

1. Application details

1.1. Permit application details

Permit application No.: 3934/5
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Saracen Gold Mines Pty Ltd

1.3. Property details

Property:
Mining Lease 31/3
Mining Lease 31/4
Mining Lease 31/5
Mining Lease 31/6
Mining Lease 31/76
Miscellaneous Licence 31/11
Miscellaneous Licence 31/59

Local Government Area: Shire of Menzies

Colloquial name: Million Dollar Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 22 October 2021

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation of the application area is broadly mapped as the following Beard vegetation associations:
389: Succulent steppe with open low woodland; mulga over saltbush; and
400: Succulent steppe with open low woodland; mulga over bluebush (GIS Database).

A flora and vegetation survey was conducted over the original application area by Botanica Consulting during 14 to 15 July 2010. The following vegetation associations were recorded within the application area (Botanica, 2010):

Creepline Vegetation - Upper-storey of *Acacia burkittii*, *Santalum lanceolatum* and *Santalum spicatum*. The mid-storey included *Eremophila longifolia*, *Acacia tetragonophylla* and *Maireana pyramidata*. The lower-storey included *Sida calyxhymenia*, *Maireana triptera* and *Cheilanthes sieberi* subsp. *sieberi*. Many germinants of *Asteraceae* sp. were found within this vegetation unit;

Maireana pyramidata Chenopod Shrubland - Upper-storey comprised of *Eucalyptus torquata*, *Santalum lanceolatum*, *Acacia aneura*, *Acacia burkittii*, *Acacia tetragonophylla* and *Hakea preissii*. The middle canopy included *Maireana sedifolia*, *Maireana pyramidata*, *Pittosporum angustifolium*, *Themeda triandra* and *Eremophila longifolia*. The lower-storey included *Scaevola spinescens*, *Eremophila clarkei* and *Solanum ferocissimum*;

Maireana sedifolia Chenopod Shrubland - Upper-storey comprised of *Santalum lanceolatum*, *Acacia aneura*, *Acacia burkittii*, *Acacia tetragonophylla* and *Hakea preissii*. The middle canopy included *Maireana sedifolia*, *Maireana pyramidata*, *Pittosporum angustifolium*, *Themeda triandra* and *Eremophila longifolia*. The lower-storey included *Scaevola spinescens*, *Eremophila clarkei* and *Solanum ferocissimum*;

Mulga Woodland - Upper-storey comprised of *Acacia ramulosa*, *Acacia aneura*, *Acacia tetragonophylla* and *Casuarina pauper*. The middle canopy included *Maireana sedifolia*, *Maireana pyramidata*, *Maireana triptera*, *Themeda triandra* and *Eremophila longifolia*. The lower-storey included *Scaevola spinescens*, *Eremophila clarkei* and *Solanum ferocissimum*; and

Casuarina pauper Woodland - Upper-storey comprised of *Acacia aneura* and *Casuarina pauper*. The middle canopy included *Dodonaea lobulata*, *Exocarpos aphyllus*, *Maireana sedifolia*, *Maireana pyramidata*, *Hakea preissii* and *Eremophila forrestii*. The lower-storey included *Ptilotus obovatus* and *Poaceae* species.

Clearing Description	<p>Million Dollar Project.</p> <p>Saracen Gold Mines Pty Ltd proposes to clear up to 300.35 hectares of native vegetation within a boundary of approximately 806.35 hectares, for the purpose of mineral production and mineral exploration. The project is located approximately 118 kilometres east of Menzies, within the Shire of Menzies.</p>
Vegetation Condition	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).</p> <p>to:</p> <p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).</p>
Comment	<p>The vegetation condition was derived from a vegetation survey conducted by Botanica (2010) and aerial photography.</p> <p>The proposed clearing is for the development of the Million Dollar mine site, including an open pit and associated mining infrastructure. Clearing will also be undertaken for ongoing mineral exploration activities.</p> <p>Clearing permit CPS 3934/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 21 October 2010 and was valid from 20 November 2010 to 31 January 2014. The permit authorised the clearing of up to 200 hectares of native vegetation within a boundary of approximately 436 hectares, for the purpose of mineral exploration and mineral production.</p> <p>CPS 3934/2 was granted on 19 December 2013, extending the permit duration to 31 January 2019. The area of clearing authorised and the permit boundaries remained unchanged.</p> <p>CPS 3934/3 was granted on 20 December 2018, extending the permit duration to 31 January 2024. The area of clearing authorised and the permit boundaries remained unchanged.</p> <p>CPS 3934/4 was granted on 23 January 2020, increasing the permit boundary by 176 hectares, and the amount of clearing authorised by 30.35 hectares, and changing the tenure on the permit.</p> <p>On 10 August 2021, the Permit Holder applied to amend CPS 3934/4 to increase the area authorised to clear by 70 hectares, and increase the permit boundary by 194 hectares.</p>



Figure 1. Previous clearing permit boundary (yellow area) and proposed amended permit boundary (blue area).

3. Assessment of application against Clearing Principles

Comments	<p>Saracen Gold Mining Pty Ltd has applied to increase the amount of clearing authorised from 230.35 hectares to 300.35 hectares, and increase the permit boundary from approximately 612 hectares to 806 hectares, to allow for the expansion of the project.</p>
-----------------	--

The amendment boundary is located within the Eastern Murchison subregion of the Interim Biogeographic Regionalisation for Australia Murchison Bioregion (GIS Database). This subregion is characterised by vegetation dominated by Mulga Woodlands, which is often rich in ephemerals; hummock grasslands, saltbush shrublands and Tecticornia shrublands (CALM, 2002).

There have been no flora or vegetation surveys undertaken within the amendment boundary. A flora and vegetation survey within the original permit boundary identified no Threatened or Priority Flora species (Botanica, 2010). NatureMap suggests the potential for two Priority Flora species to occur within a 20 kilometre radius of the amendment boundary; *Thryptomene eremaea* (Priority 2) and *Acacia eremophila* var. Numerous-nerved variant (A.S.George 11924) (Priority 3) (DBCA, 2007-). The species *A. eremophila* var. Numerous-nerved variant (A.S. George 11924) is well distributed across the local and regional area (WA Herbarium, 1998-). The species *T. eremaea* is also well distributed on a local level, and although it may be more restricted in its regional distribution, there are records located within Nature Reserves (WA Herbarium, 1998-).

There are no Threatened or Priority Ecological Communities within or in close proximity to the amendment boundary (GIS Database).

No fauna surveys have been undertaken over the amendment boundary. A fauna survey was undertaken over part of the original application area (Bamford, 2002). No conservation significant fauna were identified during the survey, and several broad habitat types were identified within the local area (Bamford, 2002). NatureMap identified the Woma python (*Aspidites ramsayi* subsp. (southwest subpop.)) (Priority 1) and Malleefowl (*Leipoa ocellata*) (Threatened) as potentially occurring within the local area (DBCA, 2007-). The record for the Woma python was a singular location from 1992, and aerial imagery and results from a survey of the adjacent vegetation suggests that the local area does not contain suitable habitat for this species (Botanica, 2010; DBCA, 2021; GIS Database). The Malleefowl may occasionally use the native vegetation within the amendment boundary for foraging and dispersal, however aerial imagery suggests that the vegetation is generally sparse, and not a dense habitat with extensive ground litter as the Malleefowl prefer (GIS Database).

The proposed amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing in a regional context. The amendment boundary is unlikely to represent an area of higher biodiversity than the original permit area or surrounding areas.

Weeds have the potential to out-compete native flora species and reduce the biodiversity of an area, and care should be taken to prevent the introduction or spread of weeds in the application areas. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the continued implementation of the existing weed management condition on the permit.

The amendment area is not within or in close proximity to any conservation areas (GIS Database), and the proposed clearing is unlikely to have any impact on any conservation area.

The amendment area intersects the Rainbow and Gundockerta land systems (GIS Database). There is a risk of wind and/or water erosion occurring should water flows be altered and/or areas remain exposed. Potential erosion impacts as a result of the proposed clearing may be minimised by the continued implementation of a staged clearing condition to ensure large areas are not void of vegetative cover for extended periods.

There are no Public Drinking Water Source Areas in the vicinity of the amendment area (GIS Database). Clearing within the amendment boundary is unlikely to result in appreciable land degradation, or have any significant impact on watercourses, surface or groundwater quality, or on the incidence or intensity of flooding (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 previous decision reports.

Methodology

Bamford (2002)
Botanica (2010)
CALM (2002)
DBCA (2007-)
DBCA (2021)
WA Herbarium (1998-)

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 are two native title claims over the area under application (DPLH, 2021). These claims have been registered with the National Native Title Tribunal on behalf of the claimant groups. 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, 2021). 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 20 August 2021 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received stating no objection in relation to this application.

Methodology DPLH (2021)

4. References

- Bamford (2002) Vertebrate fauna of the proposed Carosue Dam - Safari Haul Road. Report prepared for Sons of Gwalia Ltd, by Bamford Consulting Ecologists, 2002.
- Botanica (2010) Level 1 Flora and Vegetation Survey (Tenements: M31/0003, M31/0004, M31/005, M31/0006, M31/0030, M31/0059, M31/0076, M31/0190, M31/0381, E31/0621, L31/0011). Report prepared for Saracen Mineral Holdings Pty Ltd, by Botanica Consulting, July 2010.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Biodiversity, Conservation and Attractions. <https://naturemap.dbca.wa.gov.au/> (Accessed 25 August 2021).
- DBCA (2021) Woma Python *Aspidites ramsayi* (Macleay, 1882). Department of Biodiversity, Conservation and Attractions. <https://library.dbca.wa.gov.au/static/FullTextFiles/071556.pdf/> (Accessed 25 August 2021).
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 25 August 2021).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 25 August 2021).

5. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
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)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
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)
DoEE	Department of the Environment and Energy (now DAWE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)

DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, 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:

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

T Threatened species:

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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened 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 the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.