



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4526/5
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Sandfire Resources NL

1.3. Property details

Property: Miscellaneous Licence 52/125
Miscellaneous Licence 52/137
Miscellaneous Licence 52/152
Local Government Area: Shire of Meekatharra
Colloquial name: DeGrussa Copper-Gold Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
35		Mechanical Removal	Borefield construction and associated activities.

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 25 August 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area has been mapped as the following two Beard vegetation associations:

- 18: Low woodland; mulga (*Acacia aneura*); and
- 29: Sparse low woodland; mulga, discontinuous in scattered groups.

A vegetation and flora survey of the greater Doogunna project area was undertaken by Mattiske Consulting Pty Ltd (Mattiske) in August 2009 and January, March and May 2010 (Mattiske, 2010). These surveys included the permit area as well as the proposed sites of the DeGrussa Copper-Gold Mine, an airstrip, accommodation camps and exploration areas (Mattiske, 2010). Seven vegetation types were recorded within the permit area (Mattiske, 2010; MBS Environmental, 2011).

1. **S1:** Open scrub of *Grevillea berryana*, *Acacia aneura* var. *aneura* and *Acacia kempeana* over *Eremophila incisa*, *Eremophila margarethae*, *Eremophila forrestii* subsp. *forrestii*, *Ptilotus obovatus* and *Ptilotus schwartzii* over *Aristida contorta* and *Monochather paradoxus* on red/brown sandy loam flats with dolerite, ironstone and quartz (rarely) pebbles.
2. **S3:** Open scrub of *Acacia aneura* var. *aneura*, *Acacia ramulosa* and *Acacia tetragonophylla* over *Eremophila galeata* and *Senna artemisioides* subsp. *helmsii* over *Chrysopogon fallax* on red/brown clay loam flats.
3. **S8:** Open scrub of *Acacia tetragonophylla* and *Acacia ramulosa* over *Eremophila galeata* with occasional emergent *Psydrax latifolia* and *Eucalyptus lucasii* over mixed shrubs and grasses on flats of red/brown clay soils.
4. **LW1:** Low woodland of *Acacia aneura* var. *aneura*, *Acacia aneura* var. *microcarpa*, *Acacia pruinocarpa* and *Grevillea berryana* over *Eremophila foliosissima*, *Eremophila forrestii* subsp. *forrestii* and *Eremophila galeata* over *Ptilotus* species and mixed grasses on red/brown sandy loam flats with ironstone pebbles.
5. **LW3:** Low woodland of *Acacia aneura* var. *microcarpa*, *Acacia pruinocarpa*, *Acacia sibirica*, *Acacia xanthocarpa*, *Grevillea berryana* with occasional emergent *Corymbia candida* subsp. *dipsodes* and *Corymbia ferriticola* over *Eremophila jucunda* subsp. *jucunda*, *Eremophila forrestii* subsp. *forrestii*, *Eremophila margarethae*, *Ptilotus schwartzii*, *Solanum lasiophyllum* and *Ptilotus obovatus* over mixed grasses on hills and flats with red/brown clay loam soil with ironstone and quartz (rarely).
6. **C4:** Scrub of *Acacia aneura* var. *aneura*, *Acacia aneura* var. *conifera*, *Acacia aneura* var. *microcarpa*, *Acacia cyperophylla* over *Psydrax latifolia*, *Eremophila galeata*, *Ptilotus obovatus* and mixed grasses with occasional emergent *Corymbia candida* subsp. *dipsodes* on flow-lines with ironstone and dolerite pebbles on red clay loam.
7. **C5:** Woodland of *Eucalyptus victrix* with emergent *Corymbia candida* subsp. *dipsodes* over *Acacia ramulosa*, *Acacia tetragonophylla*, *Acacia xanthocarpa* and *Acacia aneura* var. *microcarpa* over *Isotropis forrestii* and *Eremophila galeata* over mixed grasses on major flow-lines with red/brown clay loam soil.

Clearing Description	DeGrussa Copper-Gold Project. Sandfire Resources NL proposes to clear up to 35 hectares of native vegetation within an application area of 537 hectares for the purpose of borefield construction and associated activities. The project is located approximately 130 kilometres north-east of Meekatharra within the Shire of Meekatharra.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
Comment	<p>Clearing Permit CPS 4526/1 was granted by the Department of Mines and Petroleum on 22 September 2011 and allowed for the clearing of 18 hectares of native vegetation.</p> <p>Clearing Permit CPS 4526/2 was granted on 27 December 2012 by the Department of Mines and Petroleum. The amendment requested an increase in the clearing area to 30 hectares.</p> <p>Clearing Permit CPS 4526/3 was granted on 16 May 2013 by the Department of Mines and Petroleum. The amendment requested a change to the reporting date of 31 March each year.</p> <p>Clearing Permit CPS 4526/4 was granted on 5 September 2013 by the Department of Mines and Petroleum. The amendment requested an increase in the clearing area to 35 hectares.</p> <p>An application to amend CPS 4526/4 was submitted to the Department of Mines and Petroleum on 19 July 2016. The application requested an extension to the permit duration.</p>

3. Assessment of application against clearing principles

Comments Sandfire Resources NL has applied to amend CPS 4526/4 for the purpose of extending the duration of the permit from 15 October 2016 to 30 June 2021. The extension is needed as the permit is due to expire on 15 October 2016 and all the proposed clearing has not been completed.

The amount of clearing authorised and permit boundary remain unchanged.

The proposed amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing. The assessment against the clearing principles remains consistent with the assessment contained in decision report CPS 4526/4.

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

Comments

There are three native title claims over the area under application; WC1999/013, WC1999/046 and WC2006/002 (DAA, 2016). These claims have 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*.

According to available databases there are no registered Aboriginal Sites of Significance within the application area (DAA, 2016). It is the proponents' 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 DAA (2016)

4. References

- DAA (2016) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 16 August 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.
- Mattiske Consulting (2010) Flora and Vegetation Survey of the Doolgunna Project. Unpublished report prepared for Sandfire Resources NL, June 2010.
- MBS Environmental (2011) Purpose Permit Application: DeGrussa Copper-Gold Project Borefield Native Vegetation Management Plan and Assessment of Clearing Principles. Unpublished report prepared by MBS Environmental for Sandfire Resources NL, July 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)
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	<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 *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.

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.