

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8367/2

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Adaman Resources Pty Ltd

1.3. Property details

Property: Mining Lease 59/233

Mining Lease 59/234

Local Government Area: Shire of Mount Magnet
Colloquial name: Kirkalocka Gold Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

230 Mechanical Removal Mineral Production and Associated Infrastructure

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 23 December 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 association: 18: Low woodland; mulga (*Acacia aneura*) (GIS Database).

A flora and vegetation survey was conducted over the amendment area by Niche Environmental Services (Niche) during 30 August to 1 September 2011. The following vegetation types were recorded within the amendment area (Niche, 2011):

Granite

G2: Low Woodland B of *Acacia ramulosa* var. *ramulosa*, *Acacia tetragonophylla* and *Acacia craspedocarpa* over Dwarf Scrub C of *Ptilotus obovatus*, *Solanum lasiophyllum* and *Eremophila georgei* over Low Grass of *Aristida contorta* on red clay.

Wash plains

W1: Open Low Woodland B to Low Woodland B of *Acacia aneura* var. *aneura*, *Acacia ramulosa* var. *ramulosa* and *Acacia fuscaneura* over Open Low Scrub B of mixed species over Very Open Low Grass of *Aristida contorta*, *Austrostipa elegantissima* and *Monachather paradoxus* and Very Open herbs to Herbs of mixed species on sand loam to clay sand loam.

W2: Open Low Woodland B to Low Woodland B of *Acacia aneura* var. *aneura*, *Acacia ramulosa* var. *ramulosa* and *Acacia fuscaneura* over Open Low Scrub B of mixed species over Very Open Low Grass of *Aristida contorta*, *Austrostipa elegantissima* and *Monachather paradoxus* and Very Open herbs to Herbs of mixed species on clay loam to clay within unchannelled ephemeral drainage lines.

Clearing Description

Kirkalocka Gold Project.

Adaman Resources Pty Ltd proposes to clear up to 230 hectares of native vegetation within a boundary of approximately 989.6 hectares, for the purpose of mineral production and associated infrastructure. The project is located approximately 70 kilometres south of Mount Magnet, within the Shire of Mount Magnet.

Vegetation Condition

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

to

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

Comment

The vegetation condition was derived from a vegetation survey conducted by Niche (2011).

Clearing permit CPS 8367/1 was granted by the Department of Mines, Industry Regulation and Safety) on 11 April 2019 and was valid from 4 May 2019 to 3 May 2024. The permit authorised the clearing of up to 176 hectares of native vegetation within a boundary of approximately 989.6 hectares, for the purpose of mineral production and associated activities.

On 4 November 2020, the Permit Holder applied to amend CPS 8367/1 to increase the amount of clearing authorised to 230 hectares.

3. Assessment of application against Clearing Principles

Comments

The permit holder has applied to increase the amount of clearing authorised by 54 hectares, to allow for ongoing project development. The additional area will be used for expanded waste rock landforms, roads and access tracks, camp expansion, additional topsoil storage and other various supporting infrastructure and activities.

A detailed flora and vegetation survey was conducted of the amendment area by Niche Environmental Services during 30 August to 1 September 2011 (Niche, 2011). Vegetation of the amendment area was dominated by *Acacia* woodlands, and *Aristida contorta, Austrostipa elegantissima* and *Monachather paradoxus* grasses (Niche, 2011; Preston, 2019). No Threatened or Priority Ecological Communities were identified as potentially occurring in the amendment area and the field assessment did not record any (Niche, 2011; Phoenix, 2019; Preston, 2019; GIS Database). Vegetation of the amendment area was considered common and widespread within the region (Niche, 2011).

A total of 150 flora species from 38 families and 83 genera were recorded within the amendment area, including subspecies and variants (Niche, 2011). A desktop assessment recorded 35 conservation significant flora species within the area (Phoenix, 2019). However, there are no known records of Threatened or Priority flora within the application area, and none were recorded during the field assessment (Niche, 2011; Phoenix, 2019; Preston, 2019).

There was one fauna habitat was described within the amendment area: Woodland of *Acacia* species (360 Environmental, 2011). This fauna habitat is not restricted to the amendment area and is considered well represented within the surrounding areas (360 Environmental, 2011). Multiple conservation significant fauna species have the potential to occur within the amendment area, however none were recorded during the field assessment (360 Environmental, 2011). No conservation significant fauna are likely to be impacted by the proposed amendment or likely to be reliant upon the fauna habitat described in the amendment area (360 Environmental, 2011).

There are no permanent watercourses or wetlands within the amendment area (GIS Database). There is one non-perennial drainage line that passes through the amendment area (GIS Database). Some areas of vegetation within the amendment area are described as growing in association with unchannelled ephemeral drainage lines (Niche, 2011; Preston, 2019; GIS Database). Potential impacts from the proposed amendment to this vegetation is likely to be minimal.

The amendment area lies within the Woodline land system (GIS Database). This land system is described as broad, nearly level plains, supporting acacia shrublands and mulga woodlands. This land system is not generally susceptible to erosion (Payne et al., 1998). Due to the size of the clearing (230 hectares), potential erosion may be minimised by the continued implementation of a staged clearing 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 8367/1.

Methodology

360 Environmental (2011)

Niche (2011) Payne et al. (1998) Phoenix (2019) Preston (2019)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Landsystem Rangelands

- Pre-European Vegetation
- 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 (WC1996/098) over the area under application (DPLH, 2020). 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, 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 23 November 2020 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received in relation to this application regarding aboriginal heritage issues. The issues raised were not relevant to the assessment of the proposed amendment, however the submission was forwarded on to Adaman Resource Pty Ltd.

Methodology DPLH (2020)

4. References

360 Environmental (2011) Kirkalocka Gold Mine Level 1 Vertebrate Fauna Survey. Report prepared for Mount Magnet South, by 360 Environmental Pty Ltd, October 2011.

DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage.

https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS (Accessed 8 December 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.

Niche (2011) Level 2 Flora and Vegetation Survey at the Mount Magnet South NL Kirkalocka Gold Project. Report prepared for Mount Magnet South NL, by Niche Environmental Services, October 2011.

Payne A.L., Van Vreeswyk, A.M.E., Leighton, K.A., Pringle H.J., and Hennig, P. (1998) An Inventory and Condition Survey of the Sandstone-Yalgoo-Paynes Find area, Western Australia.

Phoenix (2019) Biological Desktop assessment for the Kirkalocka Gold Project, Final Report. Report prepared for Preston Consulting Pty Ltd, by Phoenix Environmental Sciences Pty Ltd, February 2019.

Preston (2019) Native Vegetation Clearing Permit Application, Kirkalocka Gold Project Supporting Document. Report prepared for Adaman Resources Pty Ltd, by Preston Consulting Pty Ltd, February 2019.

5. Glossary

Acronyms:

BC Act Biodiversity Conservation Act 2016, Western Australia
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)

DAWE
Department of Agriculture, Water and the Environment, Australian Government
DBCA
Department of Biodiversity, Conservation and Attractions, Western Australia
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)

Dobe Department of the Environment and Energy (now DAWE)
Dobe Department of Water, Western Australia (now DWER)

DPaW Department of Parks and Wildlife, Western Australia (now DBCA)

DPIRD Department of Primary Industries and Regional Development, Western Australia

DPLH Department of Planning, Lands and Heritage, Western Australia

DRF Declared Rare Flora (now known as Threatened Flora)

DWER Department of Water and Environmental Regulation, Western Australia

EP Act Environmental Protection Act 1986, Western Australia **EPA** Environmental Protection Authority, 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 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.