



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4706/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Saracen Gold Mines Pty Ltd

1.3. Property details

Property: Mining Lease 39/165
Mining Lease 39/166
Mining Lease 39/230
Local Government Area: Shire of Leonora
Colloquial name: Butcher Well Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
200		Mechanical Removal	Mineral Production and Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 20 December 2016

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. The following four Beard vegetation associations have been broadly mapped within the application area (GIS Database):

18: Low woodland; Mulga (*Acacia aneura*);
109: Hummock grasslands, shrub steppe; *Eucalyptus youngiana* over hard Spinifex;
389: Succulent steppe with open low woodland; mulga over saltbush; and
400: Succulent steppe with open low woodland; Mulga over Bluebush.

A Level 1 flora and vegetation survey was conducted of the Butcher Well clearing permit area in September 2011 (Alexander Holm and Associates, 2011). The following ten vegetation communities were recorded within the application area, associated with different landform types:

1: Rises and breakaways associated with banded ironstone ridges

Scattered (Projected Foliage Cover (PFC) 15 - 20%) mixed height shrublands (2 - 4 metres) dominated by Acacias including *Acacia pteraneura*, *A. quadrimarginea*, *A. oswaldii*, *A. inceana* subsp. *conformis* and *Grevillea berryana* with low shrubs including *Eremophila compacta*, *Ptilotus obovatus* and *P. swartzii*;

2: Lower footslopes on basalt or metamorphic rocks

Scattered (PFC 10-15%) mixed height (2 - 5 metres) shrublands dominated by *Acacia incurvaneura*, *A. caesaneura*, *Hakea preissii* or *Eremophila caperata*, with low shrubs including *Ptilotus obovatus*, *Maireana georgei*, *M. triptera* and *Frankenia* spp.;

3: Low rises on metamorphic rocks

Very scattered to scattered (PFC 5 - 15%) tall shrublands to 4 metres dominated by *Acacia quadrimarginea*, *Hakea preisii* with undershrubs *Ptilotus obovatus*, *Maireana* spp., *Atriplex bunburyana* and *Frankenia setosa*;

4: Low breakaways and associated footslopes

Crests - very scattered (PFC about 5%) mixed shrublands to 4 metres of *Acacia erinacea*, *Dodonaea lobulata*, *Eremophila scoparia*, *E. oppositifolia* and *Tecticornia* spp. With occasional small trees of *Eucalyptus celastroides* ssp. *celastroides* and *E. lesouefii*. Lower slopes - only isolated shrubs (PFC < 2.5%), much bare ground;

11a: Saline stony plains with myall

Very scattered (PFC 5 - 10%) low (<1 metre) shrublands frequently dominated by *Frankenia setosa* with a prominent overstorey of *Acacia papyrocarpa* (myall) trees to about 8 metres; other common shrubs are *Maireana pyramidata*, *M. georgei*, *M. triptera*, *M. sedifolia*, *Atriplex vesicaria*, *Cratystylis subspinescens* and *Eremophila caperata*;

11b: Saline stony plains

Very scattered to scattered (PFC 5 - 25%) low (<1 metre) shrublands dominated by *Maireana pyramidata*, *M. georgei* and *M. triptera*; others include *Frankenia* spp., *Atriplex* spp., *Ptilotus obovatus* and *Cratystylis subspinescens*. Occasionally, scattered *Hakea preissii*, *Eremophila caperata*, *Acacia kalgoorliensis* and *A. oswaldii*;

12: Highly saline stony plains

Very scattered to scattered (PFC 5 - 25%) low (<1 metre) shrublands dominated by *Tecticornia halocnemoides*, *T. disarticulata*, *T. indica* subsp. *bidens* (samphires); minor components of numerous other, mostly halophytic shrubs, including *Maireana platycarpa*, *M. atkinsiana*, *M. glomerifolia*, *M. tomentosa*, *Atriplex vesicaria*, *Disphyma crassifolium* and *Eremophila caperata*;

14: Sandy banks

Scattered (PFC about 15%) woodlands of *Acacia caesaneura* to 8 metres over low shrubs, *Maireana pyramidata*, *M. triptera*, *Gunnipopsis quadrifida*, *Rhagodia drummondii* and *Enchylaena tomentosa*, or low shrublands of same species with occasional *Acacia caesaneura*, *Hakea preisii* and *Eremophila miniata*;

16: Saline drainage tracts

Very scattered to moderately close (PFC 5 - 40%) low (<1 metre) shrublands dominated by *Atriplex*, *Maireana*, *Frankenia* and *Tecticornia* spp. or *Tecticornia* spp.; and

17: Creeklines

Moderately close (PFC about 30%) tall shrublands (4 - 5 metres) dominated by *Acacia burkittii*, *A. oswaldii*, *Exocarpus aphylla*, *Eremophila alternifolia*, *E. oldfieldii* subsp. *angustifolia*, *E. youngii* subsp. *youngii* with undershrubs such as *Ptilotus obovatus*, *Maireana pyramidata*, *M. georgei* and *Atriplex bunburyana*.

Clearing Description

Butcher Well project.
Saracen Gold Mines Pty Ltd (Saracen) proposes to clear up to 200 hectares of native vegetation within a total boundary of approximately 542 hectares, for the purposes of mineral exploration and mineral production. The project is located approximately 185 kilometres north-east of Kalgoorlie, in the Shire of Leonora.

Vegetation Condition

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994);

To

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

Comment

The vegetation condition is derived from a flora and vegetation survey conducted by Alexander Holm and Associates in September 2011. Previous disturbance is primarily the result of pastoral activities and mineral exploration activities (Alexander Holm and Associates, 2011).

The proposed clearing is for mineral exploration and mineral production activities, including mine pits, potential cutbacks of existing pits and mining-related infrastructure. Topsoil and vegetation will be stockpiled for rehabilitation purposes (Saracen, 2011).

Clearing permit CPS 4706/1 was granted by the Department of Mines and Petroleum (DMP) on 5 January 2012 and was valid from 28 January 2012 to 28 January 2017. The permit authorised the clearing of up to 200 hectares of native vegetation within a permit boundary of approximately 542 hectares.

On 2 November 2016, the Permit Holder applied to amend CPS 4706/1 to extend the permit duration to 28 January 2022, to allow for further mining and exploration activities at Butcher Well. The area of clearing authorised and the permit boundaries remain unchanged.

3. Assessment of application against clearing principles

Comments

Saracen Gold Mines Pty Ltd has applied to amend the permit, to extend the permit duration by five years. The size of the area approved to clear (200 hectares) and the permit boundaries remain unchanged.

The amendment to extend the permit duration by five years is unlikely to result in any significant change to the environmental impacts of the proposed clearing (GIS Database).

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 4706/1.

Methodology

GIS Database:
 - Hydrography, linear
 - Pre-European Vegetation
 - Threatened and Priority Flora
 - Threatened and Priority Ecological Communities (TEC/PEC) - Boundaries
 - Threatened Fauna

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

Comments

There are no registered Native Title claims over the area under application (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*.

There are no registered Aboriginal Sites of Significance within the application area (DAA, 2016). 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, 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.

Methodology DAA (2016)

4. References

- Alexander Holm and Associates (2011) Environmental Assessment: Butcher Well Development, Saracen Gold Mines. Report prepared for Saracen Gold Mines Pty Ltd, by Alexander Holm and Associates Natural Resource Management Services, October 2011.
- DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 13 December 2016).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Saracen (2011) Butcher Well Project Clearing Permit Application M39/230, M39/165, M39/166. Saracen Gold Mines Pty Ltd, November 2011.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T	Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , 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).
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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.