



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8549/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Evolution Mining (Mungari) Pty Ltd

1.3. Property details

Mining Lease 15/829
Mining Lease 15/1827
Miscellaneous Licence 15/387
Local Government Area: Shire of Coolgardie
Colloquial name: Cutters Ridge

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
116.2		Mechanical Removal	Mineral Production and Haul Road

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 14 May 2020

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:
9: Medium woodland; coral gum (*Eucalyptus torquata*) and goldfields blackbutt (*Eucalyptus lesouefii*); and
540: Succulent steppe with open low woodland; sheoak over saltbush (GIS Database).

A flora and vegetation survey was conducted over the application area by Phoenix Environmental Sciences Pty Ltd (Phoenix) during 13-15 June and 2-9 October, 2018. The following vegetation associations were recorded within the application area (Phoenix, 2019a):

Tecticornia shrublands

MhTiDc: Isolated tall *Melaleuca halmaturorum* and *Grevillea sarissa* subsp. *sarissa* shrubs over low *Tecticornia indica* subsp. *bidens*, *Tecticornia doliiformis* and *Tecticornia pruinosa* chenopod shrubland over isolated low *Disphyma crassifolium*, *Calandrinia ?quartzitica* (P1) and *Sclerolaena* spp. forbs.

Mosaic of Tecticornia species shrublands: Various *Tecticornia* shrublands occurring on the salt lake playa.

Low chenopod shrublands

CsAvDc: Isolated mid *Cratystylis subspinescens*, *Pimelea microcephala* and *Senna artemisioides* subsp. *filifolia* shrubs over low *Atriplex vesicaria*, *Tecticornia* sp. (sterile 1) and *Roycea divaricata* shrubland over isolated low *Disphyma crassifolium*, *Brachyscome ciliaris* and *Vittadinia dissecta* var. *hirta* forbs.

Shrublands

AbDIPO: Tall *Acacia burkittii* shrubland over sparse to open mid *Dodonaea lobulata*, *Acacia tetragonophylla* and *Eremophila oldfieldii* shrubland over isolated low *Ptilotus obovatus*, *Scaevola spinescens* and *Olearia pimeleoides* shrubs.

CpEsEd: Isolated low *Casuarina pauper* trees over mid open *Eremophila scoparia*, *Dodonaea viscosa* and *Rhagodia drummondii* shrubland over isolated low shrubs to low open *Eremophila decipiens* subsp. *decipiens*, *Ptilotus obovatus* and *Enchylaena tomentosa* shrubland.

Eucalyptus woodlands

EcEsOm: Mid *Eucalyptus clelandiorum* and *Eucalyptus oleosa* subsp. *oleosa* woodland over isolated mid *Eremophila scoparia*, *Exocarpos aphyllus* and *Senna artemisioides* subsp. *filifolia* shrubs to open shrubland over isolated low *Olearia muelleri*, *Ptilotus obovatus* and *Westringia rigida* shrubs to low open shrubland.

EcDIOM: Mid *Eucalyptus clelandiorum* woodland with other *Eucalyptus* trees, frequently *Eucalyptus celastroides* subsp. *celastroides* or *Eucalyptus griffithsii*, over isolated shrubs to mid open *Dodonaea lobulata*, *Eremophila scoparia* and *Exocarpos aphyllus* shrubland over isolated low to sparse *Olearia muelleri*, *Ptilotus obovatus* and *Westringia rigida* shrubland.

EsEsAb: Mid *Eucalyptus salmonophloia* and *Eucalyptus salubris* woodland over mid *Eremophila scoparia*, *Senna artemisioides* subsp. *filifolia* and *Exocarpos aphyllus* shrubland over low open *Atriplex bunburyana*, *Maireana trichoptera* and *Ptilotus obovatus* shrubland.

EIEaAv: Mid *Eucalyptus longicornis* woodland with *Eucalyptus clelandiorum* and *Eucalyptus griffithsii* trees over mid to tall open *Exocarpos aphyllus*, *Eremophila glabra* and *Senna artemisioides* subsp. *filifolia* shrubland over isolated low *Atriplex vesicaria*, *Ptilotus obovatus* and *Rhagodia drummondii* shrubs.

EtEsOm: Mid *Eucalyptus transccontinentalis* woodland with other *Eucalyptus* trees frequently *Eucalyptus clelandiorum* and *Eucalyptus salubris* over mid open *Atriplex nummularia*, *Eremophila scoparia* and *Senna artemisioides* subsp. *filifolia* shrubland over isolated low *Olearia muelleri*, *Eremophila parvifolia* subsp. *auricampa* and *Ptilotus obovatus* shrubs.

Clearing Description	Cutters Ridge. Evolution Mining (Mungari) Pty Ltd proposes to clear up to 116.2 hectares of native vegetation within a boundary of approximately 250.2 hectares, for the purpose of mineral production and haul road. The project is located approximately 20 kilometres west of Kalgoorlie-Boulder, within the Shire of Coolgardie.
Vegetation Condition	Pristine: No obvious signs of disturbance (Keighery, 1994). To: Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
Comment	The vegetation condition was derived from a vegetation survey conducted by Phoenix (2019). The proposed clearing is for development of the Cutters Ridge Gold Mine and a new haul road which will extend from the existing Mungari haul road to the Run-of-Mine (ROM) Pad at Cutters Ridge. Clearing permit CPS 8549/1 was granted by the Department of Mines, Industry Regulation and Safety on 28 November 2019 and was valid from 21 December 2019 to 20 December 2024. The permit authorised the clearing of up to 86.5 hectares of native vegetation within a boundary of approximately 235.296 hectares, for the purpose of mineral production and haul road. On 26 February 2020, the Permit Holder applied to amend CPS 8549/1 to increase the amount of clearing authorised and to increase the permit boundary.

3. Assessment of application against Clearing Principles

Comments

The Permit Holder has applied to amend the clearing permit to increase the area of clearing authorised and increase the permit boundary by 29.7 hectares to approximately 116.2 hectares and 250.2 hectares, respectively. This increase to the clearing area and permit boundary is required due to a revised mine design and an increase in the proposed mine footprint (Talis, 2020).

A vegetation assessment of the amendment area was conducted by Phoenix (2019a) during 13-15 June and 2-9 October 2018 (Phoenix, 2019a; Talis, 2020). The vegetation of the amendment area was dominated by open *Eucalyptus* woodlands (vegetation types EIEaAv and EcEsOm), and *Tecticornia* (vegetation type MhTiDc) and chenopod (vegetation type CsAvDc) shrublands associated with salt lakes (Phoenix, 2019a; Talis, 2020). Vegetation types described within the amendment area were all represented in surrounding areas, indicating a wider distribution. No Threatened or Priority Ecological Communities were identified as potentially occurring in the amendment area and the field assessment did not record any (Phoenix, 2019a; Talis, 2020; GIS Database).

Nine conservation significant flora species were identified in the desktop assessment as possibly occurring due to the presence of suitable habitat, with four priority flora recorded during the field survey of the permit area and surrounding areas (Phoenix, 2019a; Talis, 2020). No conservation significant flora species were recorded within the amendment area (Phoenix, 2019a; Spectrum Ecology, 2019; Talis, 2020).

During the fauna survey of the permit area and surrounding areas, malleefowl (*Leipoa ocellata*, VU) were recorded in the shrubland habitat type (Phoenix, 2019b; Talis, 2020). This habitat type is not present within the amendment area, however potential impacts to malleefowl as a result of the proposed clearing may be minimised by the continued implementation of a fauna management condition.

The amendment area contains minor drainage lines (GIS Database). Drainage lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. Potential impacts to vegetation

growing in association with the watercourse may be minimised by the continued implementation of a watercourse management condition.

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 8549/1.

Methodology Phoenix (2019a)
Phoenix (2019b)
Spectrum Ecology (2019)
Talis (2020)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Pre-European Vegetation
- Public Drinking Water Source Areas
- 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 are two native title claims (WC2017/001 and WC2017/007) over the area under application (DPLH, 2020). These claims have been registered with the National Native Title Tribunal on behalf of the claimant groups. 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, 2020). 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 6 April 2020 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 (2020)

4. References

- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage.
<http://maps.daa.wa.gov.au/AHIS/> (Accessed 4 May 2020).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Phoenix (2019a) Flora and vegetation survey for Mungari Gold Operations Cutters Ridge Project. Report prepared by Phoenix Environmental Sciences Pty Ltd, for Evolution Mining Ltd, May 2019.
- Phoenix (2019b) Fauna survey for Mungari Gold Operations Cutters Ridge Project. Report prepared by Phoenix Environmental Sciences Pty Ltd, for Evolution Mining Ltd, May 2019.
- Spectrum Ecology (2019) Evolution Mining – Targeted Flora Search: *Calandrinia lefroyensis/quartzitica*. Report prepared by Spectrum Ecology Pty Ltd, for Evolution Mining Ltd, November 2019.
- Talis (2020) Cutters Ridge NVCP Amendment Application – Supporting Document. Report prepared by Talis Consultants, for Evolution Mining Ltd, February 2020.

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)
DoEE	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 DoEE)
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 DoEE)
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.