

1. Application details

1.1. Permit application de	etails	
Permit application No.:	7323/1	
Permit type:	Purpose Permit	
1.2. Proponent details		
Proponent's name:	Channar Mining Pty Limited	
1.3. Property details		
Property:	Mining Lease 70/265 SA (AM 70/2	265)
Local Government Area:	Shire of Ashburton	
Colloquial name:	Channar 64E5 Project	
1.4. Application		
Clearing Area (ha) No. T	rees Method of Clearing Mechanical Removal	For the purpose of: Mineral Exploration, Hydrogeological and Geotechnical Investigations and Associated Activities

1.5. Decision on application

Decision on Permit Application:	Grant
Decision Date:	8 December 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

VegetationBeard vegetation associations have been mapped for the whole of Western Australia. Two Beard vegetation associations have
been mapped within the application area (GIS Database):

Beard vegetation association 82: Hummock grasslands, low tree steppe; snappy gum over Triodia wiseana; and

Beard vegetation association 181: Shrublands; mulga & snakewood scrub.

Numerous flora surveys have been undertaken within and around the application area (Rio Tinto, 2016). Six vegetation types have been identified within the application area (Rio Tinto, 2016):

Vegetation of Minor Drainage

- Acacia citrinoviridis and Acacia aptaneura low open woodland over mixed Acacia spp. tall shrubland over Eremophila spp. and Dodonaea pachyneura open shrubland over Triodia epactia open hummock grassland;

Vegetation of Undulating Plains of Foot slopes

- Mixed Acacia spp. tall open shrubland over Eremophila fraseri and Eremophila phyllopoda open shrubland;
- Mixed Acacia spp. tall shrubland over Acacia tetragonophylla and Eremophila spp. open shrubland over Triodia epactia open hummock grassland;

Vegetation of Crest and Hillslopes

- Grevillea berryana and Corymbia ferriticola scattered to low open woodland over mixed Acacia spp. tall open shrubland over mixed Eremophila spp. low open shrubland;
- Mixed Acacia spp. scattered tall shrubs over mixed Eremophila spp. and Scaevola acacioides scattered shrubs/low open shrubland over Triodia epactia hummock grassland;
- Mixed Acacia spp. scattered tall shrubs (to scattered shrubs) over mixed Senna and Eremophila spp. scattered low shrubs over Triodia epactia hummock grassland.

Clearing Description	Channar 64E5 Project Channar Mining Pty Ltd proposes to clear up to 5 hectares of native vegetation within a total boundary of approximately 200 hectares, for the purpose of mineral exploration, hydrogeological and geotechnical investigations and associated activities. The project is located approximately 15 kilometres south east of Paraburdoo, in the Shire of Ashburton.
Vegetation Condition	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);
	To:
	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment The condition of the vegetation under application was determined via flora information provided by Rio Tinto (2016).

3. Assessment of application against Clearing Principles

Comments

The proposed clearing of up to 5 hectares of native vegetation will allow for mineral exploration, hydrogeological and geotechnical Investigations and associated activities to be conducted at the Channar project area (the application area). The application area has been significantly modified by existing mining disturbance, within the 200 hectare clearing permit boundary area, approximately 143.5 hectares has already been cleared (Channar Mining, 2016).

The application area occurs within the Hamersley (PIL3) subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This sub-region is characterised by sedimentary ranges and plateaux, dissected by gorges (CALM, 2002). At a broad scale, vegetation can be described as Mulga low woodlands over bunch grasses on fine textured soils in valley floors and *Eucalyptus leucophloia* over *Triodia brizoides* on skeletal soils of the ranges (CALM, 2002).

Numerous flora and fauna surveys have been undertaken within and around the application area (Channar Mining, 2016). Six vegetation associations, associated with three major landforms have been identified within the application area. All of which are common and widespread in the local area and Hamersley sub-region (Rio Tinto, 2016).

Three broad fauna habitats have been recorded within the application area; 1) minor drainage, 2) undulating plains of foot slopes and 3) rocky hills and slopes (Channar Mining, 2016). No fauna species of conservation significance have been recorded within the application area (Channar Mining, 2016) and the small amount of undisturbed habitat remaining is unlikely to offer significant habitat for local fauna species, including species of conservation significance.

According to available datasets, no Threatened Ecological Communities, Priority Ecological Communities are known to occur within the application area. One species of Threatened flora, three Priority 1 listed species, two Priority 2 listed species, seven Priority 3 listed species and four Priority 4 listed flora species are known from the local area (20 kilometre radius) (DPaW, 2016). No flora species of conservation significance have been recorded within the application area (Channar Mining, 2016).

The Beard vegetation associations mapped within the application area (Beard association 82 and 181) are well represented within the local area and region, retaining at least 97% of pre-European vegetation within the state and bioregion (Government of Western Australia, 2015).

The application area is not located within a Public Drinking Water Source Area (GIS Database). No significant streams or tributaries intersect the application area; however the application area contains numerous non-perennial watercourses and vegetation has been identified growing in association with these drainage lines (Channar Mining, 2016; GIS Database). While such features are common throughout the local area and region, the proposed clearing is at variance to Principle (f). Potential impacts to watercourses and associated vegetation as a result of the proposed clearing may be minimised by the implementation of a vegetation management condition. Given the amount of existing disturbance, the proposed clearing of 5 hectares is unlikely to result in increased sediment loads or adverse impacts to surface or groundwater quality.

Two introduced flora (weed) species are known to occur within the application area (Channar Mining, 2016). Potential impacts from the spreading of weeds as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The soils of the application area are not known to be prone to erosion (Channar Mining, 2016), however erosion may occur in areas where water flows following large rain events. Potential land degradation impacts as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

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) and is not likely to be at variance to the remaining clearing Principles. The proposed clearing of up to 5 hectares of native vegetation is unlikely to result in significant environmental impacts.

Methodology CALM (2002)

Channar Mining (2016) DPaW (2016) Government of Western Australia (2015) Keighery (1994)

GIS Database:

- DPaW Tenure
- Groundwater Salinity
- Hydrographic Catchments Catchments
- Hydrography, linear
- IBRA Australia
- Imagery
- Pre-European Vegetation
- Public Drinking Water Source Areas (PDWSAs)

- Soils, statewide
- Threatened and Priority Flora List
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

There is one native title claim over the application area (WC2010/016) (DAA, 2016). 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*.

According to available datasets, there are no Sites of Aboriginal Significance located in the area applied to clear (DAA, 2016). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Parks and Wildlife and the Department of Water, 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 7 November 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology DAA (2016)

4. References

DAA (2016) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs, Perth, Western Australia < http://maps.dia.wa.gov.au> (Accessed December 2016).

DPaW (2016) NatureMap, Department of Parks and Wildlife <http://naturemap.dec.wa.gov.au> (Accessed December 2016). Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. WA Department of Environment and Conservation, Perth.

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

Channar Mining (2016) Desktop Flora, Vegetation and Fauna Habitat Assessment at Channar. Native Vegetation Clearing Permit Application - Supporting Report. Channar Mining Pty Limited, Western Australia, October 2016.

5. Glossary

Acronyms:

BoM DAA DAFWA DEC	Bureau of Meteorology, Australian Government Department of Aboriginal Affairs, Western Australia Department of Agriculture and Food, Western Australia Department of Environment and Conservation, Western Australia (now DPaW and DER)
DER DMP	Department of Environment Regulation, Western Australia Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
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 (2015) 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.

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.

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 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.