Haemodorum loratum* (Priority 3), *Hemiandra* sp. Eneabba (Priority 3), *Persoonia rudis* (Priority 3), *Schoenus griffinianus* (Priority 3), *Banksia scabrella* (Priority, 4) and *Stawellia dimorphantha* (Priority 4) (Woodman Environmental Consulting, 2015). The records of *Haemodorum loratum* are on the northern boundary of the species known distribution (Woodman Environmental Consulting, 2015). Both *Lasiopetalum ogilvieanum* and *Schoenus* sp. Eneabba have a known distribution restricted to within 100 kilometres of the application area (DPaW, 2015). Advice from DPaW (2015) is that impacts on these two species and *Haemodorum loratum* may be of conservation significance. Tronox (2015) has advised that avoidance of these species may not be possible as moving the existing tracks will have a greater impact. Within the application area there were three plants of *Lasiopetalum ogilvieanum* and two plants of *Schoenus* sp. Eneabba both recorded from one location (Woodman Environmental Consulting, 2015). Within the Dongara exploration area there has been over 11,000 hectares of habitat for mapped for these species (Woodman Environmental Consulting, 2015). *Haemodorum loratum* was identified at 12 locations with 27 individuals located within the application area (Woodman Environmental Consulting, 2015). Given the amount of suitable habitat available in the local area, these species are likely to be present in greater numbers than what has been recorded (Woodman Environmental Consulting, 2015). The potential removal of the individuals recorded is not likely to have a significant impact on the viability of the local populations. The proposed clearing is not likely to have a significant impact on the remaining Priority flora species within the application area (DPaW, 2015).

The proposed clearing is for low impact exploration requiring the clearing of 3.7 hectares of which some is located on existing tracks. Given the relatively small area of disturbance required for exploration there are unlikely to be any impacts upon significant fauna habitat. No trees considered to be suitable roosting or nesting habitat for Carnaby's Cockatoo (*Calyptorhynchus latirostris* – Schedule 1; Vulnerable), however, the majority of the vegetation is considered to be foraging habitat. This habitat is widespread in the local area and the proposed clearing is not likely to have an impact on availability of foraging habitat in the region.

Tronox has strict hygiene procedures in place including the requirement for dieback interpretation and risk mapping. In addition Tronox operate under an approved Exploration Environmental Management Plan which identifies that where there is a requirement to move soil in wet conditions, additional hygiene measures must be implemented. These additional measures require tenements to be operated using a clean on entry and exit policy and the installation of a mobile wash-down unit (Tronox, 2014). The implementation of a dieback management condition will minimise the potential for the movement of dieback from infested to un-infested areas.

The application area crosses one area identified as a seasonal dampland (GIS Database, Woodman Environmental Consulting, 2015). As the proposed method of clearing is by rolling over the vegetation, there are not likely to be significant impacts to watercourses in the local area.

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principles (c) and (f), is not likely to be at variance to Principles (a), (b), (d), (g), (h), (i), and (j) and is not at variance to Principle (e).

**Methodology** DPaW (2015)

GIS Database:  
- Hydrography, linear  
- Threatened and Priority Ecological Communities - Boundaries  
Government of Western Australia (2013)  
Tronox (2014)  
Tronox (2015)  
Woodman Environmental Consulting (2015)

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

### Comments

There is one Native Title Claim (WC2004/002) 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 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 9 March 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

**Methodology** GIS Database

## 4. References

- DPaW (2015) Advice to assessing officer from Species and Communities Branch, Department of Parks and Wildlife. Received 1 April 2015.
- Government of Western Australia (2013) 2013 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2013. WA Department of Parks and Wildlife, 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.
- Tronox (2014) Exploration Environmental Management Plan, 26 June 2014.
- Tronox (2015) Additional information supplied to assessing officer, 15 April 2015.
- Woodman Environmental Consulting (2015) Botanical Survey and Impact Assessment of 2015 Dongara Drill and Access Lines. Unpublished report for Tronox Management Pty Ltd, January 2015.

## 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:**

{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.