

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4674/2

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Chichester Metals Pty Ltd

1.3. Property details

Property: Exploration Licence 45/2652

Exploration Licence 46/590 Exploration Licence 46/664 Exploration Licence 46/611 Exploration Licence 46/612

Local Government Area: Shire of East Pilbara
Colloquial name: Fortescue Marsh Project

1.4. Application

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

28.3 Mechanical Removal Hydrological Investigations

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 29 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. Two Beard vegetation associations have been mapped within the application area (GIS Database).

29: Sparse low woodland; mulga, discontinuous in scattered groups; and

676: Succulent steppe; samphire.

The application area was surveyed in 2006 by Mattiske Consulting. The following vegetation types were identified within the application area (Mattiske Consulting, 2007):

- 2: Low Woodland to Low Open Forest of Acacia aneura var. aneura, Acacia citrinovirirdis, Acacia pruinocarpa over Acacia tetragonophylla and Psydrax latifolia over Chrysopogon fallax, Stemodia viscosa, Blumea tenella, Themeda triandra and species of Triodia and Aristida;
- **3:** Low Woodland to Low Open Forest of Acacia aneura var. aneura, Acacia pruinocarpa, Acacia tetragonophylla, Acacia tenuissima, Grevillea wickhamii subsp. aprica, Psydrax latifolia over Dodonaea petiolaris and species of Triodia and Aristida;
- **11:** Hummock grassland of *Triodia angusta* with patches of *Acacia victoriae*, *Acacia aneura* var. *aneura*, *Acacia xiphophylla* over *Atriplex codonocarpa*, *Eremophila cuneifolia* and mixed Chenopods;
- **12:** Low Halophytic shrubland of *Halosarcia auriculata* and *Halosarcia indica* subsp. *leiostachya* with associated Chenopod species of *Maireana* species and *Atriplex flabelliformis* with *Muehlenbeckia florulenta* with patches of *Acacia victoriae* and *Acacia sclerosperma* subsp. *sclerosperma*;
- **13:** Low Halophytic shrubland of *Halosarcia auriculata*, *Halosarcia indica* subsp. *leiostachya*, *Halosarcia halocnemoides* subsp. *tenuis* with patches of *Frankenia* species;
- **14:** Hummock grassland of *Trioida angusta* with patches of *Acacia victoriae* over *Atriplex codonocarpa* and mixed Chenopods and Poaceae species;
- **19:** Scrub of *Acacia xiphophylla* over *Cenchrus ciliaris, Dissocarpus paradoxus* and *Halosarcia indica* subsp. bidens:

- 20: Scrub of Acacia sericophylla over Muellerolimon salicorniaceum, Nicotiana occidentalis and Mimulus gracilis;
- **21:** Scrub of *Acacia ampliceps* over *Muellerolimon salicorniaceum, Halosarcia indica* subsp. *bidens, Nicotiana occidentalis* and *Frankenia ambita*;
- **22:** Low shrubland of *Halosarcia indica* subsp. *bidens* and *Nicotiana occidentalis* over grasses with occasional stands of *Sesbania cannabina* and *Cullen cinereum*;
- 23: Low shrubland of Frankenia ambita, Halosarcia bidens subsp. leiostachya and Eragrostis dielsii with emergent Acacia sericophylla;
- 24: Low shrubland of Halosarcia bidens subsp. leiostachya with Eragrostis dielsii;
- 25: Low shrubland of *Halosarcia auriculata*, *Halosarcia indica* subsp. *bidens* and *Frankenia ambita* over *Eragrostis dielsii*:
- 26: Low shrubland of Muellerolimon salicorniaceum and Halosarcia indica subsp. bidens;
- **27:** Low shrubland of *Maireana carnosa*, *Atriplex codonocarpa* and *Sclerolaena cuneata* over *Eragrostis dielsii* and *Trianthema turgidifolium*;
- 28: Hummock grassland of *Triodia angusta* with *Eremophila spongiocarpa* (P1) and *Halosarcia indica* subsp. bidens; and
- **29:** Hummock grassland of *Triodia angusta* with *Halosarcia bidens* subsp. *leiostachya, Cullen cinereum, Eragrostis dielsii* and emergent *Acacia synchronicia*.

Clearing Description

Fortescue Marsh Project.

Chichester Metals Pty Ltd proposes to clear up to 28.3 hectares of native vegetation within a total boundary of approximately 44.4 hectares, for the purpose of hydrological investigations. The project is located approximately 74 kilometres south-southwest of Nullagine, in the Shire of East Pilbara.

Vegetation Condition

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

To

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

Comment

The vegetation condition and descriptions were derived from a flora and vegetation survey undertaken by Mattiske Consulting (2007).

Clearing permit CPS 4674/1 was granted by the Department of Mines and Petroleum on 19 January 2012, authorising the clearing of up to 28.3 hectares of native vegetation within a boundary of approximately 44.4 hectares for the purpose of hydrological investigations.

On 17 October 2016, the permit holder applied to amend CPS 4674/1 to extend the duration of the permit.

3. Assessment of application against clearing principles

Comments

The amendment to extend the duration of the permit by five years is unlikely to result in any significant change to the environmental impacts of the proposed clearing. The size of the area approved to clear (28.3 hectares) and the permit boundary remain unchanged.

The assessment against the clearing principles remains consistent with the assessment contained in decision report CPS 4674/1.

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

Comments:

There are two Native Title Claims (WC 2005/006 and WC 2012/001) 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 that intersect with 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 Water, and the Department of Parks and Wildlife, 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)

. References	
Mattiske Consulting (2007) Flora and Vegetation near Fortescue Marshes. Report prepared for Fortescue Me	tals Group by
Mattiske Consulting, June 2007. AA (2016) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs.< http://maps.dia.wa.gov.au	/AHIS2/>
(Accessed 28 November 2016)	
eighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflo WA (Inc). Nedlands, Western Australia.	wer Society of
	Page

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 Environmental Protection Act 1986, Western Australia

EPBC Act Environment Protection and Biodiversity Conservation Act 1999 (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 Rights in Water and Irrigation Act 1914, 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.