

Clearing Permit Decision Report

1. Application details

1.1. Permit application details
Permit application No.: 5426/2

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Saracen Gold Mines Pty Ltd

1.3. Property details

Property: Mining Lease 28/269

Mining Lease 31/220 Mining Lease 31/295

Local Government Area: Shire of Menzies and City of Kalgoorlie-Boulder

Colloquial name: TSF Expansion Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

250 Mechanical Removal Construction of a Tailings Storage Facility and

Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 15 February 2018

2. Site Information

2.1. 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. Two Beard vegetation associations have been mapped within the application area (GIS Database):

Beard vegetation association 20: Low woodland; mulga mixed with Allocasuarina cristata and Eucalyptus sp; and

Beard vegetation association 24: Low woodland; *Allocasuarina cristata* (Government of Western Australia, 2016; GIS Database).

A flora and vegetation survey conducted by Holm (2012) during 17 to 21 November 2012 identified six distinct vegetation communities within the application area:

2a: Low lateritic rises – Very sparse woodland (to 10 metres) of Casuarina obesa with very sparse mid-height shrub layers dominated by Eremophila scoparia, Scaevola spinescens, Senna artemisioides subsp. filifolia and Acacia colletioides.

2b: Low rises on basaltic or metamorphic rocks – Very sparse to mid-dense mixed height degraded chenopod shrublands dominated by *Dodonaea lobulata, Senna artemisioides* subsp. *filifolia, Acacia burkittii, Ptilotus obovatus* with isolated to very sparse tree layer (6 to 15 metres) of *Casuarina obesa* and occasionally *A. incurvaneura, Grevillea nematophylla* subsp. *nematophylla* and/or *Alextryon oleifolius*. Less frequently shrublands dominated by *Maireana sedifolia*;

2c: Sandy rises – Sparse woodlands dominated by *Acacia incurvaneura* and low mallees including *Eucalyptus eremicola, E. ceratocorys* and *E. oldfieldii* over a diverse sparse Shrubland with spinifex (*Triodia irritans*) often dominated by myrtaceous shrubs. Shrubs include *Eremophila forrestii* subsp. *forrestii, Thryptomene kochii, Verticordia pritzelii, Prostanthera althoferi* subsp. *althoferi* and *Acacia effusifolia*;

4a: Plains supporting eucalypt or acacia shrublands – Very sparse tall *Acacia* shrublands (4 to 6 metres) dominated by *Acacia incurvaneura*, *A. aptaneura* or sparse mid height *Acacia* shrublands dominated by *A. burkittii* with overstoreys of isolated *Casuarina obesa* or *Eucalyptus oleosa* subsp. *oleosa* and lower shrubs including *Dodonaea lobulata*, *Senna artemisioides* subsp. *filifolia* and *Ptilotus obovatus*;

4b: Sand plains supporting sparse eucalypt woodlands – Very sparse eucalypt woodland (6 to 10 metres) of *Eucalyptus flocktoniae* subsp. *flocktoniae*, *E. yilgarnensis* and *E. oleosa* subsp. *oleosa* over mixed height, very sparse shrubs including *Eremophila caperata*, *Acacia colletioides* and *Westringia rigida* and mid-dense *Triodia irritans*; and

5: Alluvial plains supporting chenopod shrublands – Very sparse to sparse mixed height chenopod shrublands dominated by *Maireana sedifolia, M. georgei, M. pyramidata, Atriplex vesicaria, Ptilotus obovatus* and others or in poor condition dominated by *Senna artemisioides* subsp. *filifolia, Eremophila scoparia, Dodonaea lobulata* and *Acacia burkittii* overtopped with isolated and clumped tree layer of *Casuarina obesa, Eucalyptus brachycorys* and *E. lesouefii.*

Clearing Description

TSF Expansion Project.

Saracen Gold Mines is proposing to clear up to 250 hectares of native vegetation within an application area of 681 hectares for the construction of a Tailings Storage Facility (TSF). This includes associated pipe work, monitoring bores and other infrastructure and rehabilitation of the existing TSF batters. The project is located approximately 105 kilometres north-east of Kalgoorlie, within the Shire of Menzies and the City of Kalgoorlie-Boulder.

The vegetation will be cleared using a bulldozer and grader or scrapers. The vegetation and topsoil will be stockpiled separately for use in rehabilitation.

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 vegetation condition was derived from a vegetation survey conducted by Holm (2012).

Clearing permit CPS 5426/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 14 February 2013 and was valid from 9 March 2013 to 9 March 2018. The permit authorised the clearing of up to 250 hectares of native vegetation within a boundary of approximately 681 hectares, for the purpose of construction of a Tailings Storage Facility and associated activities.

On 15 January 2018, the Permit Holder applied to amend CPS 5426/1 to extend the duration of the permit for an additional five years.

3. Assessment of application against Clearing Principles

Comments

Saracen Gold Mines Pty Ltd has applied to amend clearing permit CPS 5426/1 to extend the duration of the permit for an additional five years to 9 March 2023. The amount of clearing and clearing permit boundary remain the same

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 5426/1.

Methodology

GIS Database:

- Hydrography, Linear
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities boundaries
- Threatened Fauna

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There is one Native Title claim (WC2017/001) over the area under application (DPLH, 2018). 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, 2018). 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.

Methodology

DPLH (2018)

4. References

DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage.

http://maps.daa.wa.gov.au/AHIS/ (Accessed 5 February 2018).

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.

Holm (2012) Environmental Assessment: Tailings Storage Facility Expansion. Report prepared for Saracen Gold Mine by Alexander Holm & Associates, December 2012.

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:

BoM 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)

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 Department of Planning, Lands and Heritage, Western Australia

DRF Declared Rare Flora

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:

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

T 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 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
- (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.