



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7674/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Avoca Mining Pty Ltd

1.3. Property details

Property:
Mining Lease 15/348
Mining Lease 15/352
Mining Lease 15/375
Mining Lease 15/512
Mining Lease 15/528
Mining Lease 15/610
Mining Lease 15/642
Miscellaneous Licence 15/368

Local Government Area: Shire of Coolgardie
Colloquial name: Two Boys and Fairplay Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 4 July 2019

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. Two Beard vegetation associations have been mapped within the application area (GIS Database):

8: Medium woodland; salmon gum & gimlet; and

522: Medium woodland; redwood (*E. transcontinentalis*) & merrit (*E. flocktoniae*).

A level one flora and vegetation survey has been undertaken over the application area by NVS (2017), which recorded five vegetation groups across the application area, which are:

A: *Eucalyptus griffithsii* over *Acacia acuminata* over sclerophyll shrubland;

B: *Eucalyptus salmonophloia* woodland over sclerophyll shrubland;

C: *Eucalyptus torquata* woodland over mixed sclerophyll shrubland;

D: Mixed *Eucalyptus* woodland over mixed sclerophyll shrubland; and

J: Existing Disturbance.

A reconnaissance flora and vegetation survey was undertaken over the amendment boundary by NVS (2018) during 4 to 5 April 2017, which recorded the additional vegetation groups:

E: *Eucalyptus lesouefii* and *E. salmonophloia* over chenopod shrubland;

F: *Eucalyptus griffithsii* woodland;

G: *Eucalyptus lesouefii* over *Melaleuca sheathiana* woodland;

H: *Eucalyptus oleosa* over *Melaleuca sheathiana* over sclerophyll shrubland; and

I: *Eucalyptus salubris* over sclerophyll shrubland.

Clearing Description

Two Boys and Fairplay Project
Avoca Mining Pty Ltd (Avoca) proposes to clear 210 hectares of native vegetation within a total boundary of approximately 216 hectares for the purpose of mineral production. The project is located approximately 52 kilometres north of Norseman, in the Shire of Coolgardie.

Vegetation Condition

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);

To

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

Comment

The vegetation condition was determined by botanists from Native Vegetation Solutions (2017).

Clearing permit CPS 7674/1 was granted by the Department of Mines, Industry Regulation and Safety on 31 August 2017 and was valid from 23 September 2017 to 31 July 2022. The permit authorised the clearing of up to 189 hectares of native vegetation within a boundary of approximately 190.7 hectares, for the purpose of mineral production.

On 27 July 2018, the Permit Holder applied to amend CPS 7674/1 to increase the amount of clearing authorised to 210 hectares and increase the permit boundary to approximately 216 hectares.

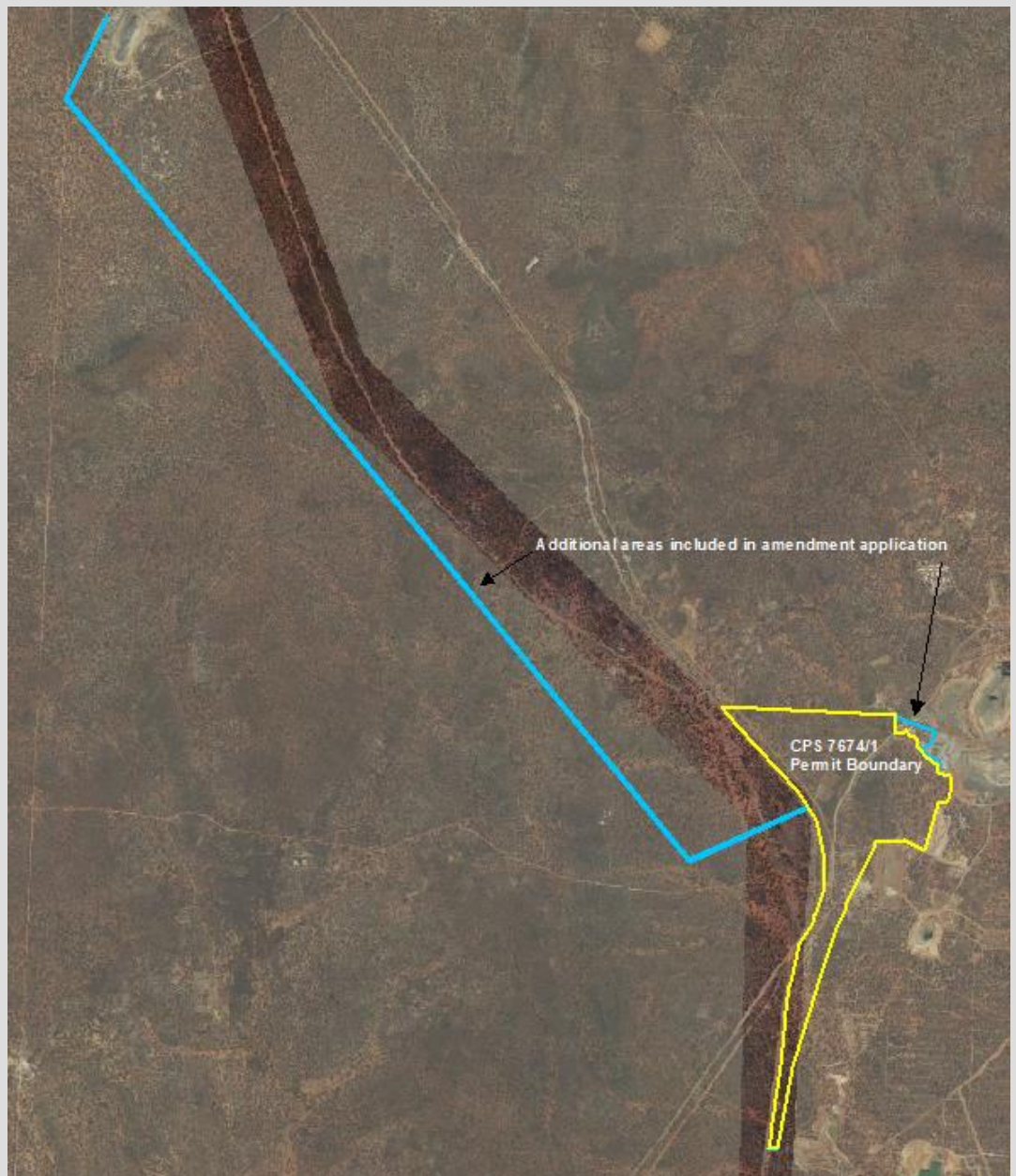


Figure 1: Original clearing permit boundary (yellow area) and proposed amended permit boundary (blue area).

3. Assessment of application against Clearing Principles

Comments

Avoca Mining Pty Ltd has applied to increase the area permitted to clear from 189 hectares to 210 hectares, and to increase the permit boundary from 190.7 hectares to approximately 216 hectares.

A reconnaissance flora and vegetation undertaken over the amendment boundary by NVS (2018) identified five new vegetation types within the permit boundary. These vegetation types are not considered to be of higher diversity than those assessed within clearing permit decision report CPS 7674/1. The vegetation condition within the amendment area ranges from 'good' to 'very good' (Keighery, 1994). Historical exploration and cattle grazing was observed within the amendment boundary (NVS, 2018). No vegetation communities recorded are considered to be a Threatened or Priority Ecological Community (NVS, 2018; GIS Database). There were no Threatened Flora species identified within the amendment boundary (NVS, 2018; GIS Database). There was one Priority 3 flora species recorded within the amendment boundary; *Diocirea acutifolia*. There were approximately 6,450 individuals of *Diocirea acutifolia* recorded from nine locations within the amendment boundary, with 40,481 individuals from 55 locations known in the local area (NVS, 2018). This species is also widespread across the local and regional area (NVS, 2018). Given the proposed clearing within the amendment boundary is for a powerline, it is unlikely that all the individuals will be impacted by the proposed clearing.

A reconnaissance fauna survey was undertaken over the amendment boundary by Terrestrial Ecosystems (2018) on 4 December 2017, and five broad fauna habitats were identified:

1. Open eucalypt woodland over chenopods, mostly on a red clayey substrate;
2. Open eucalypt woodland over low shrubs on a stony, red clayey substrate;
3. Open eucalypt woodland over tall shrubs mostly on a stony red clay soils;
4. Low trees with limited understorey of shrubs on red clayey substrate; and
5. Low trees with a dense understorey of low shrubs on red clayey and often stony substrate.

None of the fauna habitats identified are considered to be of regional or local significance to vertebrate fauna (Terrestrial Ecosystems, 2018). Terrestrial Ecosystems (2018) identified 11 fauna species of conservation significance that have the potential to occur. Based on preferred habitat type, the Malleefowl (*Leipoa ocellata* - Vulnerable) is the most likely to occur within the application area, however the survey identified no preferred or critical habitat types for any conservation significant fauna species. No Malleefowl mounds were observed during the reconnaissance survey (Terrestrial Ecosystems, 2018).

There are no permanent watercourses or wetlands within the amendment boundary (GIS Database).

There were two weed species were identified within the amendment boundary (NVS, 2018). Clearing activities have the potential to result in an increase in the incidence of weed species, which may negatively impact on the biodiversity of the local area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of existing weed management conditions.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 7674/1.

Methodology

Keighery (1994)
NVS (2018)
Terrestrial Ecosystems (2018)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There is one Native Title claim over the area under application (DPLH, 2019). 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 (DPLH, 2019). 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 Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, 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 13 August 2018 by the the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2019)

4. References

- DPLH (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage.
<http://maps.daa.wa.gov.au/AHIS/> (Accessed 11 June 2019).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- NVS (2017) Level 1 Flora and Vegetation Survey of the Proposed Two Boys and Fairplay Project Area, and Proposed Infrastructure Corridors Development Higgsville (M15/348, M15/352, M15/375, M15/512, M15/528, M15/610, M15/642 and P15/5429). Report prepared for Avoca Mining Pty Ltd by Native Vegetation Solutions, July 2017.
- NVS (2018) Reconnaissance Flora and Vegetation Survey of the Redross-Higgsville Powerline Corridor, Higgsville (L15/368 and L15/377). Report prepared for Avoca Mining Pty Ltd by Native Vegetation Solutions, January 2018.
- Terrestrial Ecosystems (2018) Level 1 Vertebrate Fauna risk Assessment for the proposed Higgsville powerline. Report prepared for Native Vegetation Solutions by Terrestrial Ecosystems, January 2018.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DBCA	Department of Biodiversity Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DSEWPac	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
DWER	Department of Water and Environmental Regulation, Western Australia
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:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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 in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

Threatened species considered to be "*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU Vulnerable species

Threatened species considered to be "*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct Species:

EX Extinct species

Species where "*there is no reasonable doubt that the last member of the species has died*", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

Species that "*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI

Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD

Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS

Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P

Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.