

Clearing Permit Decision Report

1. Application details

| 1.3. Property details Property: Mining Le Miscellan Miscellan Miscellan | Permit | |
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| 1.2. Proponent details Proponent's name: Atlas Iro 1.3. Property details Property: Mining Le Miscellan Miscellan Miscellan | Permit | |
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| | East Pilbara | |
| Colloquial name: Abydos L | Link Project | |
| 1.4. Application | | |
| Clearing Area (ha) No. Trees 361 | Method of Clearing Mechanical Removal | For the purpose of: Borrow Pits, Construction of a Haul Road and Associated Infrastructure |

1.5. Decision on application

Decision on Permit Application:GrantDecision Date:14 December 2017

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. Four Beard vegetation associations have been mapped within the application area (GIS Database):

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*;93: Hummock grasslands, shrub steppe; kanji over soft spinifex;

589: Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex; and

619: Medium woodland; river gum (Eucalyptus camaldulensis).

A number of flora and vegetation surveys have been conducted across the Abydos Link site since 2001 (Eco Logical, 2012). The majority of the application area was surveyed by Trudgen et al. (2002) and Trudgen (2006; 2007a; 2007b). Mattiske (2007) summarised the previous four surveys. The remaining section of the application area was surveyed by Woodman Environmental in July 2012 and the vegetation type descriptions were aligned with Mattiske (2007) to ensure consistency. Six vegetation formations and 18 vegetation alliances were recorded during the surveys.

Open Forest to Open Woodland: Flowlines

1. Open forest to open woodland of *Eucalyptus camaldulensis*, *Melaleuca argentea* and *Eucalyptus victrix* with scattered tall shrubs of *Indigofera monophylla* over *Schoenus falcatus*, *Cyperus vaginatus* and *Triodia longiceps* sedgeland/grasslands in river beds.

Open Forest to Open Woodland: Other

2. Eucalyptus victrix scattered trees to open woodland which may include Melaleuca glomerata and Melaleuca linophylla over open to closed scrub in creek beds and low slopes.

3. Corymbia aspera scattered low trees to low open woodland in creek beds.

4. Acacia tumida high shrubland to low open forest in creeklines.

5. *Eucalyptus leucophloia* scattered low trees over patches of *Acacia* shrubs over hummock grasslands of *Triodia* species, including *T. brizoides*, *T. wiseana* and *T. epactia* on ridge slopes.

6. Corymbia hamersleyana scattered low trees to low open woodland over tall shrubs to open shrubland of Acacia spp. and Grevillea wickhamii over hummock grasslands on creek banks, flood banks and distributing

| | fans. |
|----------------------|---|
| | 7. Corymbia zygophylla and Corymbia hamersleyana scattered low trees over hummock grasslands on sandplains. |
| | 8. Terminalia canescens scattered low trees to low woodland on creek banks. |
| | 9. Atalaya hemiglauca, Acacia pruinocarpa, Ehretia saligna var. saligna, Acacia tumida, Eucalyptus ferriticola subsp. ferriticola and Ficus platypoda scattered low trees over high open shrubland on steep, rocky gorge walls. |
| | High Shrublands to Open Scrublands 10. Shrubland to open scrubland of <i>Acacia</i> species including <i>A. tumida</i> , <i>A. acradenia</i> and <i>A. orthocarpa</i> over hummock grasslands on upper and steep slopes. |
| | 11. Shrubland to closed scrubland of <i>Acacia</i> species, including <i>A. acradenia</i> , <i>A. pyrifolia</i> and <i>A. tumida</i> along small creeklines and on the adjacent parts of valley floors and distributing fans. |
| | 12. Acacia inaequilatera scattered tall shrubs to high open shrubland over Triodia brizoides hummock grasslands on ridge slopes and low hills. |
| | 13. Acacia inaequilatera scattered tall shrubs to high shrubland over Triodia wiseana hummock grasslands occurring mainly on gentle lower slopes. |
| | 14. Acacia ancistrocarpa high open shrubland to open scrub. |
| | 15. Acacia trachycarpa high open shrubland to high shrublands. |
| | Low Shrublands to Low Open Heaths 16. Low shrublands to low open heath on gentle slopes and undulating plains. |
| | Hummock Grasslands 17. Hummock grasslands on slopes and ridges. |
| | Other Grasslands and Herblands 18. Cracking clay alliance on gentle sloping plains and seasonal damplands. |
| Clearing Description | Abydos Link Project. Atlas Iron Limited proposes to clear up to 361 hectares of native vegetation within a boundary of approximately 961 hectares for the purpose of constructing a haul road and supporting infrastructure, including borrow pits, two temporary construction camps, laydown areas and water storage. The haul road is approximately 59 kilometres in length and is located approximately 85 kilometres south-east of Port Hedland within the Shire of East Pilbara. |
| 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 assessed by botanists from Trudgen and Woodman using a scale based on Trudgen (1988) and has been converted to the corresponding Keighery (1994) condition. |
| | The Abydos Link haul road will support road haulage from Atlas Iron Limited's approved Abydos DSO Project. Clearing will be undertaken with a bulldozer. Vegetation and topsoil will be removed where possible and stockpiled for use in rehabilitation. |
| | Clearing permit CPS 5343/1 was granted by the Department of Mines and Petroleum (now Department of Mines, Industry Regulation and Safety) on 24 January 2013 and authorised the clearing of 361 hectares. |

3. Assessment of application against Clearing Principles

Comments

Atlas Iron Limited has applied to amend the permit to extend the duration of the permit from 16 February 2018 to 31 December 2019. The amount of clearing authorised and the clearing permit boundary will remain the same.

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 5343/1.

Methodology

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There are two native title claims over the area under application (Department of Planning, Lands and Heritage, 2017). These claim/s 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, 2017). 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.

Methodology Department of Planning, Lands and Heritage (2017)

4. References

Department of Planning, Lands and Heritage (2017) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <u>http://maps.daa.wa.gov.au/AHIS/</u> (Accessed 5 December 2017).

- Eco Logical (2012) Native Vegetation Clearing Permit Application Abydos DSO Project: Proposed Abydos Link Project. Report prepared by Eco Logical Australia for Atlas Iron Limited, October 2012.
- 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 (2007) A Review of the Flora and Vegetation and an Assessment of Groundwater Dependent Ecosystems in the Panorama Project Survey Area. Report prepared by Mattiske Consulting for URS Australia Pty Ltd, September 2007.
- Trudgen, M. (2006) Rare Flora Searches of a Proposed Campsite, Tailings Dam and Waste Dumps and Observations on Vegetation Condition for the Panorama Project. Report prepared for CBH Resources, November 2006.
- Trudgen, M. (2007a) Response to Department of Environment and Conservation Comments, Panorama Project. Report prepared for CBH Resources, February 2007.
- Trudgen, M. (2007b) Supplementary Botanical Surveys, Rare Flora Searches, Assessment of Vegetation Condition and Identification of Groundwater Dependent Ecosystems for the Sulphur Springs Project. Report prepared for CBH Resources, July 2007.
- Woodman (2012) Abydos East Project Camp and Haul Road Corridor Flora and Vegetation Studies. Report prepared by Woodman Environmental for Atlas Iron Limited, July 2012.

5. Glossary

Acronyms:

| ВоМ | Bureau of Meteorology, Australian Government |
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| DAA | Department of Aboriginal Affairs, Western Australia (now DPLH) |
| DAFWA | Department of Agriculture and Food, Western Australia (now DPIRD) |
| DBCA | Department of Biodiversity Conservation and Attractions, Western Australia |
| DEC | Department of Environment and Conservation, Western Australia (now DBCA and DWER) |
| DEE | Department of the Environment and Energy, Australian Government |
| 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) |
| DPIRD | Department of Primary Industries and Regional Development, Western Australia |
| DPLH | Department of Planning, Lands and Heritage, Western Australia |
| DRF | Declared Rare Flora |
| DoE | Department of the Environment, Australian Government (now DEE) |
| DoW | Department of Water, Western Australia (now DWER) |
| DPaW | Department of Parks and Wildlife, Western Australia (now DBCA) |
| DSEWPaC | Department of Sustainability, Environment, Water, Population and Communities (now DEE) |
| DWER | Department of Water and Environmental Regulation, Western Australia |
| 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 (2017) 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 1950*.

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 1950*.

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.