



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6478/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: La Mancha Resources Australia Pty Ltd

1.3. Property details

Property: Mining Lease M15/830
Mining Lease M15/1287

Local Government Area: Shire of Coolgardie

Colloquial name: White Foil Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.376		Mechanical Removal	Pit Bund Extension

1.5. Decision on application

Decision on Permit Application: 1.376

Decision Date: 26 March 2015

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. One Beard vegetation association is located within the application area (GIS Database):

Beard association 540 - Succulent steppe with open low woodland; sheoak over saltbush.

Clearing Description White Foil Mine Project.
La Mancha Resources Australia Pty Ltd proposes to clear up to 1.376 hectares of native vegetation for the purpose of a pit bund extension. The project is located approximately 19 kilometres west of Kalgoorlie in the Shire of Coolgardie.

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

To

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

Comment Vegetation condition was derived from GIS datasets, aerial imagery and a flora and vegetation assessment conducted on Lake Kopai by Botanica (2010b).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

The application area is located within the Eastern Goldfield subregion of the Coolgardie Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). This subregion is characterised by gently undulating plains interrupted in the west with low hills and a series of large playa lakes in the western half (CALM, 2002). The vegetation is dominated by Mallees, *Acacia* thickets and shrub-heaths on sandplains, diverse Eucalyptus woodlands occur around salt lakes, on ranges, and in valleys, and dwarf shrublands of samphire around salt lakes (CALM, 2002).

A flora and vegetation survey of the local area was conducted by Botanica Consulting (2010a) in April and September 2010. The survey identified four broad vegetation groups, represented by a total of 82 plant taxa from 42 genera and 22 families (Botanica, 2010a) within a 637.7 hectare survey area. This is not considered to represent an area of high biodiversity on a regional scale (CALM, 2002).

The flora survey was solely conducted within Mining Lease 15/830 and did not survey Mining Lease 15/1287.

The majority of the proposed clearing will be undertaken within Mining Lease 15/1287. The closest quadrat surveyed (Q5) was located approximately 500 metres from the application area. The vegetation type present within Q5 is described as mixed eucalyptus woodland and is common to the local area (Botanica, 2010a); however aerial imagery shows that the area under application is noticeably different, with large amounts of un-vegetated areas throughout and a mapped salt lake (Lake Kopai) extending into the northern section of the application area (GIS Database). The vegetation within the application area has been broadly mapped as Beard vegetation association 540: Succulent steppe with open low woodland; sheoak over saltbush.

Lake Kopai is a small ephemeral salt lake consisting of two adjoining claypans connected by culverts below a site access road, and is characterised by samphire flats, open woodlands, shallow channels and exposed bays (Botanica, 2010b). Approximately 23% of the application area lies within the mapped boundary of Lake Kopai (GIS Database). Lake Kopai shows signs of disturbance from exploration and recreational activities (Outback Ecology, 2003). However, the proposed clearing is not likely to significantly impact on the conservation of vegetation growing in association with permanent watercourses or wetlands due to the absence of these features within the application area. In addition to this, Lake Kopai is an ephemeral lake and the vegetation communities known to be associated with Lake Kopai are well represented throughout the bioregion (Botanica Consulting, 2010b), therefore the proposed clearing is unlikely to significantly impact on vegetation communities growing in association with this wetland.

Given the location of Kopai Lake, which extends into the northern section of the application area, and the bare nature of the majority of the application area, the vegetation offers limited fauna habitat. The samphire flats located to the west of the application area represent much better fauna habitat (Terrestrial Ecosystems, 2010). The proposed clearing is unlikely to remove significant habitat for local fauna species.

According to available databases, there are no known records of Threatened Flora within the application area (GIS Database). A search of the Department of Parks and Wildlife's Threatened and Priority Flora databases identified no Threatened or Priority Flora species as occurring within a 5 kilometre radius of the application area (DPaW, 2014). Botanica Consulting (2010a) did not identify any Threatened or Priority flora during a flora and vegetation survey of the local area.

According to available datasets, there are no Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) within the application area. There are no known TECs or PECs within a 50 kilometre radius of the application area.

Botanica Consulting (2010a) did not identify any introduced flora species within the local area. However, the introduction of weeds has the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. This can in turn lead to greater rates of infestation and further loss of biodiversity if the area is subject to repeated fires. It is therefore important to ensure that weed species are not introduced to the application area as a result of the proposed activities. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The application area occurs within the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion, in which approximately 98% of the pre-European vegetation remains (GIS Database; Government of Western Australia, 2013). The vegetation within the application area has been mapped as Beard vegetation association 540 (GIS Database). Approximately 98.88% and 97.11% of Beard vegetation association 540 remains at a state and bioregional level respectively (Government of Western Australia, 2013).

The application area is not located within a Public Drinking Water Source Area (PDWSA), however it is located within the proclaimed Goldfields groundwater area under the *Rights in Water and Irrigation Act 1914* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the Department of Water.

Overgrazing by stock and rabbits is the major cause of land degradation and the Eastern Goldfields subregion is not likely to be susceptible to erosion (Morton, Short & Barker, 1995). The application area experiences a semi-arid climate with rainfall predominantly in the winter months (CALM, 2002) and the application area is subject to inundation following rain events (GIS Database). However, given the low average annual rainfall and high evaporation rate of the area (BoM, 2015), any water pooling within the application area is likely to be short lived.

The application to clear 1.376 hectares of native vegetation for the purpose of a pit bund extension is unlikely to have 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 to Principles (a), (b), (c), (d), (e), (g), (h), (i), and (j), and is at variance to Principle (f).

Methodology BoM (2015)
Botanica (2010a)
Botanica (2010b)
CALM (2002)
DPaW (2014)

Government of Western Australia (2013)
Keighery (1994)
Morton, Short & Barker (1995)
Outback Ecology (2003)
GIS Database:
- DEC Tenure
- Imagery
- Groundwater Salinity
- Hydrographic Catchments – Catchments
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation
- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater Areas
- Soils, statewide
- Threatened and Priority Flora List
- Threatened Ecological Sites Buffered
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

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

Comments

There are no native title claims over the application area (GIS Database; DAA, 2014). 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 Sites of Aboriginal Significance located in the area applied to clear (GIS Database; DAA, 2014). 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 2 March 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology DAA (2015)
GIS Database:
- Aboriginal Sites of Significance

4. References

- BoM (2015) Climate Statistics for Australian Locations. A Search for Climate Statistics for Kalgoorlie West, Australian Government Bureau of Meteorology, Viewed 6 March 2015
<http://www.bom.gov.au/climate/averages/tables/cw_012038.shtml>.
<<http://www.bom.gov.au/watl/evaporation/>>.
- Botanica Consulting (2010a) Level 2 Flora and Vegetation Survey White Foil Area Tenement M15/830. Unpublished report prepared for La Mancha Resources dated September 2010.
- Botanica Consulting (2010b) Level 1 Rubicon/Hornet Spring Flora Survey, Prepared for Barrick Kanowna Belle. Unpublished report dated September 2010.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Coolgardie 3 (C003 – Eastern Goldfields subregion). Department of Conservation and Land Management
- DAA (2014) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, viewed 4 March 2015 <<http://maps.dia.wa.gov.au/AHIS2/>>.
- DPaW (2014) NatureMap Department of Parks and Wildlife, viewed 23 December 2014 <<http://naturemap.dec.wa.gov.au>>
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. 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.
- Morton, S. R., Short, J. & Barker, R. D. (1995) Refugia for Biological Diversity in Arid and Semi-arid Australia, Department of the Environment, Sport and Territories, Canberra, ACT.
- Outback Ecology (2003) Hornet Pit: Potential Impacts on Kopai Lake, Prepared for Placer Dome Asia Pacific. Unpublished report dated October 2003

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)
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
s.17	Section 17 of <i>the Environment Protection Act 1986</i> , Western Australia
TEC	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 the Department 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.