

Clearing Permit Decision Report

1. Application details

Permit application details

Permit application No.: 6426/2 Permit type: Purpose

Proponent details

Proponent's name:

Southern Gold Limited

1.3. Property details

Property:

Mining Lease 25/333 Mining Lease 25/162 Mining Lease 25/234

Miscellaneous Licence 25/43 Miscellaneous Licence 25/48 City of Kalgoorlie -Boulder Cannon Mining Project

Local Government Area: Colloquial name:

Application

Clearing Area (ha)

No. Trees

Method of Clearing Mechanical Removal

For the purpose of:

Mineral Production and Associated Infrastructure

Decision on application

Decision on Permit Application: Decision Date:

1.5.

3 September 2015

2. Site Information

Existing environment and information

2.1.1. Description of the native vegetation under application

Grant

Vegetation Description

The clearing permit application area has been broadly mapped as Beard vegetation association:

468: Medium woodland, salmon gum and goldfields blackbutt.

A flora and vegetation survey conducted by Native Vegetation Solutions (NVS, 2014) and GHD (GHD, 2015) over the application area identified the following ten vegetation types:

VSA 2 - Eucalyptus lesouefii woodland on undulating hills.

VSA 4 - Salmon Gum (Eucalyptus salmonophloia) woodland.

VSA 5 - Eucalyptus lesouefii woodland over mixed shrubland.

EIW - Eucalyptus lesouefii woodland.

EsW - Eucalyptus salmonophloia open woodland.

EW - Mixed Eucalyptus woodland.

EsEsW - Eucalyptus sticklandii, E. salmonophloia woodland.

EgEIW - Eucalyptus griffithsii, E. lesouefii

CpS - Casuarina pauper shrubland.

AS - Atriplex shrubland.

Clearing Description

Cannon Mining Project. Southern Gold Ltd proposes to clear up to 200 hectares of native vegetation within a total boundary of approximately 590.56 hectares, for the purpose of mineral production and associated infrastructure. The project is located approximately 30 kilometres south-east of Kalgoorlie, in the City of Kalgoorlie-Boulder.

Vegetation Condition

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

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

Comment

Vegetation condition was determined by NVS (2014) and GHD (2015) using the Keighery scale.

Clearing permit CPS 6426/1 was granted by the Department of Mines and Petroleum on 26 February 2015 and authorised the clearing of 40.3 hectares for mineral production and associated infrastructure.

On the 29 June 2015, Southern Gold Limited applied to amend CPS 6426/1 in order to increase the authorised clearing are by 159.7 hectares and the total boundary by 550.26 hectares.

3. Assessment of application against clearing principles

Comments

The clearing permit amendment is to increase the authorised clearing area by 159.7 hectares and the approved clearing boundary by 550.26 hectares in order to accommodate for the expansion of the project and the construction of a haul road on L25/48.

A flora and vegetation survey covering the amended application area was conducted by GHD in 2015 (GHD, 2015). None of the vegetation associations within the amended application area represent a threatened or priority ecological community and no threatened or priority flora species were recorded within the amended application area (GHD, 2015).

A total of four introduced flora species were recorded within the application area during the flora and vegetation survey (GHD, 2015). These included *Citrullus lanatus* (Pie Melon), *Cucumis myriocarpus* (Prickly Paddy Melon), *Salvia verbenaca* (Wild Sage) and *Centaurea melitensis* (Maltese Cockspur) (GHD, 2015). None of these introduced flora species are Declared Pests or listed as Weeds of National Significance (GHD, 2015).

GHD conducted a fauna assessment over the application area in 2015 (GHD, 2015). The fauna habitat types identified during the survey were relatively common and widely represented throughout the region therefore the proposed clearing is unlikely to have a significant impact on fauna habitat availability (GHD, 2015).

No fauna species of conservation significance were recorded within the application area during the field survey (GHD, 2015). However, evidence of the Malleefowl (*Leipoa ocellata*)(EPBC Act – Vulunerable; WC Act – Schedule 1) was recorded during the fauna assessment, with two recently active and four old (inactive) Malleefowl mounds recorded within the application area (GHD, 2015). It is recommended that a fauna management condition be added to the amended permit restricting the clearing of vegetation within 100 meters of identiifed Malleefowl mounds as per the advice provided by the Department of Parks and Wildlife.

There are no permanent wetlands or watercourses within the amended application area (GIS Database). There are several non-perennial drainage lines that intersect the application area however the flora and vegetation survey did not identify any riparian vegetation growing in association with these drainage lines (GHD, 2015).

The soil types within the amended application area are consistent with the soils of the original application area and the proposed additional clearing is not likely to impact on surface water quality nor increase the incidence or intensity of flooding (GIS Database).

The assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 6426/1.

Methodology

GHD (2015)

GIS Database:

- DPaW Tenure
- Hydrography, linear
- Soils, Statewide
- Rangeland Land System Mapping
- Threatened and Priority Flora
- Threatened Ecological Sites Buffered

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

Comments

There is one Native Title claim (WC2014/002) over the area under application (GIS Database). 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 (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.

The clearing permit application was advertised on 3 August 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology

DAA (2015)

GIS Database:

- Aboriginal Sites Register System

4. References

DAA (2015) Department of Aboriginal Affairs (WWW Search – Aboriginal Heritage Inquiry System). Retrieved from http://maps.dia.wa.gov.au/AHIS2/ on 03 August 2015.

GHD (2015) Metals X Limited – Joint Venture Operation in the Bulong Area – Level 1 Vegetation, Flora and Fauna Assessment. Report prepared by GHD Consulting for Southern Gold Limited, Kalgoorlie, Western Australia.

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

NVS (2014) Level 1 Flora and Vegetation Survey for the Cannon Deposit Mining Project–Bulong (M25/333). Report prepared by Native Vegetation Solutions for Southern Gold Limited, Kalgoorlie, Western Australia.

5. Glossary

Acronyms:

BoMBureau of Meteorology, Australian GovernmentDAADepartment of Aboriginal Affairs, Western AustraliaDAFWADepartment of Agriculture and Food, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DPaW and DER)

DER Department of Environment Regulation, Western Australia
DMP 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

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

TEC Threatened Ecological Community

Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T Threatened species:

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

Threatened Fauna and Flora are further recognised by DPaW according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

Rankings:

CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.

EN: Endangered - considered to be facing a very high risk of extinction in the wild.

VU: Vulnerable - considered to be facing a high risk of extinction in the wild.

X Presumed Extinct species:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).

IA Migratory birds protected under an international agreement:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.

Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.

S Other specially protected fauna:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P1 Priority One - Poorly-known species:

Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

P2 Priority Two - Poorly-known species:

Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

P3 Priority Three - Poorly-known species:

Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

P5 Priority Five - Conservation Dependent species:

Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five 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.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.