Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5564/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Atlas Iron Limited**

1.3. Property details

Property: Mining Lease 45/351
Mining Lease 45/381
Mining Lease 45/923
Local Government Area: Town of Port Hedland
Colloquial name: Wodgina DSO Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
173		Mechanical Removal	Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 21 November 2013

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. One Beard vegetation association has been mapped within the application area (GIS Database):

626: Hummock grasslands, shrub-steppe; kanji over soft spinifex & *Triodia brizioides*.

Outback Ecology (2009) and Woodman Environmental (2012) have conducted flora surveys over the application area. Woodman Environmental (2013) has merged the data from both surveys and identified the following six vegetation communities as occurring within the application area:

1. Tall to mid sparse shrubland or isolated clumps of shrubs of *Acacia inaequilatera* and *Grevillea wickhamii* over mid to low open shrubland to isolated clumps of shrubs of *Acacia acradenia* over mid to low mixed closed hummock grassland to open hummock grassland of mixed species of *Triodia* dominated by *Triodia epactia* on red or brown clay loam, sandy loam, loam or sand with ironstone, quartz, or granite fragments on plains to hillocks.

2. Low closed hummock grassland to open hummock grassland of *Triodia wiseana* often with *Triodia* aff. *basedowii* with tall to low isolated clumps of shrubs of mixed *Acacia* species dominated by *Acacia acradenia* and *Acacia inaequilatera* on brown sandy loam with granite or calcrete fragments on lower to upperslopes.

3. Low isolated clumps of trees of mixed species (*Terminalia supranitifolia* (P3), *Eucalyptus leucophloia* and *Ficus brachypoda*) over tall to low open shrubland to isolated clumps of shrubs of *Acacia acradenia* and *Grevillea wickhamii* over low isolated clumps of shrubs of *Indigofera monophylla* over low open hummock grassland of *Triodia wiseana* and *Triodia epactia* on red loam with ironstone course fragments on midslopes to crests.

4. Mid to low closed hummock grassland to open hummock grassland of *Triodia wiseana* with tall to low isolated clumps of shrubs of mixed *Acacia* species (*Acacia acradenia, Acaica inaequifolia* and *Acaica pyrifolia* var. *pyrifolia)* on brown sandy loam or red loam with granite or ironstone coarse fragments on very steep to precipitous upperslopes and hillocks.

5. Low open woodland to isolated clumps of trees of *Corymbia hamersleyana* and/or *Eucalyptus victrix* over tall open shrubland to isolated clumps of shrubs of mixed *Acacia* species dominated by *Acacia tumida* var. *pilbarensis* over mid to low open shrubland to isolated clumps of shrubs of *Indigofera monophylla*, *Cajanus cinereus*, *Phyllanthus maderaspatensis* and *Notoleptopus decaisnei* over mid isolated clumps of tussock grasses of *Cymbopogon ambiguus* over mid to low hummock grassland to isolated clumps of hummock grasses of mixed *Triodia* species dominated by *Triodia epactia* on red or brown loam, clay loam or sandy loam on major drainage lines.

6. Tall shrubland to isolated clumps of shrubs of *Acacia ancistrocarpa* and *Acacia tumida* var. *pilbarensis* over mid to low hummock grassland to isolated clumps of hummock grasses of mixed *Triodia* species

dominated by *Triodia epactia* with low isolated clumps of trees of *Corymbia hamersleyana* on brown sandy loam on minor drainage lines and plains.

Clearing Description Wodgina DSO Project – Stage 3. Atlas Iron Limited has applied to clear up to 173 hectares of native vegetation, within a total application boundary of approximately 221 hectares, for the purpose of mineral production. The proposed clearing is located approximately 60 kilometres south of Port Hedland.

Vegetation Condition Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

Comment Clearing for mineral production includes the provision of mine pits, a waste rock dump, roads, topsoil storage and water storage.

3. Assessment of application against clearing principles

Comments Atlas Iron Ltd has applied to amend the reporting date on the permit from 31 July to 31 October, so that it is aligned with pre-existing clearing permits for the project area. There are no additional environmental impacts associated with this amendment. Therefore, the assessment against the clearing principles is consistent with the assessment in Clearing Permit Decision Report CPS 5564/1.

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

Comments There is one native title claim over the area under application: WC99/3 (GIS Database). This claim was registered with the NNTT on behalf of the claimant group on 22 April 1999. 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 several registered Aboriginal Sites of Significance within the application area (GIS Database). 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 (formerly the Department of Environment and Conservation) 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 GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims – Determined by the Federal Court

4. References

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Outback Ecology (2009) Wodgina DSO Project Flora and Vegetation Assessment. Unpublished report prepared for Atlas Iron Limited dated October 2009.

Woodman Environmental (2012) Atlas iron Limited Flora and Vegetation Studies for the Hercules Project. Unpublished report for Atlas Iron Limited dated November 2012.

Woodman Environmental (2013) Atlas Iron Limited Hercules DSO Project Conservation Significant Flora Assessment. Unpublished report for Atlas Iron Limited dated January 2013.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
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
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

P1 **Priority One - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

P2 **Priority Two - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

P3 **Priority Three - Poorly Known taxa**: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.

P4 **Priority Four – Rare taxa**: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.

R **Declared Rare Flora – Extant taxa** *(= Threatened Flora = Endangered + Vulnerable)*: taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

X **Declared Rare Flora - Presumed Extinct taxa**: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

Schedule 1 **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.

Schedule 2 **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.

Schedule 3 **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.

Schedule 4 **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

P1 **Priority One: Taxa with few, poorly known populations on threatened lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P2 **Priority Two: Taxa with few, poorly known populations on conservation lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P3 **Priority Three: Taxa with several, poorly known populations, some on conservation lands**: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P4 **Priority Four: Taxa in need of monitoring**: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.

P5 **Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999)*

EX **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.

EX(W) **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

CR **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.

EN **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

VU **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

CD **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

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.