



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6905/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Alcoa of Australia Limited
Postal address: PO Box 172, Pinjarra WA 6208
Contacts: Phone: 08 9531 6953
anne.price@alcoa.com.au

1.3. Property details

Property: *Alumina Refinery (Pinjarra) Agreement Act 1969*, Mineral Lease 1SA (AML 70/1)
Lot 151 on Plan 10914
Lot 301 on Deposited Plan 35411
Lot 302 on Deposited Plan 35411
Colloquial name: Pinjarra Alumina Refinery

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	400	Mechanical Removal	Maintenance of a Residue Storage Area

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 25 February 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation proposed to be cleared consists of 400 *Eucalyptus camaldulensis* trees (Alcoa, 2016). These trees were planted by Alcoa approximately 10 years ago to provide a visual screen to a Residue Storage Area (RSA9). The vegetation under application does not resemble the mapped Beard vegetation association (968) for the area (GIS Database).

Clearing Description Pinjarra Alumina Refinery
Alcoa of Australia Limited (Alcoa) proposes to clear up to 400 trees, for the purpose of maintenance of a residue storage facility. The Pinjarra Alumina Refinery is located approximately 3 kilometres west of Pinjarra, in the Shire of Murray.

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

Comment Vegetation condition was determined by analysis of aerial imagery and supporting information (including photographs) supplied by the proponent.

The 400 *Eucalyptus camaldulensis* trees to be cleared occur within an area that was previously cleared to allow for the construction of Residue Storage Area 9 (RSA9) at the Pinjarra Alumina Refinery.

The 400 trees were planted in accordance with a rehabilitation and visual amenity commitment in Alcoa's application for a Work's Approval to construct RSA9. Recent studies undertaken by Alcoa have revealed that the root systems of these trees, which are situated within close proximity to the embankment walls of RSA9, may affect the embankment walls structural integrity (ALCOA, 2016). Removal of the 400 trees will ensure the on-going structural integrity of the eastern embankment wall of RSA9.

3. Assessment of application against Clearing Principles

Comments The proposed clearing is for the removal of 400 trees of the species *Eucalyptus camaldulensis*, which were planted by Alcoa approximately 10 years ago (Alcoa, 2016). The 400 trees occur within an area that was previously cleared to allow for the construction of RSA9 (Alcoa, 2016). No understorey vegetation is proposed to be cleared under this application (Alcoa, 2016). The trees are to be cut at the base and the roots left in-situ avoiding any disturbance to flora that has the potential to exist in the understorey (Alcoa, 2016).

According to available datasets, there are no known Threatened or Priority flora species, conservation significant fauna species, or conservation areas located within the application area (DPaW, 2016; GIS Database). The 400 trees to be cleared are unlikely to act as significant fauna habitat given the abundance of more suitable habitat in the surrounding area (GIS Database). The nearest conservation area (Marrinup State Forrest) is situated approximately three kilometres east (GIS Database), any impact to the reserve as a result

of the proposed clearing is unlikely.

The proposed clearing is not within a Threatened Ecological community (TEC) or Priority Ecological Community (PEC) (GIS Database). No watercourses, wetlands, or Public Drinking Water Source Areas (PDWSA) are mapped within the application area (GIS Database).

As the roots of the cleared trees are to be left in situ and no understorey vegetation is to be impacted, the proposed clearing is unlikely to result in appreciable land degradation.

The application area occurs within a dieback (*Phytophthora cinnamomi*) risk zone. The proponent has advised that the application area is not dieback affected, although clearing activities have the potential to introduce such pathogens (Alcoa, 2016). To reduce the potential for dieback invasion, Alcoa will implement existing dieback management procedures. No weed species have been identified within the application area (Alcoa, 2016), however similar to dieback disease, if introduced to an area, have the potential to alter the biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be further minimised by the implementation of a weed and dieback management condition.

Given the proposed clearing is for the removal of 400 trees, located on a previously cleared embankment wall, it is unlikely to result in any significant environmental impacts.

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 not likely to be at variance with Principles (a), (b),(c), (g), (i), and (j) and is not at variance to Principles (d), (e), (f) and (h).

Methodology Alcoa (2016)
DPaW (2016)

GIS Database:
- DPaW Tenure
- Hydrography, linear
- Pre – European Vegetation
- Public Drinking Water Source Areas (PDWSAs)
- Threatened and Priority Flora List
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments There are no native title claims over the application area (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 two registered Sites of Aboriginal Significance located in the area applied to clear (DAA, 2016). 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 25 January 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology DAA (2016)

Officer Lauren Stirbinskis

4. Assessor's recommendations

Comment / recommendation

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 not likely to be at variance with Principles (a), (b),(c), (g), (i), and (j) and is not at variance to Principles (d), (e), (f) and (h).

5. References

- Alcoa (2016) Additional Information Received in Relation to Clearing Permit Application CPS 6905/1. Alcoa of Australia Limited, Western Australia.
- DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 28 January 2016).
- DPaW (2016) NatureMap. Department of Parks and Wildlife. <http://naturemap.dec.wa.gov.au> (Accessed 11 February 2016)
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

6. 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)
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPac	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
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.