



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6486/3
Permit type: Purpose

1.2. Proponent details

Proponent's name: Tronox Management Pty Ltd

1.3. Property details

Property: Mining Lease 70/1198
Mining Lease 70/1200
Mining Lease 70/1204
Mining Lease 70/1207
Mining Lease 70/1211
Mining Lease 70/1213
Mining Lease 70/1214
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:
4.37		Mechanical Removal	Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 12 April 2017

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. The following Beard vegetation associations are located within the application areas (CPS 6486/3):

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

379: Shrublands; scrub-heath on lateritic sandplain in the Geraldton Sandplain Region

392: Shrublands; *Melaleuca thyoides* thicket.

Clearing Description Dongara Exploration Project.
Tronox Management Pty Ltd (Tronox) proposes to clear up to 4.37 hectares of native vegetation within a total boundary of approximately 14 hectares, for the purpose 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 Vegetation condition was based on vegetation descriptions provided by Woodman Environmental Consulting (2016; 2017).

Clearing permit CPS 6486/1 was granted by the Department of Mines and Petroleum on 16 April 2015, authorising the clearing of up to 3.7 hectares of native vegetation within a boundary of approximately 12.12 hectares.

On 12 February 2016, the permit holder applied to amend CPS 6486/1 to increase the area approved to clear by

0.27 hectares, decrease the permit boundary from 12.12 hectares to 7.88 hectares, and amend the tenements on which clearing is authorised.

On 6 February 2017, the permit holder applied to amend CPS 6486/2 to increase the area approved to clear by 0.4 hectares and increase the permit boundary from 7.88 hectares to 14 hectares.

3. Assessment of application against clearing principles

Comments The proposed clearing of up to 4.37 hectares relates to a portion of the total planned drilling as part of the Dongara Exploration Programme (Woodman Environmental Consulting, 2016).

CPS 6486/2 was granted on 14 April 2016, approving the clearing of up to 3.97 hectares on tenements M 70/1204, M 70/1207, M 70/1213, M 70/1214, and M 70/1215. Tronox has since applied to increase the area to be cleared by 0.4 hectares from 3.97 to 4.37 hectares and increase the permit boundary (CPS 6486/3). This increase results in the addition of tenements M 70/1198, M 70/1200, and M 70/1211.

A botanical survey of the entire application area was undertaken from 21-26 November 2016. The survey identified the Threatened flora species *Paracaleana dixonii* within the application area (Woodman Environmental Consulting, 2017). The additional 0.4 hectares of clearing will not directly clear any individuals of *Paracaleana dixonii* however clearing occurs within 50 metres. Advice from DPaW (2017) is that the additional 0.4 hectares of clearing proposed under this amendment is not considered likely to have a significant impact on this species at a local or regional level, however a licence to take is required for potential inadvertent impacts. A licence to take application for additional clearing under CPS 6486/3 was approved by DPaW for potential inadvertent impacts to *Paracaleana dixonii* (DPaW, 2017).

Within the additional permit boundary proposed under CPS 6486/3 the following species of Priority flora were identified (Woodman Environmental Consulting, 2017):

- Two individuals of *Haemodorum loratum* – Priority 3 as listed by DPaW;
- Six individuals of *Hemiandra* sp. Eneabba – Priority 3 as listed by DPaW;
- Two individuals of *Schoenus griffinianus* – Priority 4 as listed by DPaW; and
- 31 individuals of *Calytrix chrysantha* – Priority 4 as listed by DPaW

Given the minimal amount of additional Priority flora to be impacted and the presence of individuals in the surrounding area (Woodman Environmental Consulting, 2017), the amendment to increase the area approved to clear by 0.4 hectares is unlikely to impact the conservation status of Priority flora at a regional or local scale (DPaW, 2017).

No Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) are known to occur within the application area and none were recorded during a flora and vegetation survey (GIS Database; Woodman Environmental Consulting, 2017). The application area has been mapped as Beard vegetation associations 378, 379, and 392. Vegetation associations 378 and 392 have greater than 50% of pre European extent remaining at a state and bioregional level (Government of Western Australia, 2015). Vegetation association 379 has approximately 24% of pre-European vegetation remaining, however the small scale of clearing proposed within this association is unlikely to have a significant impact. Approximately 0.5 hectares of the total application area (14 hectares) falls within vegetation association 379. Given the nature of the clearing, it is likely that less than 0.5 hectares of this vegetation association will be impacted. The small scale of clearing proposed is unlikely to have any impacts on surface water or ground water quality, or to lead to significant land degradation.

The proposed clearing is for low impact exploration requiring the clearing of up to 4.37 hectares of which some is located on existing tracks (Woodman Environmental Consulting, 2017). Given the relatively small area of disturbance required for exploration, there are unlikely to be any impacts upon significant fauna habitat. No trees are 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 (Woodman Environmental Consulting, 2017). This habitat is widespread in the local area and the additional clearing is not likely to have an impact on availability of foraging habitat in the region.

Dieback has the potential to occur within the application area. Tronox has strict hygiene procedures in place including the requirement for dieback interpretation and risk mapping (Tronox, 2014). In addition Tronox operate under an 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). Weeds also have the potential to occur within the application area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed and dieback management condition.

The application area crosses one area identified as a seasonal dampland (GIS Database, Woodman Environmental Consulting, 2017). As the proposed method of clearing is by rolling over the vegetation it is unlikely there will be significant impacts to watercourses in the local area.

Methodology The application area 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), may be at variance to Principle (e), and is not likely to be at variance to Principles (a), (b), (d), (g), (h), (i), and (j).

DPaW (2017)
Government of Western Australia (2015)
Tronox (2014)
Woodman Environmental Consulting (2016)
Woodman Environmental Consulting (2017)

GIS Database:
- DPaW Tenure
- Hydrography, linear
- IBRA Australia
- Pre – European Vegetation
- Threatened and Priority Flora List
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

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

Comments: There is one native title claim (WC 2004/002) over the area under application (DAA, 2017). This claim has been registered with the Native Title Tribunal on behalf of the claimant group. However, the tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (ie. 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 Sites of Aboriginal Significance located in the area applied to clear (DAA, 2017). 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 Environment Regulation, the 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 March 2017 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology: DAA (2017)

4. References

- DAA (2017) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 4 April 2017).
- DPaW (2017) Advice received in relation to Clearing Permit Application CPS 6486/3. Department of Parks and Wildlife, Western Australia, April 2017.
- Government of Western Australia (2015) 2015 Statewide Vegetation Statistics Incorporating the CAR reserve analysis (Full Report). Department of Environment and Conservation, Western Australia, June 2015.
- 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 Management (2014) Exploration Environmental Management Plan. Tronox Management Pty Ltd, June 2014.
- Woodman Environmental Consulting (2016) Exploration Environmental Assessment 2016. Desktop Review and Risk Assessment. Report prepared for Tronox Management Pty Ltd, by Woodman Environmental Consulting Pty Ltd, January 2016
- Woodman Environmental Consulting (2017) Dongara Exploration Area, Exploration Environmental Assessment 2017. Report prepared for Tronox Management Pty Ltd, by Woodman Environmental Consulting Pty Ltd, January 2017.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

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

T

Threatened species:

Published as Specially Protected under the *Wildlife Conservation Act 1950*, 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).

Threatened fauna is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act.

Threatened flora 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.

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. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN

Endangered species

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU

Vulnerable species

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (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.