

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7541/2

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Sandfire Resources Limited

1.3. Property details

Property: Mining Lease 52/1071

Miscellaneous Licence 52/170

Local Government Area: Shire of Meekatharra

Colloquial name: Monty Project

1.4. Application

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

157.6 Mechanical Removal Mineral Production and Associated Activities

I.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 6 May 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:

18: Low woodland; mulga (Acacia aneura); and

29: Sparse low woodland; mulga & Acacia victoriae in scattered groups.

There has been at least three flora surveys conducted over parts of the application area (Sandfire Resources, 2017). A Level 2 flora and vegetation survey was conducted over the wider project area and included the majority of the application area. This survey was undertaken in 2015 by Mattiske Consulting Pty Ltd (hereafter referred to as Mattiske) and identified and the following 13 vegetation communities (Mattiske, 2016; Sandfire Resources, 2017):

Drainage Channels

- Open scrub of Acacia aneura, Acacia pteraneura, Acacia kempeana and Acacia tetragonophylla over Psydrax latifolia, Senna artemisioides subsp. helmsii, Eremophila galeata, Ptilotus obovatus and Solanum lasiophyllum over mixed herbs over mixed grasses on flowlines on dolerite and ironstone pebbles on red/brown clay loam (Vegetation code C1);
- Low open woodland of Acacia aneura, Acacia pteraneura, 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 (Vegetation code C2);
- Scrub to thicket of Acacia pteraneura, Acacia tetragonophylla, Acacia pruinocarpa and Psydrax latifolia
 over Eremophila forrestii subsp. forrestii, Solanum lasiophyllum, Ptilotus obovatus, Aristida contorta,
 Monachather paradoxus and *Bidens bipinnata on red-brown clay soils drainage lines and seasonally
 wet low lying areas (Vegetation code C8);
- Scrub of Acacia paraneura and Acacia tetragonophylla with emergent Corymbia candida over Digitaria brownii and Eriachne mucronata on red-brown sandy clays soils in major drainage channels (Vegetation code C9);

Woodlands

 Low woodland of Acacia aneura, Acacia incurvaneura, 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 (Vegetation code LW1);

Shrublands

- Open scrub of Grevillea berryana, Acacia 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 (rarely) pebbles (Vegetation code S1);
- Open scrub of Acacia incurvaneura, Acacia pruinocarpa, Acacia mulganeura and Acacia cuthbertsonii subsp. cuthbertsonii over Eremophila forrestii subsp. forrestii, Ptilotus obovatus, Sida picklesiana (P3) and Solanum lasiophyllum on orange to red-brown clay loam soils on flats (Vegetation code S11);
- Open scrub of Acacia macraneura and Acacia incurvaneura over Ptilotus schwartzii, Ptilotus obovatus, Solanum lasiophyllum, Eremophila galeata and Sida picklesiana (P3) on red-brown clay loam soils with quartz pebbles on flats (Vegetation code S12);
- Scrub of *Acacia incurvaneura* over *Ptilotus obovatus* and *Senna glutinosa* subsp. *pruinosa* over *Aristida contorta, Sclerolaena eurotioides* and *Maireana convexa* on red-brown clay soils with ironstone and quartz rocks on flats (**Vegetation code S15**);
- Scrub to thicket of Acacia incurvaneura, Acacia pruinocarpa, Acacia mulganeura and Acacia cuthbertsonii subsp. cuthbertsonii over Eremophila forrestii subsp. forrestii, Ptilotus obovatus, Sida picklesiana (P3) and Solanum lasiophyllum on orange to red-brown clay loam soils on flats (Vegetation code S16);
- Open low shrubland of *Dodonaea pachyneura*, *Thryptomene decussata* and mixed shrubs on redbrown clay loam soils on flats and upper slopes (Vegetation code S21);
- Open low shrubland of Solanum lasiophyllum, Ptilotus obovatus, Hemigenia virescens (P3) and
 Eremophila spectabilis with emergent Grevillea berryana and mixed Acacia species over Monachather
 paradoxus, Eragrostis ?kennedyae and Aristida contorta on red-brown clay loam flats (Vegetation
 code S22);
- Scrub of Acacia sect. Juliflorae (A. mulganeura, A. incurvaneura), Acacia pruinocarpa and Grevillea berryana over Aluta maisonneuvei subsp. auriculata and Ptilotus schwartzii on red-brown rocky clay soils on slopes and ridges of hills (Vegetation code S28).

Note: Based on the preliminary mine site layout, the majority of the proposed clearing is expected to occur within vegetation community S11.

Clearing Description

Monty Project.

Sandfire Resources Limited (Sandfire) proposes to clear up to 157.6 hectares of native vegetation within an application area of approximately 1,761 hectares for the purpose of mineral production and associated activities. The project is located approximately 150 kilometres north of Meekatharra, in the Shire of Meekatharra.

Vegetation Condition

Pristine: No obvious signs of disturbance (Keighery, 1994):

To:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment

The vegetation condition was derived from a flora and vegetation survey conducted by Mattiske Consulting Pty Ltd (2016).

Clearing Permit CPS 7541/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 18 May 2017 and authorised the clearing of 157.6 hectares of native vegetation within a boundary of approximately 1,761 hectares, for the purpose of mineral production (Development of the Monty Project: Proposed activities include the construction and operation of an underground mine, Run of Mine (ROM) pad, haul roads, waste rock landforms, laydown yards, workshop and water storage infrastructure).

On 8 March 2021, the Permit Holder applied to amend CPS 7541/1 to extend the permit duration by five years.

The most recent Annual Clearing Report for this permit was received on 25 March 2021. The report indicates no clearing was undertaken during the 2020 calendar year, and that 112.21 hectares of the approved 157.6 hectares has been cleared pursuant to the permit, as of 31 December 2020.

3. Assessment of application against Clearing Principles

Comments

The Permit Holder has applied to amend the clearing permit to extend the permit duration by five years, as the project is ongoing. The size of the area approved to clear and the permit boundaries remain unchanged. A review of current environmental information indicates that this amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing (Mattiske, 2016; Sandfire Resources, 2017; 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*. The assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in previous decision reports.

Methodology

Mattiske (2016)

Sandfire Resources (2017)

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 is one native title claim over the application area (DPLH, 2021). This claim (WC2020/003) 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, 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 22 March 2021 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology

DPLH (2021)

4. References

DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS (Accessed 27 April 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.

Mattiske (2016) Flora and Vegetation of the Monty Survey Area. Report prepared for Sandfire Resources NL Ltd, by Mattiske Consulting Pty Ltd, January 2016.

Sandfire Resources (2017) Purpose Permit Application, Development of the Monty Project, Supporting Information for CPS 7541/1. Sandfire Resources NL, March 2017.

5. Glossary

Acronyms:

BC Act Biodiversity Conservation Act 2016, 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

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

EPAct Environmental Protection Act 1986, Western Australia
EPA Environmental Protection Authority, Western Australia

EPBC Act Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)

GIS Geographical Information System Hactare (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:

{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 <u>Priority species:</u>

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 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.