

Clearing Permit Decision Report

| 1. Application details | |
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| 1.1. Permit application | on details |
| Permit application No.: | 8238/1 |
| Permit type: | Purpose |
| 1.2. Proponent detai | |
| Proponent's name: | ACH Minerals Pty Ltd |
| 1.3. Property details | |
| Property: | Exploration Licence 74/537 |
| Local Government Area: | Shire of Ravensthorpe |
| Colloquial name: | Welcome Stranger Exploration Project |
| 1.4. Application | |
| Clearing Area (ha) | No. Trees Method of Clearing For the purpose of: |
| 1.33 | Mechanical Removal Mineral Exploration |
| 1.5. Decision on app | |
| Decision on Permit Applic Decision Date: | ation: Grant 20 December 2018 |
| Decision Date. | 20 December 2016 |
| 2. Site Information | |
| | ment and information |
| - | e native vegetation under application |
| Vegetation Description | Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Two vegetation associations have been mapped within the application area (GIS Database): |
| | 516: Shrublands: mallee scrub, black marlock; and |
| | 691: Shrublands; <i>Dryandra quercifolia & Eucalyptus</i> spp. thicket (GIS Database, Shepherd, 2009). |
| | A flora survey was undertaken by Animal Plant Mineral in October 2018, and collected flora specimens present in |
| | 10 m x 10 m quadrats at each of the 23 proposed drill pad sites (ACH Minerals, 2018). Previous surveys have also been undertaken by Craig et al. (2008) and Markey et al. (2012). |
| Clearing Description | Welcome Stranger Exploration Project. |
| | ACH Minerals Pty Ltd proposes to clear up to 1.33 hectares within a boundary of 1.587 hectares for the purposes of mineral exploration. The project is located approximately 12 kilometres south-east of Ravensthorpe in the Shire of Ravensthorpe. |
| Comment | Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994). |
| Vegetation Condition | The vegetation condition was derived from aerial imagery. |

3. Assessment of application against clearing principles

Comments

The application area occurs within the Fitzgerald (ESP1) sub-region of the Esperance Plains Bioregion of the Interim Biogeographic Regionalisation of Australia (IBRA) (GIS Database). This sub-region is characterised by myrtaceous and proteaceous scrub and mallee heaths on sand plains overlying Eocene sediments. Herbfields and heaths occur on abrupt granite tors and quartzite ranges that rise from the plain, while *Eucalypt* woodlands occur in the gullies and alluvial foot-slopes (CALM, 2002).

The vegetation within the application area is in an 'excellent' condition based on viewing of aerial imagery (GIS Database). Parts of the application area have been previously disturbed by an existing access track and a firebreak (GIS Database). The application area is not known to be within a dieback risk area (GIS Database).

The application area is located within the Ravensthorpe Range Area, Register of National Estate (GIS Database). The Ravensthorpe Range Area has been identified as containing a unique biological niche within the State, containing many rare and endemic plant species and the only natural locality of several Eucalypt species (DEE, 2018). A desktop and targeted flora survey was undertaken by Animal Plant Mineral in October

2018 to identify conservation significant flora and ecological communities within the application area (ACH Minerals, 2018).

According to available databases, the Threatened flora species *Daviesia megacalyx* is present adjacent to the application area, however, no Threatened flora were located during the survey within or adjacent to the proposed clearing (ACH Minerals, 2018). Previous advice for clearing permit application CPS 1739/1 states that that the actual location of this species is some two kilometres east of the proposed clearing area (DEC, 2006).

The Priority 4 species *Eucalyptus desmondensis* was recorded from 20 locations during the Animal Plant Mineral survey in October 2018 (ACH, 2018). *Eucalyptus desmondensis* is principally restricted to granite sands in the Ravensthorpe Range, with the largest known population in the Mt Desmond-Elverdton area (Craig et al., 2008). *Eucalyptus desmondensis* was common and widespread in the survey area, particularly in the shallow coarse sand over gneiss that occurs on low rises and individuals are likely to be impacted. Disturbed areas within the tenement, such as around the old mine workings and old tracks, have had a good regeneration of *Eucalyptus desmondensis* (Craig et al., 2008).

The Atlas of Living Australia (AoLA, 2018) which collates herbarium records from across Australia, indicates the distribution of *Eucalyptus desmondensis* covers approximately 25 x 25 km and is distributed across both sides of the Ravensthorpe Range including from within the Kundip Nature Reserve. Despite the potential for impacts to individuals of *Eucalyptus desmondensis* it is not anticipated this will have a significant impact on the species population in the locality or the region, with a reduction of 1 % of the range where the species is a dominant canopy component (ACH Minerals, 2018).

Two Threatened Ecological Communities (TEC) and three Priority Ecological Communities (PEC) were identified as potentially occurring in the area during the desktop surveys of the region (ACH Minerals, 2018). The published descriptions of the TECs and PECs along with field observations were used to assess these vegetation types against any of the identified conservation significant communities in the region (ACH Minerals, 2018). The vegetation within the application area is *Eucalyptus desmondensis*/ *Allocasuarina campestris* very open shrub mallee, and as such is not a TEC listed under the *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999*.

There are a number of conservation significant fauna that have been recorded within 10 kilometres of the application area (DPaW, 2018). Similar habitat is present throughout the surrounding region (GIS Database). Given the small scale of the clearing (1.33 hectares), the proposed clearing is not likely to significantly impact habitat for local fauna species.

Numerous minor non-perennial watercourses dissect the application area (GIS Database). There are many similar drainage lines scattered throughout the local area, which will likely only flow following a significant rain event. Potential impacts to vegetation growing in association with a watercourse may be minimised by the implementation of a watercourse management condition.

The application area is located approximately 12 kilometres north-west of Kundip Nature Reserve (GIS Database). Given the distance between the application area and Kundip Nature Reserve, the proposed clearing is not considered likely to have any impacts on the Kundip Nature Reserve.

The mapped Beard vegetation associations (Beard vegetation associations 516 and 619) are well represented, with more than 54% of pre-European levels of native vegetation remaining within the State and Bioregion (Government of Western Australia, 2016; GIS Database).

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principle (f), may be at variance to Principle (a), is not likely to be at variance to Principles (b), (c), (d), (g), (h), (i), and (j), and is not at variance to Principle (e).

Methodology ACH Minerals (2018) Animal Plant Mineral (2017) AoLA, 2018 CALM (2002) Craig et al. (2008) DEC (2006) DEE (2018) Government of Western Australia (2016)

GIS Database:

- Clearing Regulations Environmentally Sensitive Areas
- Clearing Regulations Instruments
- DPaW Tenure
- Dieback Occurrence
- Hydrography, Linear
- IBRA Australia

- Imagery
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffered
- Threatened Fauna

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

There is one Native Title claim over the area under application (GIS Database). This claim has been registered with the 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 located within the clearing permit application area (GIS Database). 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 clearing permit application was advertised on 19 November 2018 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. One submission was received in relation to this application raising no objection.

Methodology DPLH (2018)

4. References

ACH Minerals (2018) Welcome Stranger Exploration Project, Ravensthorpe, WA. NVCP Supporting Documentation for CPS 8238/1. Unpublished report prepared for ACH Minerals Pty Ltd by Animal Plant Mineral, 2018.

- Animal Plant Mineral (2017) Targeted survey for declared conservation significant flora and ecological communities to support exploration drilling within the Ravensthorpe Copper / Gold Project area. Prepared for ACH Minerals Pty Ltd by Animal Plant Mineral, 2017.
- AoLA (2018) Atlas of Living Australia Available: http://www.ala.org.au/. (Accessed October 2018).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.
- Craig GF, EJ Hickman, N McQuoid, J Newell, AM Rick and EM Sandiford 2008 Vegetation of the Ravensthorpe Range, Western Australia: Mt Short to Kundip, 1:10 000 scale. Department of Environment and Conservation and South Coast Natural Resource Management Inc, Albany, Western Australia.

DEE (2018) Australian Heritage Places Inventory. Department of Environment and Energy, Australian Government. <u>https://dmzapp17p.ris.environment.gov.au/ahpi/action/search/heritage-search/record/RNE9393</u> (Accessed 17 <u>December 2018</u>).

DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 17 December 2018).

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Government of Western Australia (2016) 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2016. WA Department of Parks and Wildlife, Perth.

5. Glossary

Acronyms:

| BoM DAA | Bureau of Meteorology, Australian Government Department of Aboriginal Affairs, Western Australia (now DPLH) |
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| | |
| 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 DRF | Department of Planning, Lands and Heritage, Western Australia Declared Rare Flora |
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| 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:

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{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

Threatened species:

Published as Specially Protected under the *Wildlife Conservation Act 1950*, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the *Wildlife Conservation Act 1950*.

Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the *Wildlife Conservation Act 1950*.

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. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN Endangered species

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU Vulnerable species

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EX Presumed extinct species

Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

IA Migratory birds protected under an international agreement

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 the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD Conservation dependent fauna

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS Other specially protected fauna

Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P Priority species

Species which are poorly known; or

Species that are adequately known, are rare but not threatened, and 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.