



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8450/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Kimminco Pty Ltd**

1.3. Property details

Property: Exploration Licence 04/1441
Exploration Licence 04/2409
Local Government Area: Shire of Derby-East Kimberley
Colloquial name: McLarty Range Copper Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 30 May 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 association: 8001: Grasslands, curly spinifex, low tree savannah; bloodwood (*Eucalyptus dichromophloia*) & woollybutt (*E. miniata*) over curly spinifex on islands (GIS Database).

No vegetation surveys have been undertaken over the application areas; therefore vegetation communities have not been described or mapped for this area in any further detail than Beard vegetation mapping.

Clearing Description McLarty Range Copper Project. Kimminco Pty Ltd proposes to clear up to 8 hectares of native vegetation within a boundary of approximately 215.57 hectares, for the purpose of mineral exploration. The project is located approximately 107 kilometres north of Derby, within the Shire of Derby-East Kimberley.

Vegetation Condition Pristine: No obvious signs of disturbance (Keighery, 1994);
To:
Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

Comment The vegetation condition has been inferred from aerial imagery and classified using the Keighery (1994) scale.

3. Assessment of application against Clearing Principles

Comments

The application area occurs within the Mitchell subregion of the North Kimberley Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and the Mount Eliza subregion of the Central Kimberley IBRA (GIS Database). The Mitchell subregion is characterised by Savannah woodland over high *Sorghum* grasses and hummock grasses on shallow sandy soils on outcropping Proterozoic siliceous sandstone strata and Savannah woodlands over high *Sorghum* grasses on red and yellow earths mantling basic Proterozoic volcanics. Riparian closed forests of *Melaleuca* and *Pandanus* occur along drainage lines. A prominent feature is the rugged sunken coastline with extensive Mangal occurring in estuaries and deep, sheltered embayments. Numerous small patches of monsoon rainforest are scattered through the district. This subregion features a high number of endemic flora and fauna species to subregion (CALM, 2002). The Mount Eliza subregion is characterised by very rugged with intense folding and exposure of basement strata. The geology includes

shales, granites, sandstones, dolerites and volcanics. The vegetation is primarily savannah woodland and there are scattered vine thickets towards western end (CALM, 2002).

There has been no flora surveys conducted over the application areas. According to available databases there are no known records of Threatened Flora, Priority Flora, Threatened Ecological Communities or Priority Ecological Communities within the application areas or within a 10 kilometre radius of the application areas (NatureMap, 2019; GIS Database). Given the lack of flora and vegetation surveys over application area and the broader region, the level of biological knowledge of the bioregions appears to be low and CALM (2002) states that there are a high number of endemic species to the subregions. Aerial imagery indicates that the vegetation appears to be largely in a pristine condition (Keighery, 1994).

No fauna surveys were undertaken over the application area. The conservation values of the application area in regards to fauna, in particular conservation significant species, are uncertain and cannot be fully understood until on-ground fauna surveys are conducted. The Vulnerable (EBC Act, BC Act) Brush-tailed Rabbit-rat (*Conilurus penicillatus*) has been recorded 9 kilometres south-west of the application area (NatureMap, 2019). According to aerial imagery (GIS Database), the habitat appears to be similar to that within the application area. The Brush-tailed Rabbit-rat shares the same habitat as the Threatened Partridge Pigeon, Masked Owl, Golden-backed Tree-rat, Butler's Dunnart, Yellow-snouted Gecko, Northern Quoll, Golden Bandicoot and Gouldian Finch (DotEE, 2019a). The Brush-tailed Rabbit-rat dens in hollow trees with trunks at least 24cm in diameter, in logs on the ground and occasionally in Pandanus fronds (DotEE, 2019a).

Beard vegetation association 8001 retains approximately 85% or above of its pre-European extent at both the state and bioregion level (Government of Western Australia, 2019). The area proposed to be cleared is not a significant remnant of native vegetation.

According to the available databases, several ephemeral watercourses intersect the application area, with flows likely to be restricted to the wet season following significant rainfall or cyclonic events (GIS Database). Aerial imagery shows thick vegetation lining several watercourses, and these vegetation types are likely to provide important habitat for fauna, as the vegetation can provide faunal habitat of a moderate range of microhabitats with logs, leaf litter and tree hollows (GIS Database). The proposed clearing is likely to have some impact to the riparian vegetation. Potential impacts to riparian vegetation may be minimised through the implementation of a vegetation management condition.

The application area partially sits within the Yampi Defence Area Environmentally Sensitive Area (Register of National Estate) managed by the Department of Defence (GIS Database). DotEE (2019b) describes this area as covering approximately 570,000 hectares in the Kimberley region. The diversity of landforms in the place and the resultant high concentration of small refugial habitats support a regionally rich vertebrate fauna and represent the most southerly known extant population of the nationally vulnerable golden-backed tree rat (*Mesembriomys macrurus*) and the most southerly record in the Kimberley of the sugar glider (*Petaurus breviceps*). The place is also an important zone of overlap between many northern and southern species and sub-species. This Reserve supports several fauna and flora species that are listed as specially protected, threatened or having priority status in Western Australia in addition to four fauna species that are nationally vulnerable and one nationally endangered.

Despite the area being on the Register of National Estate for natural values, it is considered that the proposed clearing is low impact and of a small scale and will not significantly impact on the environmental values of the area. Following the cessation of exploration activities and rehabilitation undertaken by the proponent, the proposed activities are not expected to significantly impact on the conservation values of the Yampi Defence Reserve.

The application area is not located within a Public Drinking Water Source Area (GIS Database). The application area is located within the proclaimed Canning-Kimberley 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.

The annual evaporation rate exceeds the annual average rainfall for local area (GIS Database). Any surface water within the application areas are likely to only remain for short periods following significant rainfall events. The proposed clearing is not likely to cause deterioration in the quality of any surface water within or outside of the application area.

The application areas have a groundwater salinity that is marginal (500 to 1,000 milligrams/Litre Total Dissolved Solids (TDS)) (GIS Database). With high annual evaporation rates and low annual rainfall, there is little recharge into regional groundwater. The proposed clearing is unlikely to further deteriorate the quality of underground water (GIS Database). Whilst large rainfall events may result in flooding of the area, the proposed clearing is not likely to lead to an increase in incidence or intensity of flooding.

The shortage of biological survey data from the area brings a level of uncertainty when assessing the level of biological diversity of the application area. However, the broad-scale vegetation types and fauna habitat types are common and widespread both locally and regionally. Aerial imagery also suggests the widespread availability of similar vegetation communities and landforms, and the application area is not considered to support a higher biological diversity than the adjoining local or regional areas (GIS Database). Given the small

area proposed to be cleared (8 hectares), it is not likely that the proposed clearing will have any significance on biodiversity at a regional scale.

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

Methodology CALM (2002)
DotEE (2019a)
DotEE (2019b)
Government of Western Australia (2019)
Keighery (1994)
NatureMap (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 determined by the Federal Court 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 15 April 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

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DotEE (2019a) SPRAT Profile - *Conilurus penicillatus* — Brush-tailed Rabbit-rat, Brush-tailed Tree-rat, Pakooma. Department of the Environment and Energy. http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=132 (accessed 20 May 2019).
- DotEE (2019b) Australian Heritage Database. Department of the Environment and Energy. <http://www.environment.gov.au/heritage> (accessed 16 May 2019).
- DPLH (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (accessed 16 May 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.
- NatureMap (2019) NatureMap - Mapping Western Australia Biodiversity, Department of Biodiversity, Conservation and Attractions. <http://naturemap.dec.wa.gov.au> (accessed 20 May 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	<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.