



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 4132/7  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Sandfire Resources NL

### 1.3. Property details

Property: Mining Lease 52/1046  
Miscellaneous Licence 52/122  
Miscellaneous Licence 52/161  
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:
450		Mechanical Removal	Mineral production

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 21 January 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. Two Beard vegetation associations have been mapped within the application area (GIS Database):

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

The application area was surveyed by Mattiske Consulting (2010) over 2009 and 2010. The following seven vegetation types were recorded in the application area:

**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 *Monachather paradoxus* on red/brown sandy loam flats with dolerite, ironstone and quartz pebbles;

**S2:** Low woodland of *Acacia aneura* var. *aneura* and *Grevillea berryana* over *Eremophila incisa* and *Ptilotus* species on red/brown sandy loam flats with ironstone pebbles;

**LW1:** Low woodland of *Acacia aneura* var. *aneura*, *Acacia macraneura*, *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 on ironstone pebbles;

**LW2:** Open low woodland of *Acacia aneura* var. *aneura*, *Acacia cuthbertsonii* subsp. *linearis* and *Acacia tetragonophylla* over *Eremophila galeata*, *Eremophila margarethae* over *Ptilotus* and *Senna* species on red/brown sandy loam flats with quartz pebbles;

**C1:** Open scrub of *Acacia aneura* var. *aneura*, *Acacia aneura* var. *conifera*, *Acacia kempeana* and *Acacia tetragonophylla* over *Psydrax latifolia*, *Senna artemisioides* subsp. *helmsii*, *Eremophila galeata*, *Ptilotus obovatus* and *Solanum lasiophyllum* over mixed herbs and grasses on flow-lines with dolerite and ironstone pebbles on red/brown clay loam;

**C2:** Low open woodland of *Acacia aneura* var. *aneura*, *Acacia aneura* var. *conifera*, *Acacia craspedocarpa*, *Acacia tetragonophylla* over *Eremophila galeata* over *Alternanthera nodiflora* and *Cyperus ?centralis* over mixed grasses with occasional emergent *Eucalyptus victrix* on flow-lines with dolerite and ironstone pebbles on red/brown sandy loam gravel; and

**C4:** Scrub of *Acacia aneura* var. *aneura*, *Acacia aneura* var. *conifera*, *Acacia macraneura*, *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.

<b>Clearing Description</b>	DeGrussa Copper-Gold Project. Sandfire Resources NL (Sandfire) proposes to clear up to 450 hectares of native vegetation within a total boundary of 1,331.5 hectares for the purpose of mineral production. The project is located approximately 138 kilometres north-east of Meekatharra, in the Shire of Meekatharra.
<b>Vegetation Condition</b>	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994); to: Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
<b>Comment</b>	Clearing permit CPS 4132/1 was granted by the Department of Mines and Petroleum on 17 February 2011 and authorised the clearing of 242 hectares of native vegetation within a boundary of 1,324.5 hectares for the purpose of mineral production. CPS 4132/1 was amended on 14 July 2011 to increase the amount of clearing authorised to 302 hectares. CPS 4132/2 was amended on 26 July 2012 to increase the amount of clearing authorised to 412 hectares. CPS 4132/3 was amended on 22 November 2012 to increase the amount of clearing authorised to 418 hectares. Clearing Permit CPS 4132/4 was amended on 16 May 2013 to amend the permit reporting date and reporting period. Clearing Permit CPS 4132/5 was subsequently amended on 14 August 2014 to increase the amount of clearing authorised to 450 hectares and extend the duration of the permit to 12 March 2021.  Sandfire Resources NL has applied to amend CPS 4132/6 to increase the clearing permit boundary by approximately 1.3 hectares. The amendment will remove Miscellaneous Licence 52/146 from the permit area and replace it with Miscellaneous Licence 52/161. This is due to a change in access routes to a water bore.

### 3. Assessment of application against clearing principles

#### Comments

Sandfire Resources NL has applied to amend CPS 4132/6 to change the permit boundary to include Miscellaneous Licence 52/161 and remove the area over Miscellaneous Licence 52/146. This change will result in the permit boundary increasing by approximately 1.3 hectares.

The amendment is to change the route to a water bore. No clearing was undertaken on Miscellaneous Licence 52/146. The new route has been chosen to utilise existing access tracks and therefore, minimise the amount of clearing required (Sandfire Resources NL, 2015).

The vegetation within the area of Miscellaneous Licence 52/161 is comprised of the same vegetation types as the area covered by Miscellaneous Licence 52/146 (Mattiske, 2010). No Threatened flora species have been recorded within the additional area (GIS Database; Mattiske, 2010). There has not been any Threatened or Priority Ecological Communities identified within the additional area (GIS Database; Mattiske, 2010).

The permit area contains the Priority flora *Hemigenia tysonii* (P3), first identified during a baseline vegetation survey (Mattiske, 2010). Post construction activities in association with the DeGrussa Project identified additional clusters of this species, and Sandfire Resources NL commissioned a detailed mapping report of *H. tysonii* within the project boundary. Mapping results included field assessments of populations and found individuals of *H. tysonii* to be in a variety of growth stages, with recruitment evident in some areas despite impacts from clearing and grazing (Sandfire Resources NL, 2014). A large population was recorded adjacent to Miscellaneous Licence 52/161 and it is likely the population extends into the northern part of this tenement (Sandfire Resources NL, 2014). This population of the species was particularly dense and dominated the understorey with over 1,000 individuals recorded (Sandfire Resources NL, 2014). Given the activities in this area will largely utilise previously disturbed areas, the proposed clearing is not expected to have a significant impact on this species.

The additional area is located within the Doolgunna former pastoral lease, which is managed by the Department of Parks and Wildlife (DPaW) (GIS Database). Given the intent of the amendment is to minimise the amount of clearing required, the proposal will not have any significant impacts on this conservation area.

The application area occurs within the Horseshoe and Three Rivers land systems (GIS Database). The Three Rivers land system is considered to be susceptible to erosion. However, the amendment of the permit boundary will not increase the risk of appreciable land degradation. A weed condition is pre-existing on the clearing permit to address the potential for land degradation as a result of weed proliferation.

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principle (f), may be at variance to Principles (g) and (h), is not likely to be at variance to Principles (a), (b), (c), (d), (i) and (j) and is not at variance to Principle (e).

<b>Methodology</b>	Mattiske (2010) Sandfire Resources NL (2014) Sandfire Resources NL (2015) GIS Database: - DPaW Tenure - Rangeland Land System Mapping
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- Threatened and Priority Flora
- Threatened and Priority Ecological Communities

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

### Comments

There are two native title claims over the area under application (WC1999/46 and WC2006/02) (Department of Aboriginal Affairs, 2016). 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*.

According to available databases there are no registered Aboriginal Sites of Significance within the application area (Department of Aboriginal Affairs, 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.

The clearing permit application was advertised on 14 December 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

**Methodology** Department of Aboriginal Affairs (2016)

## 4. References

- Department of Aboriginal Affairs (2016) Aboriginal Heritage Inquiry System. <http://maps.dia.wa.gov.au/AHIS2/> Accessed on 7 January 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 by Mattiske Consulting Pty Ltd for Sandfire Resources NL, June 2010.
- Sandfire Resources NL (2014) Priority 3 Species Vegetation Mapping Project – *Hemigenia tysonii*. Sandfire Resources NL, Perth.
- Sandfire Resources NL (2015) Supporting Information for Clearing Permit Amendment CPS 4132/7, Sandfire Resources NL, Perth, 18 November 2015.

## 5. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DPaW and DER)
<b>DER</b>	Department of Environment Regulation, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DotE</b>	Department of the Environment, Australian Government
<b>DoW</b>	Department of Water, Western Australia
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

### Definitions:

- 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.