

Clearing Permit Decision Report

1. Application details			
1.1. Permit application de	Permit application details		
Permit application No.: Permit type:	8152/2 Purpose Permit		
1.2. Proponent details			
Proponent's name:	Avoca Mining Pty Ltd		
1.3. Property details			
Property: Local Government Area: Colloquial name:	Mining Lease 15/348 Mining Lease 15/375 Mining Lease 15/506 Mining Lease 15/507 Mining Lease 15/580 Mining Lease 15/597 Mining Lease 15/1814 Miscellaneous Licence 15/382 Miscellaneous Licence 15/386 Shire of Coolgardie Baloo Gold Project		
1.4. Application			
Clearing Area (ha) No. 1	Trees Method of Clearing	For the purpose of:	
270	Mechanical Removal	Mineral Production and Associated Activities	
1.5. Decision on application			
Decision on Permit Application:	Grant		
Decision Date:	26 September 2019		

2. Site Information

2.1. **Existing environment and information**

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation of the application area is broadly mapped as the following Beard vegetation associations:

> 8: Medium woodland: salmon gum (E. salmonophloia) and gimlet (E. salubris); 125: Bare areas; salt lakes; and 501: Medium woodland; goldfields blackbutt (E. lesouefii) (GIS Database).

A flora and vegetation survey of the amendment area and surrounding area was undertaken by Native Vegetation Solutions (NVS) on 27 June 2019 (NVS, 2019). The following vegetation associations were recorded within the application area:

Eucalyptus torquata and Eucalyptus lesouefii over mixed sclerophyll shrubland on undulating hills Low Forrest A (Muir 1977) dominated by Eucalyptus torquata and Eucalyptus lesouefii, over Eremophila glabra subsp. glabra, Dodonaea lobulata, Eremophila scoparia, Westringia rigida, Eremophila parvifolia subsp. auricampa, Acacia erinacea and Alyxia buxifolia.

Open Eucalyptus salmonophloia woodland

Open Woodland (Muir 1977) dominated by Eucalyptus salmonophloia, over Chenopod and sclerophyll shrublands including Eremophila scoparia, Atriplex nummularia subsp. spathulata, Atriplex vesicaria, Tecticornia disarticulata, Maireana triptera, Eremophila glabra subsp. glabra, Scaevola spinescens and Olearia muelleri.

Mixed Eucalyptus woodland over mixed shrubland

Woodland (Muir 1977) of transitional Eucalypts dominated by Eucalyptus salmonophloia, Eucalyptus salubris and Eucalyptus lesouefii over a mixed sclerophyll shrubland including Alyxia buxifolia, Cratystylis subspinescens, Atriplex nummularia subsp. spathulata, Atriplex vesicaria, Acacia tetragonophylla, Scaevola spinescens, Dodonaea lobulata, Eremophila scoparia and Eremophila glabra subsp. glabra.

Mixed sclerophyll shrubland

Heath B (Muir 1977) of Acacia quadrimarginea, Acacia tetragonophylla, Eremophila glabra subsp. glabra, Senna artemisioides subsp. filifolia, Scaevola spinescens, Acacia erinacea, Eremophila scoparia and Lycium australe.

Clearing Description	Baloo Project. Avoca Mining Pty Ltd proposes to clear up to 270 hectares of native vegetation within a boundary of approximately 1,789 hectares, for the purpose of mineral production and associated activities. The project is located approximately 48 kilometres north of Norseman, within the Shire of Coolgardie.
Vegetation Condition	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).
Comment	Clearing permit CPS 8152/1 was granted by the Department of Mines, Industry Regulation and Safety on 4 October 2018 and was valid from 27 October 2018 to 31 July 2023. The permit authorised the clearing of up to 200 hectares of native vegetation within a boundary of approximately 1,694 hectares, for the purpose of mineral production and associated activities.
	On 26 August 2019, the Permit Holder applied to amend CPS 8152/1 to increase the area authorised to clear from 200 hectares to 270 hectares and to increase the permit boundary from 1,694 hectares to 1,789 hectares.

3. Assessment of application against Clearing Principles

Comments

Avoca Mining Pty Ltd has applied to increase the area permitted to clear by 70 hectares and to increase the permit boundary by 95 hectares.

A flora and vegetation survey was undertaken by NVS (2019) which recorded 20 families, 37 genera and 80 taxa within the amendment boundary and surrounding area. No new vegetation associations were identified within the amendment boundary, with all the vegetation associations common, widespread and well represented in the Eastern Goldfields subregion (NVS, 2019).

No Threatened or Priority Flora, Threatened or Priority Ecological Communities were identified within the amendment boundary. Databases indicate that the amendment boundary is within the buffer zone of the Priority Ecological Community 'Fraser Range Vegetation Complex', however the vegetation survey concluded that the vegetation groups within the survey area did not match the DBCA description of the Fraser Range Vegetation Complex (NVS, 2019; GIS Database).

A level 1 vertebrate fauna risk assessment of the amendment boundary and surrounding area was undertaken by Terrestrial Ecosystems, which includes a reconnaissance survey undertaken on 27 June 2019 (Terrestrial Ecosystems, 2019). There were three broad fauna habitats and one disturbed landform recorded in the survey area:

- Open Salmon Gum woodland over sparse chenopods;
- Eucalypt woodland over mixed shrubland and chenopod over scattered grasses of varying densities on a sandy-clay substrate;
- Mixed sclerophyll shrubland; and
- Areas devoid of vegetation from earlier exploration activity (Terrestrial Ecosystems, 2019).

The condition of the fauna habitats ranged from 'good' to 'degraded' (Keighery, 1994), with localised exploration activities and cattle grazing evident (Avoca, 2019). The faunal habitats within the amendment boundary are common and widespread within the local area (GIS Database).

The reconnaissance survey specifically involved a search for Malleefowl and their mounds (Terrestrial Ecosystems, 2019). No Malleefowl mounds were observed in the survey area. The proponent advises that there were no recent records of active breeding mounds in the vicinity of the project area (Avoca, 2019).

The amendment boundary contains suitable habitat for the Western Rosella (Priority 4) and Central Long-eared Bat (Priority 4) (Terrestrial Ecosystems, 2019). These species may forage within the amendment boundary, however there is extensive suitable habitat outside the amendment boundary, and the proposed clearing is not likely to have a significant impact on these species (Terrestrial Ecosystems, 2019; GIS Database).

There are no conservation areas within the amendment boundary (GIS Database).

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

The proposed increase in clearing is unlikely to significantly impact surface water or groundwater. The application area is not located within a Public Drinking Water Source Area (GIS Database).

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 the existing weed management condition.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 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 reports CPS 8152/1.

Methodology Avoca (2019)

NVS (2019) Keighery (1994) Terrestrial Ecosystems (2019)

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 26 August 2019 by 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

Avoca (2019) Supporting information for application to amend CPS 8152/1 Eundynie Gold Project. Avoca Mining Pty Ltd (RNC Minerals), August 2019.

DPLH (2019) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage.

http://maps.daa.wa.gov.au/AHIS/ (Accessed 26 August 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 (2019) Reconnaissance Flora and Vegetation Survey of the Eundynie Gold Project, Higginsville - June 2019. Report prepared for Avoca Mining Pty Ltd, by Native Vegetation Solutions, July 2019.

Terrestrial Ecosystems (2019). Level 1 Vertebrate Fauna Risk Assessment for the Eundynie Project. Report prepared for Avoca Mining Pty Ltd, by Terrestrial Ecosystems, July 2019.

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	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (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	Rights in Water and Irrigation Act 1914, 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 <u>Threatened species:</u>

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 <u>Priority species:</u>

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.