

1. Application details

1.1. Permit application details				
Permit application No.:	4073/5			
Permit type:	Purpose Permit			
1.2. Proponent details				
Proponent's name:	Robe River Mining Co Pty Ltd			
1.3. Property details				
Property:	Iron Ore (Robe River) Agreement Act 1964; Special Lease for Mining Operations 3116/4622; Document I 123390 L, Lots 63, 106 on Deposited Plan 54397 Iron Ore (Robe River) Agreement Act 1964; Special Lease for Mining Operations 3116/4623; Document I 123396 L, Lot 65 on Deposited Plan 241547, Lots 404, 405 on Deposited Plan 194355 Iron Ore (Robe River) Agreement Act 1964; Lease K 58441; Lot 500 on Deposited Plan 53285			
	3116/11346; Document I 126942 L, Lot 307 on Deposited Plan 218388 Section 91 Licence 00338-2008_3_70 under the Land Administration Act 1997 Section 91 Licence 02405-1975 4 178 under the Land Administration Act 1997			
Local Government Area:	Shire of Roebourne	-		
Colloquial name:	Cape Lambert 33 kV Powerline			
1.4 Application				
Clearing Area (ha) No. T	rees Method of Clearing	For the purpose of:		
40	Mechanical Removal	Construction and Installation of Utilities, Mine and Port		

1.5. Decision on application

Decision on Permit Application:GrantDecision Date:21 June 2012

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).

43: Low forest; mangroves (Kimberley) or thicket; mangroves (Pilbara).

157: Hummock grasslands, grass steppe; hard spinifex, Triodia wiseana.

A Rio Tinto botanist conducted a field survey of the application area on 1-2 October 2010. Previous vegetation mapping of sections of the application area by Biota were incorporated into the Rio Tinto survey (RTIO, 2010).

Eighteen vegetation types were identified in the application area, as well as a unit being assigned for heavily disturbed areas. The broad landform that the vegetation types occurred in was also recorded. The vegetation types are listed below with the landform in brackets:

SDu (Coastal dunes) - Tall shrubland of Acacia coriacea subsp. coriacea over Crotalaria cunninghamii, Rhagodia eremaea, Scaevola sericophylla and Scaevola spinescens low open shrubland over Triodia epactia hummock grassland.

CP (Coastal plains) - Open shrubland dominated by Acacia stellaticeps or Acacia bivenosa over Scaevola spinescens, Rhagodia eremaea scattered low shrubs over Triodia epactia hummock grassland and Cenchrus ciliaris tussock grassland.

AtuAstTe (Minor flowlines) - Acacia tumida var. pilbarensis tall open scrub over A. stellaticeps low shrubland over Triodia epactia hummock grassland.

AvmTYd (Mudflats) - Avicennia marina scattered low trees over Typha domingensis sedgeland.

AcAbCEc (Plains) - Acacia coriacea subsp. pendens, A. bivenosa tall shrubland over Cenchrus ciliaris tussock grassland.

	AcDIsEHsTwCEc (Rockpile) - Acacia coriacea subsp. coriacea, Dichrostachys spicata, Ehretia saligna tall open shrubland over Triodia wiseana very open hummock grassland and/or Cenchrus ciliaris very open tussock grassland.
	BZ (Rocky and sandy beach areas) - Rocky and sandy beach areas - devoid of vegetation.
	AiAcApyAbTw (Rocky and stony slopes) - Acacia inaequilatera, A. coriacea subsp. pendens scattered tall shrubs over A. pyrifolia, A. bivenosa scattered shrubs over Triodia wiseana hummock grassland.
	ApyAbTwTeTHt (Rocky and stony slopes) - <i>Acacia pyrifolia, A. bivenosa</i> scattered shrubs over <i>Triodia wiseana, T. epactia</i> hummock grassland and <i>Themeda triandra</i> very open tussock grassland.
	RH (Rocky slopes) - Rocky hillcrests and upper slope habitats inland from the coast with <i>Triodia wiseana</i> and/or <i>Triodia epactia</i> hummock grassland.
	SD (Saline drainage areas) - Halosarcia halocnemoides subsp. tenuis, H. indica subsp. leiostachya low samphire shrubland or open heath with Frankenia ambita, Muellerolimon salicorniaceum low open shrubland.
	SIZ (Saline interzone areas) - Acacia ampliceps tall shrubland, with Sesbania cannabina tall open herbland over Sporobolus virginicus tussock to closed tussock grassland.
	AcoGpTeTs (Sandy plains) - Acacia colei var. colei, Grevillea pyramidalis tall open shrubland over Triodia epactia, T. schinzii closed hummock grassland.
	AsAcScCcTsTe (Sandy plains) - Acacia sabulosa, A. coriacea subsp. pendens tall shrubland over Scaevola sericophylla, Crotalaria cunninghamii open shrubland over Triodia schinzii, T. epactia hummock grassland.
	MIAcoTeTs (Sandy plains) - <i>Melaleuca lasiandra, Acacia colei</i> var. colei tall shrubland over <i>Triodia epactia, T. schinzii</i> closed hummock grassland.
	AcoAaAbAstTwTe (Stony plains) - Acacia colei var. ileocarpa, A. ancistrocarpa tall open shrubland over A. bivenosa open shrubland over A. stellaticeps low open shrubland over Triodia wiseana, T. epactia hummock grassland.
	AbAstTe (Stony plains and lower stony slopes) - Acacia bivenosa scattered shrubs over Acacia stellaticeps low open shrubland over Triodia epactia hummock grassland.
	AamSPOv (Tidal interzone) - Acacia ampliceps tall shrubland over Sporobolus virginicus closed tussock grassland.
	HD (Heavily disturbed) - Areas which are completely degraded.
Clearing Description	Robe River Mining Co Pty Ltd has applied to clear up to 40 hectares of native vegetation within an application area of approximately 227.7 hectares for the purpose of construction of construction and installation of utilities, mine and port support infrastructure, and associated works. The utilities and infrastructure will service Rio Tinto Iron Ore's port facilities at Cape Lambert and include a powerline, water pipeline and water tank. Cape Lambert is approximately 5 kilometres north of Wickham in the Pilbara region.
	Vegetation will be cleared using dozers with their blade down. Vegetation will be stockpiled and used in rehabilitation.
Vegetation Condition	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994);
	To Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
Comment	The vegetation condition was assessed by a botanist from Rio Tinto. The vegetation conditions were described using a scale based on Trudgen (1988) and have been converted to the corresponding conditions from the Keighery (1994) scale.
	Clearing permit CPS 4073/1 was granted by the Department of Mines and Petroleum (DMP) on 20 January 2011 and authorised the clearing of 20 hectares of native vegetation. On 3 May 2011 Robe River Mining Co Pty Ltd requested an extension of approximately 0.5 hectares to the approved clearing boundary to allow for the construction and installation of up to four additional power poles. Clearing permit CPS 4073/2 was granted on 23 June 2011. Clearing permit CPS 4073/3 was granted on 29 December 2011 following an amendment application to modify the clearing permit CPS 4073/4 was granted by DMP on 29 December 2011 which changed the purpose of the permit and added additional tenure to the permit. An application for an amendment to clearing permit CPS 4073/4 was submitted by Robe River Mining Co Pty Ltd to DMP on 9 May 2012 to change the purpose of the clearing permit to 'contruction and installation of utilities, mine and port support infrastructure, and associated works'; increase the amount of clearing authorised to 40 hectares; and extend the duration of the clearing permit to 29 August 2017. The clearing permit boundary will remain the same as that approved under clearing permit CPS 4073/4.

3. Assessment of application against clearing principles

Comments

Robe River Mining Co Pty Ltd has applied to change the purpose of the clearing permit to 'contruction and installation of utiliities, mine and port support infrastructure, and associated works'; increase the amount of clearing authorised to 40 hectares; and extend the duration of the clearing permit to 29 August 2017. The clearing permit boundary will remain the same as that approved under clearing permit CPS 4073/4.

Current environmental information has been reviewed and the assessment against the clearing principles remains the same as the assessment for clearing permit CPS 4073/4. The assessment can be found in the Clearing Permit Decision Report CPS 4073/4.

The amended proposal has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principles (b) and (f), may be at variance to Principle (g), is not likely to be at variance to Principles (a), (c), (d), (h), (i) and (j) and is not at variance to Principle (e).

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

Comments

There is one Native Title Claim (WC99/14) over the area under application (GIS Database). This claim has been determined by the Federal Court on behalf of the claimant group. However, the 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 numerous 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 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.

The amendment application was advertised on 21 May 2012 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

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.

RTIO (2010) Botanical Survey of the 33 kV Power Line and Site Access Road at Cape Lambert: Native Vegetation Clearing Permit Supporting Report. Report by Rio Tinto Iron Ore, October 2010.

Trudgen, M.E. (1988) A Report on the Flora and Vegetation of the Port Kennedy Area. Unpublished Report Prepared for Bowman Bishaw and Associates, West Perth.

5. Glossary

Acronyms:

Bureau of Meteorology, Australian Government Department of Conservation and Land Management (now DEC), Western Australia Department of Agriculture and Food, Western Australia Department of Environment and Conservation, Western Australia Department of Environment and Heritage (federal based in Canberra) previously Environment Australia Department of Environment Protection (now DEC), Western Australia
Department of Indigenous Affairs

DLI	Department of Land Information, Western Australia
	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DolR	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.
- **P**3 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.
- Priority Four Rare taxa: taxa which are considered to have been adequately surveyed and which, whilst P4 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.
- Declared Rare Flora Presumed Extinct taxa: taxa which have not been collected, or otherwise verified, Х 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 Fauna that is presumed to be extinct: being fauna that is presumed to be extinct, are Schedule 2 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.
- Priority Two: Taxa with few, poorly known populations on conservation lands: Taxa which are known **P**2 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 Page 4

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.