

Clearing Permit Decision Report

1. Application details

Permit application details

Permit application No.:

CPS 5541/2

Permit type:

Purpose

Proponent details

Proponent's name:

Vector Resources Ltd

Property details

Property:

General Purpose Lease 77/119 Miscellaneous Licence 77/247 Miscellaneous Licence 77/248 Mining Lease 77/1263

Local Government Area:

Colloquial name:

Shire of Menzies

Gwendolyn East Cutback Project

Application 1.4.

Clearing Area (ha)

No. Trees

Method of Clearing

For the purpose of:

107.17 Mechanical Removal Mineral Production and Associated Infrastructure

Decision on application

Decision on Permit Application:

Decision Date:

24 July 2014

2. Site Information

Existing environment and information

2.1.1. Description of the 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 Beard vegetation associations have been mapped within the application

202: Shrublands; mulga and Acacia quadrimarginea scrub; and

385: Shrublands; bowgada and jam scrub with scattered York gum (GIS Database).

A botanist from Niche Environmental Services undertook a Level 2 flora and vegetation survey over the application area and surrounding project area in April and September 2012. A total of 26 vegetation units within seven broad landforms were described within the larger project area. Six broad landforms and 22 vegetation units were mapped within the application area (Niche Environmental Services, 2012).

The plains vegetation within the project area was generally defined by soils of red clay, on flat to very gently sloping plains that were noted in areas to contain pebbles and stones of ironstone, quartz and basalt.

PW1 - Low Woodland B of Acacia ramulosa var. ramulosa, Eucalyptus ewartiana and A. aneura over Open Low Scrub A of Baeckea elderiana, Prostanthera grylloana and Eremophila forestii subsp. forestii on red clay in a flat to very gently sloping valley floor.

PW2 - Low Woodland B of Acacia ramulosa var. ramulosa, A. aneura and A. caesaneura on red clay.

PW3 - Woodland of Eucalyptus salubris and E. clelandii over Open Low Scrub B of Atriplex nummularia, Eremophila pantonii and Senna artemisioides subsp. x artemisioides over Open Dwarf Scrub D of chenopods on plains with red clay and scattered gravel of ironstone and quartz.

PW5 - Open Low Woodland A of Eucalyptus clelandii over Open Dwarf Scrub C of Atriplex nummularia on red clay with scattered pebbles and stones of basalt.

PW6 - Open Low Woodland A of Eucalyptus griffithsii and Casuarina pauper over Low Woodland B of Acacia species on red clay with scattered ironstone and basalt pebbles.

PW7 - Open Low Woodland A of Eucalyptus griffithsii over Open Low Scrub A of Eremophila scoparia and Atriplex nummularia on red clay with very scattered ironstone and basalt pebbles.

PW8 - Open Low Woodland A of Eucalyptus kochii and Casuarina pauper over Low Woodland B of Acacia species on red clay with scattered ironstone pebbles and stones

PW9 - Open Low Woodland A of Eucalyptus kochii over Low Woodland B of Acacia species on red clay with ironstone pebbles.

PW10 - Low Woodland A of *Eucalyptus* species over Low Woodland B of *Acacia ramulosa* var. *ramulosa*, *A. aneura* and *A. caesaneura* over red clay with scattered gravel of ironstone and quartz.

PW11 - Open Low Woodland of *Eucalyptus salubris* over Open Scrub B of *Eremophila scoparia*, *Exocarpos aphyllus* and mixed species on red clay with ironstone and quartz pebbles and stones.

PW12 - Open Woodland of *Eucalyptus oleosa* over Low Woodland B of *Acacia ramulosa* var. *ramulosa*, *A. aneura* and *A. acuminata* on red clay with basalt and ironstone pebbles.

Floodplains Vegetation

These units were characterised by proximity to ephemeral drainage lines, but generally lacked any clearly defined banks or contouring consistent with the ephemeral drainage lines. The floodplains units were considered to be consistent with plains vegetation units *sens. lat.* of the Murchison, where plain and floodplain topography plays a role in promoting the rapid movement of water from significant rainfall events into better developed drainage systems.

FPW2 - Open Woodland of *Eucalyptus griffithsii* over Open Low Woodland B of *Acacia* species and *Eremophila scoparia* on red clay with occasional sections of exposed hard cap of weather basalt.

FPW3 - Open Woodland of Eucalyptus kochii and E. loxophleba over Open Low Woodland B of Acacia acuminata and Eremophila oppositifolia subsp. angustifolia on red clay with occasional scattered outcropping of weathered basalt.

Ephemeral Drainage Line Vegetation

The key differences between the floodplain and ephemeral drainage line units related to the presence of some degree of bank formation in the ephemeral drainage lines.

EDW1 - Open Low Woodland A of *Eucalyptus loxophleba* and *E. kochii* over Open Low Woodland B of *Acacia ramulosa* var. *ramulosa*, *A. aneura* and *A. acuminata* on red clay with sections of exposed, laterised hard cap and calcrete.

EDW2 - Low Woodland B of *Acacia* species on red clay with exposed hard cap of concretionary laterised ironstone.

Banded Ironstone Formation and Concretionary Weathered Ironstone Vegetation

There were several small sections of low banded ironstone and concretionary weathered ironstone formations in the project areas. These were generally characterised by a low topography, containing ironstone rocks of varying sizes, some of which were clearly weathered or had undergone further geological process to form ironstone that was more concretionary in nature.

BW2 - Low Woodland B of Acacia species and Grevillea nematophylla var. nematophylla.

BW3 - Open Low Woodland A of *Eucalyptus* species over Low Woodland B of *Acacia ramulosa* var. *ramulosa*, *A. aneura* and *A. caesaneura* over Open Low Scrub B of *Philotheca brucei* subsp. *brucei*, *Dodonaea rigida* and *Eremophila decipiens* subsp. *decipiens* on red flat plain to very gently sloping low hills of red clay with ironstone, quartz and basalt gravel and very occasional minor outcroppings of basalt and ironstone.

Greenstone Hills Vegetation

There was a section of greenstone hills at the northern end of the proposed access track into the main project area (M77/1263).

GW - Low Woodland B of *Acacia* species and *Eremophila oldfieldii* subsp. *angustifolia* on red clay on low greenstone hill.

Basalt Hills Vegetation

The basalt hills formed part of an undulating landscape, with the low hills interspersed with sections of plains and floodplains vegetation.

BHLW - Low Woodland B *Acacia* species and *Allocasuarina dielsiana* over Open Low Scrub A of *Dodonaea rigida*, *Prostanthera althoferi* subsp. *althoferi* and *Acacia caesanaeura* on red clay with scattered basalt stones and outcropping.

BHOLW-A - Open Low Woodland A of *Casuarina pauper* over Open Low Scrub B of *Scaevola spinescens*, *Eremophila decipiens* subsp. *decipiens* and *E. scoparia* on red clay on low hill of basalt.

BHOLW-B - Open Low Woodland B of *Acacia cockertoniana*, *A. caesaneura* and *A. aneura* over Low Scrub B of *Baeckea* aff. *elderiana* on red clay on weathered basalt and ironstone.

BHS - Scrub of Dodonaea lobulata and Acacia acuminata on light red clay on low hill of basalt.

Clearing Description

Gwendolyn East Cutback Project.

Vector Resources Ltd proposes to clear up to 107.17 hectares of native vegetation for the purpose of mineral production and associated infrastructure. The application area is located at the existing Gwendolyn East project, approximately 160 kilometres west of Menzies, in the Shire of Menzies.

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994);

To

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment

Clearing is to develop an existing pit as well as waste landforms, plant, campsite, water pipeline, haul roads and access roads. Vegetation will be cleared by machinery.

The vegetation condition was assessed by a botanist from Niche Environmental Services (2012).

Clearing permit CPS 5541/1 was granted by the Department of Mines and Petroleum (DMP) on 6 June 2013 and was valid from 29 June 2014 to 31 August 2014. The clearing permit authorised the clearing of up to 107.17 hectares of native vegetation. An application for an amendment was submitted to DMP on 28 May 2014 to extend the permit duration for an additional 5 years.

3. Assessment of application against clearing principles

Comments

Vector Resources Ltd has applied to extend the duration of the clearing permit for an additional five years. The amount of clearing authorised and the clearing permit boundary will remain unchanged. There are unlikely to be any additional environmental impacts associated with this amendment. Therefore, the assessment against the clearing principles has not changed and can be found in the Clearing Permit Decision Report CPS 5541/1.

Methodology

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

Comments

There is one Native Title Claim (WC2013/009) over the area under application (GIS Database). This claim has been filed at 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 recorded within the 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 Environment Regulation, 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.

Methodology

GIS Database:

- Aboriginal Sites of Significance
- Native Title Claims Determined by the Federal Court
- Native Title Claims Filed at the Federal Court
- Native Title Claims Registered with the NNTT

4. References

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 Environmental Services (2012) Report Documenting the Findings of a Level 2 Flora and Vegetation Survey at the Vector Resources' Gwendolyn Gold Project. Report Prepared by Niche Environmental Services for Vector Resources Ltd, December 2012.

5. Glossary

Acronyms:

BoM Bureau of Meteorology, Australian Government CALM Department of Conservation and Land Management (now DEC), Western Australia **DAFWA** Department of Agriculture and Food, Western Australia DEC Department of Environment and Conservation, Western Australia Department of Environment and Heritage (federal based in Canberra) previously Environment Australia DEH DEP Department of Environment Protection (now DEC), Western Australia DIA Department of Indigenous Affairs DLI Department of Land Information, Western Australia Department of Mines and Petroleum, Western Australia DMP Department of Environment (now DEC), Western Australia DoE **DoIR** Department of Industry and Resources (now DMP), Western Australia

DOLA Department of Land Administration, Western Australia

DoW Department of Water

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

RIWI Act Rights in Water and Irrigation Act 1914, Western Australia

s.17 Section 17 of the Environment Protection Act 1986, Western Australia

TEC Threatened Ecological Community

Definitions:

X

{Atkins, K (2005). Declared rare and priority flora list for Western Australia, 22 February 2005. Department of Conservation and Land Management, Como, Western Australia}:-

Priority One - Poorly Known taxa: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

P2 Priority Two - Poorly Known taxa: taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

Priority Three - Poorly Known taxa: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.

Priority Four – Rare taxa: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.

Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable): taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

Declared Rare Flora - Presumed Extinct taxa: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

Schedule 1 – Fauna that is rare or likely to become extinct: being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.

Schedule 2 — Fauna that is presumed to be extinct: being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.

Schedule 3 – Birds protected under an international agreement: being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.

Schedule 4 — Other specially protected fauna: being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). Priority Codes for Fauna. Department of Conservation and Land Management, Como, Western Australia}:-

Priority One: Taxa with few, poorly known populations on threatened lands: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

Priority Two: Taxa with few, poorly known populations on conservation lands: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

Priority Three: Taxa with several, poorly known populations, some on conservation lands: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P4 Priority Four: Taxa in need of monitoring: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.

P5

Priority Five: Taxa in need of monitoring: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (Environment Protection and Biodiversity Conservation Act 1999)

EX

Extinct: A native species for which there is no reasonable doubt that the last member of the species has died.

EX(W)

Extinct in the wild: A native species which:

- (a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
- (b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

CR

Critically Endangered: A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.

EN

Endangered: A native species which:

- (a) is not critically endangered; and
- (b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

VU

Vulnerable: A native species which:

- (a) is not critically endangered or endangered; and
- (b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

CD

(j)

Conservation Dependent: A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

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.

Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

