

Government of Western Australia Department of Mines, Industry Regulation and Safety

# **Clearing Permit Decision Report**

1. Application details	S S
1.1. Permit applicati	ion details
Permit application No.:	7836/4
Permit type:	Purpose Permit
1.2. Proponent detai	
Proponent's name:	Greenmount Resources Pty Ltd
1.3. Property details	
Property:	Mining Lease 52/1070
	Miscellaneous Licence 52/177
	Miscellaneous Licence 52/178 Miscellaneous Licence 52/179
	Miscellaneous Licence 52/183
Local Government Area:	Shire of Meekatharra
Colloquial name:	Karlawinda Gold Project
1.4. Application	
Clearing Area (ha)	No. Trees Method of Clearing For the purpose of:
1,087	Mechanical Removal Mineral production and associated activities
1.5. Decision on app	
Decision on Permit Applica	
Decision Date:	1 October 2020
2. Site Information	
2.1. Existing enviror	nment and information
2.1.1. Description of the	e native vegetation under application
Vegetation Description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations:
	<ul> <li>29: Sparse low woodland; mulga, discontinuous in scattered groups;</li> <li>96: Hummock grasslands, shrub steppe; <i>Acacia</i> species (+<i>Grevillea</i>) over <i>Triodia basedowii</i> often between</li> </ul>
	sandridges; 111: Hummock grasslands, shrub steppe; <i>Eucalyptus gamophylla</i> over hard spinifex; and 216: Low woodland; mulga (with spinifex) on rises (GIS Database).
	A Level 2 flora and vegetation survey was conducted over the broader area by 360 Environmental Pty Ltd during March 2016 which was inclusive of the majority of the application area. The following vegetation associations were recorded within the surveyed area (360 Environmental, 2017):
	<ol> <li>Acacia aneura, Corymbia candida subsp. dipsodes (+- C. hamersleyana) low woodland over Hakea lorea subsp. lorea tall open shrubland over Eriachne flaccida, Aristida inaequiglumis and Digitaria ammophila open tussock grassland;</li> </ol>
	2. Acacia aneura tall sparse shrubland (to open shrubland) over Eremophila forrestii subsp. forrestii isolated shrubs over Triodia schinzii hummock grassland;
	3. Acacia aneura low woodland over Eremophila forrestii subsp. forrestii sparse shrubland over Aristida inaequiglumis, Digitaria ammophila sparse tussock grassland over Fimbristylis dichotoma sparse herbland;
	4. Acacia aptaneura, Corymbia candida subsp. dipsodes, Acacia catenulata subsp. occidentalis open forest over Psydrax latifolia tall sparse shrubland Eremophila sparse shrubland;
	5a. Acacia aptaneura (and/or A. paraneura) tall isolated shrubs over Eremophila fraseri subsp. fraseri sparse shrubland over Eremophila youngii subsp. youngii low isolated shrubs over Aristida contorta sparse grassland and Fimbristylis dichotoma sparse herbs;
	5b. Acacia aptaneura tall isolated shrubs over Eremophila fraseri subsp. fraseri isolated shrubs over Eremophila rigida low sparse shrubs over Aristida contorta sparse grassland;
	6. Acacia aptaneura or Acacia subcontorta sparse shrubland over Fimbristylis dichotoma isolated herbs;
	7a. Acacia pruinocarpa isolated shrubs over Triodia schinzii hummock grassland (+-Triodia epactia);
	7b. Acacia aptaneura and Hakea lorea subsp. lorea tall open shrubland over Eremophila forrestii subsp. forrestii
	Page

	sparse shrubland over Triodia pungens hummock grassland;
	8. A. synchronicia (+-Acacia aptaneura/A. aneura) tall scattered shrubs over Maireana triptera and Eremophila cuneifolia low open shrubland over Aristida contorta sparse grassland;
	9. Acacia aptaneura tall sparse shrubland over Eremophila flaccida subsp. flaccida low open shrubland over Fimbristylis dichotoma and Aristida contorta isolated herbs and grasses;
	10. <i>Acacia pruinocarpa</i> (+- <i>Acacia incurvaneura</i> ) sparse shrubland over <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) hummock grassland; and
	11. Acacia incurvaneura and Acacia ayersiana low woodland over Eremophila forrestii subsp. forrestii sparse shrubland over Thyridolepis xerophila sparse tussock grassland (+- Triodia pungens).
Clearing Description	Karlawinda Gold Project. Greenmount Resources Pty Ltd proposes to clear up to 1,087 hectares of native vegetation within a boundary of approximately 3,053 hectares, for the purpose of mineral production and associated activities. The project is located approximately 60 kilometres south-east of Newman, within the Shire of Meekatharra.
Vegetation Condition	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);
	То:
	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 360 Environmental (2017).
	Clearing permit CPS 7836/1 was granted by the Department of Mines, Industry Regulation and Safety on 4 January 2018 and was valid from 27 January 2018 to 31 January 2023. The permit authorised the clearing of up to 500 hectares of native vegetation within a boundary of approximately 2,975 hectares, for the purpose of mineral production.
	CPS 7836/2 was granted on 11 October 2018, amending the permit to increase the amount of clearing authorised to 525 hectares, increase the permit boundary to 3,053 hectares and add additional tenure to the permit.
	CPS 7836/3 was granted on 31 January 2019, amending the permit to increase the amount of clearing authorised to 620 hectares.
	On 24 June 2020, the Permit Holder applied to amend CPS 7836/3 to increase the amount of clearing authorised to 1,087 hectares. The permit boundary remains unchanged.

# 3. Assessment of application against Clearing Principles

#### Comments

Greenmount Resources Pty Ltd has applied to increase the area permitted to clear from 620 hectares to 1,087 hectares (an additional 467 hectares of clearing). The permit boundary remains the same. The amendment is to allow for an increase in mining voids and associated mining disturbances such as run-of mine pads, transport or service infrastructure corridors, topsoil stockpiles, abandonment bunding, airstrip and laydown/hardstand areas on Mining lease 52/1070.

Given the proposed amendment is only to increase the amount of clearing authorised and not to amend the permit boundary, no additional vegetation communities will be impacted to those previously assessed in clearing permit applications CPS 7836/1, 7836/2 and 7836/3. The vegetation associations identified within the application area are considered to be well represented in the surrounding area and are unlikely to act as significant habitat for fauna in the region (360 Environmental, 2017; 2018).

A targeted Bilby and Mulgara survey conducted by 360 Environmental (2017) over the application area identified no evidence of Bilby or Mulgara (360 Environmental, 2017; 2018). Furthermore, the application area is not considered to provide suitable habitat for other conservation significant species such as the Pilbara Olive Python, Northern Quoll, Princess Parrot, Pilbara Leaf-nosed Bat or Ghost Bat (360 Environmental, 2017; 2018).

360 Environmental (2017) identified two Priority 3 Flora species within the application area during the assessment of CPS 7836/1; *Eremophila rigida* and *Rhagodia sp. Hamersley* (M Trudgen 17794). These species were found in low numbers within the application area (five individuals of *E. rigida* and 16 individuals of *Rhagodia* sp.) and the additional proposed clearing is not likely to impact the conservation status of these species.

No Threatened flora, Threatened or Priority Ecological Communities have been identified within the proposed permit boundary (360 Environmental, 2018; GIS Database).

The Karlawinda Project is located within the internally draining Lake Disappointment (Savory Creek) Catchment (approximately 154,000km<sup>2</sup>), and 10 to 15 km south of the regional watershed boundary with the Upper Fortescue River catchment (Capricorn Metals Ltd, 2020). The Savory Creek itself is located

approximately 11 km south of the Project and flows inland in a west to east direction discharging approximately 300 km east from the mine site at the north western perimeter of Lake Disappointment (Capricorn Metals Ltd, 2020). Savory Creek is an ephemeral drainage line and has been defined as a Priority 1 Wild River by the Australian Heritage Commission in collaboration with the Department of Water and Environmental Regulation. Savory Creek is unlikely to be significantly impacted by this clearing proposal, based on the size of the catchment and the distance of clearing from Savory Creek.

There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database). There is one minor ephemeral watercourse located within the disturbance envelope (GIS Database) which only flows briefly following significant rainfall. Impacts from the additional clearing surrounding the ephemeral watercourse are unlikely to be significant. Potential environmental impacts associated with construction of mining infrastructure, such as changes to hydrology, will be managed under a Mining Proposal to be assessed by DMIRS under the *Mining Act 1978*.

The application area is not located within a Public Drinking Water Source Area (GIS Database). The proposed increase in clearing is unlikely to significantly impact groundwater.

The application area lies within the Jamindie, Cadgie, Washplain, Egerton and Nooingnin Land systems. DMIRS sought DPIRD advice on potential land degradation impacts arising from the proposed amendment. DPIRD's advice focussed on the proposed airstrip location. The proposed vegetation clearing for the planned airstrip occurs within the Nooingnin land system (GIS Database; DPIRD, 2020). The Nooingnin land system is described as hard plains with very large groves supporting mulga shrublands. Deposition surfaces of level non-saline hardpan wash plains are subject to sheet flow with very large groves and low sandy banks; narrow drainage zones receiving concentrated sheet flow (DPIRD, 2020). Bands of dense vegetation (groves) on hardpan plains are generally stable but can be degraded by disturbance such as inappropriately located roads or tracks that divert surface water sheet flows (DPIRD, 2020). Whilst the land system generally has a low susceptibility to erosion, it can suffer significant vegetation loss from deaths relating to water starvation where poorly designed and located infrastructure disrupt the sheet flow (DPIRD, 2020). This has implications on soil stability and can lead to an increased erosion susceptibility in the land system (DPIRD, 2020).

Based on the Nooingnin land system's susceptibility to erosion and the proposed clearing of an additional 467 hectares across all five land systems, the proposed amendment may be at variance to Principle (g). DMIRS notes that concerns raised by DPIRD regarding inappropriately located or poorly designed infrastructure affecting surface water flows will be managed under a Mining Proposal to be assessed under the *Mining Act 1978*. A permit condition requiring staged vegetation clearing will further minimise land degradation risks associated with the proposal.

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

Methodology 360 Environmental (2017) 360 Environmental (2018) Capricorn Metals Ltd (2020) DPIRD (2020)

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 (WC2005/006) over the area under application (DPLH, 2020). This claim has been registered with the National 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 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 13 July 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

360 Environmental (2017) Karlawinda Gold Project Mining Lease, Application for a Native Vegetation Clearing Permit. Prepared for Capricorn Metals Limited, by 360 Environmental Pty Ltd, 2017.

360 Environmental (2018) Desktop Assessment of Additional Tenements – L52/177, L52/178 and L52/183. Prepared for Capricorn Metals Limited, by 360 Environmental Pty Ltd, August 2018.

- Capricorn Metals Ltd (2020) Karlawinda Gold Project Mining Proposal (Rev 5.1), M52/1070, L52/177, L52/178, L52/179, L52/181, L52/183, L52/189, L52/192, L52/197. Prepared for Capricorn Metals Ltd, by Tetris Environmental, 11 September 2020.
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 26 August 2020).

DPIRD (2020) Advice received in relation to Clearing Permit Application CPS 7836/4. Commissioner of Soil and Land Conservation, Department of Primary Industries and Regional Development, Western Australia, August 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.

# 5. Glossary

# Acronyms:

ВоМ	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	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:**

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

## T <u>Threatened species:</u>

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.