

Clearing Permit Decision Report

1. Application details

1.1.	Permit applicatio	n details					
Permit application No.: Permit type:		5604/1	5604/1				
		Purpos	Purpose Permit				
1.2.	Proponent details	S					
Propo	nent's name:	Focus	Focus Minerals Operations Pty Ltd				
1.3.	Property details						
Property:		Mining	Mining Lease 15/645				
Local Government Area:		Shire o	Shire of Coolgardie				
Colloquial name:		CNX G	CNX Gold Mine				
1.4.	Application						
Clearir	ng Area (ha)	No. Trees	Method of Clearing	For the purpose of:			
30			Mechanical Removal	Mineral Production and associated activities			
1.5. Decision on application							
Decisi	on on Permit Applicati	on: Grant	Grant				
Decisi	on Date:	18 July	18 July 2013				

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

The clearing permit application area has been broadly mapped as Beard vegetation association 9: Medium woodland; coral gum (*Eucalyptus torquata*) & goldfields blackbutt (*E. lesouefii*) (GIS Database).

MBS Environmental (2013) conducted a Level 1 flora and fauna survey over the clearing permit application area during 2012.

The survey identified the following three main vegetation communities:

1. Low Shrubland (approximately 32% of the survey area):

Low shrublands of Acacia burkittii, Acacia erinacea and Acacia hemiteles over Eremophila oldfieldii ssp. angustifolia, Eremophila glabra ssp. glabra and Eremophila georgei with scattered shrubs of Dodonaea lobulata, Scaevola spinescens, Atriplex vesicaria, Maireana tomentosa, Senna artemisioides ssp. filifolia and Westringia rigida.

2. Open Woodland (approximately 53% of the survey area):

Open woodlands of *Eucalyptus salmonophloia*, *Eucalyptus transcontinentalis* and *Eucalyptus lesouefii* over Acacia tetragonophylla, Eremophila scoparia and Eremophila parvifolia subsp. auricampa with scattered shrubs of Atriplex vesicaria, Atriplex nummularia, Scaevola spinescens, Maireana sedifolia and Maireana pyramidata.

3. Disturbed Areas: (approximately 15% of the survey area):

Areas of mine site disturbance and rehabilitation, heavily modified by large scale mining activities, consisting of small and mostly short lived chenopods such as *Maireana* and *Atriplex* species. This vegetation type represented approximately 15% of the survey area (MBS Environmental, 2013). Focus Minerals Operations Pty Ltd has applied to clear up to 30 hectares of native vegetation within a total application area of approximately 272 hectares, for the CNX Gold Mine project.

Clearing Description

The proposed clearing is for an open mine pit and mining-related infrastructure including: waste rock dump, access roads, topsoil stockpiles, dewatering pipeline, bunds and laydown areas (Focus Minerals Ltd, 2013).

Vegetation Condition

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

Comment

The application area is located in the Goldfields Region, approximately three kilometres northeast of Coolgardie (GIS Database).

Comments	Proposal is not likely to be at variance to this Principle The clearing permit application area is located within the Eastern Goldfields subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The terrain of this subregion is largely gently undulating plains, and the vegetation is broadly described as eucalyptus and acacia shrublands and woodlands (Cowan, 2001).
	The region has a long mining history, and historical disturbance within the application area includes an existing mine pit and associated infrastructure (GIS Database; MBS Environmental, 2013). Two common weed specie were recorded in areas of existing disturbance: Ward's Weed (<i>Carrichtera annua</i>) and Burr Medic (<i>Medicago polymorpha</i>), and were likely to have been introduced by historical mining activities (MBS Environmental, 2013). 2013).
	MBS Environmental conducted a Level 1 flora survey of the CNX project area in 2012. The vegetation of the application area was described as predominantly eucalypt woodlands with saltbush and bluebush understorey (Focus Minerals, 2013). Approximately 15% of the survey area had suffered substantial disturbance from previous mining related activities. The remainder of the survey area consisted of two main vegetation communities, described as 'Low Shrubland' and 'Open Woodland'. MBS Environmental (2013) report that bot these vegetation communities are well represented in the region.
	A review of available databases identified 24 flora species of conservation significance (one Threatened Flora and 23 Priority Flora) with the potential to occur within the application area, based on known distributions (MBS Environmental, 2013). MBS Environmental (2013) determined that 14 of these Priority Flora species may occur within the application area, based on habitat preferences, while the remaining species were unlikely to occur.
	A flora survey of the application area recorded 59 flora species, from 26 genera and 17 families (MBS Environmental, 2013). No flora of conservation significance were recorded (MBS Environmental, 2013).
	A desktop survey identified seven fauna species of conservation significance (six bird species and one reptile species) with the potential to occur within the application area, based on known distributions (MBS Environmental, 2013). Following an analysis of the habitat preferences of these fauna species, MBS Environmental (2013) determined that one migratory bird species: <i>Apus pacificus</i> (Fork-tailed Swift); and one Schedule 4 (other specially protected fauna) reptile: <i>Morelia spilota imbricata</i> (Carpet Python); could possibly be found within the application area. The remaining fauna species identified in the desktop survey were considered very unlikely to be found in the area, due to a lack of suitable habitat (MBS Environmental, 2013).
	No conservation significant flora, fauna, fauna habitats or ecological communities were identified within the application area during the on-site survey (MBS Environmental, 2013).
	The vegetation association found in the application area is well represented and widespread within the region (GIS Database; MBS Environmental, 2013). Considering the level of hidtorical disturbance and generally poor vegetation condition within the application area, the vegetation proposed to be cleared is unlikely to represent higher level of biodiversity than surrounding undisturbed areas.
	Based on the above, the proposed clearing is not likely to be at variance to this Principle.
Methodology	Cowan (2001) MBS Environmental (2013) GIS Database: - IBRA WA (Regions - Sub Regions)
	- Kalgoorlie 50cm Orthomosaic - Landgate 2006 - Pre-European Vegetation - Threatened Ecological Sites Buffered
(b) Native v mainter	regetation should not be cleared if it comprises the whole or a part of, or is necessary for the nance of, a significant habitat for fauna indigenous to Western Australia.
Comments	Proposal is not likely to be at variance to this Principle MBS Environmental (2013) identified the main fauna habitats of the application area as Open Woodland and Low Shrubland. The woodland areas were considered to provide better quality fauna habitat than the shrubland areas, but neither habitat type was considered to be of high quality. These habitat types are well represented and widespread within surrounding areas and the broader region (GIS Database), and MBS Environmental (2013) report that substantial areas of similar fauna habitat in better condition occur to the north and west of the application area.
	The habitat value of the application area has been degraded by multiple disturbance, including historical minin

activities and introduced fauna species, such as goats and rabbits (MBS Environmental, 2013).

A desktop survey identified two fauna species of conservation significance Apus pacificus (Fork-tailed Swift);

and Morelia spilota imbricata (Carpet Python); which may occur in the application area. The reconnaissance survey of the application area did not identify any fauna or fauna habitats of conservation significance. Although some conservation significant fauna, including migratory birds, may pass through the application area, the area is unlikely to represent significant habitat for any native fauna species (MBS Environmental, 2013). The proposed clearing of up to 30 hectares of native vegetation within a total area of approximately 272 hectares is unlikely to have any significant impact on available fauna habitats at either a local or regional scale. Based on the above, the proposed clearing is not likely to be at variance to this Principle. Methodology MBS Environmental (2013) **GIS** Database: - Pre-European Vegetation - Threatened Fauna (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora. Comments Proposal is not likely to be at variance to this Principle A desktop survey identified one species of Threatened Flora, Gastrolobium graniticum with the potential to occur within the project area, based on known distributions (MBS Environmental, 2013). According to Florabase (Western Australian Herbarium, 2013), the range of this species includes the Avon Wheatbelt and Coolgardie IBRA Regions, and the species is usually found on rocky outcrops along drainage lines. This species has not been recorded within the application area and is considered extremely unlikely to occur due to a lack of suitable habitat (MBS Environmental, 2013). A flora survey of the application area did not record any threatened flora, or any other flora of conservation significance (MBS Environmental, 2013). Based on the above, the proposed clearing is not likely to be at variance to this Principle. Methodology MBS Environmental (2013) Western Australian Herbarium (2013) GIS Database: - Threatened and Priority Flora Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the (d) maintenance of a threatened ecological community. Comments Proposal is not likely to be at variance to this Principle There are no known Threatened Ecological Communities (TEC's) located within a 50 kilometre radius of the application area (GIS Database). A flora and vegetation survey of the application area did not identify any Threatened Ecological Communities (MBS Environmental, 2013). Based on the above, the proposed clearing is not likely to be at variance to this Principle. Methodology MBS Environmental (2013) GIS Database: - Threatened Ecological Sites Buffered Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area (e) that has been extensively cleared. Proposal is not at variance to this Principle Comments The area applied to be cleared is located within the Coolgardie IBRA bioregion (GIS Database). There is approximately 98% of Pre-European vegetation remaining within the bioregion (Government of Western Australia, 2013). The vegetation of the application area is classified as Beard vegetation association 9 - Medium woodland; coral gum (Eucalyptus torguata) & goldfields blackbutt (E. lesouefii) (GIS Database). This vegetation association remains at approximately 98% of pre-European extent in the state and also in the Coolgardie bioregion (Government of Western Australia, 2013). The area proposed to clear does not represent a significant remnant of vegetation in an area that has been extensively cleared, at either the local or regional scale.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Coolgardie	12,912,204	12,648,491	~98	Least Concern	~11
Beard vegetation associations - State					
9	240,509	235,162	~98	Least Concern	~1.5
Beard vegetation associations - Bioregion					
9	240,442	235,101	~98	Least Concern	~1.5

* Government of Western Australia (2011)

** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology Department of Natural Resources and Environment (2002)

Government of Western Australia (2013)

GIS Database:

- IBRA WA (Regions - Sub Regions)

- Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposal is at variance to this Principle

There are no permanent watercourses or wetlands within or in close proximity to the application area (GIS database).

There are two minor, non-perennial watercourses passing through the application area (GIS Database). These drainage lines are dry for most of the year, only flowing briefly following significant rainfall events (Focus Minerals Ltd, 2013). The vegetation associated with these drainage lines is the same as that of adjacent areas, and is not considered to be riparian (GIS Database; MBS Environmental, 2013).

Based on the above, the proposed clearing is at variance to this Principle. However, the proposed clearing of 30 hectares of native vegetation within a total application area of approximately 272 hectares is unlikely to result in any significant impact on the ephemeral watercourses or any other watercourses or wetlands.

Methodology Focus Minerals Ltd (2013)

MBS Environmental (2013)

GIS Database:

- Geodata, Lakes
- Hydrography, linear
- Lake Carey 50cm Orthomosaic Landgate 2006
- Pre-European Vegetation

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal is not likely to be at variance to this Principle

The soils of the application area are classifed as shallow calcareous loamy soils (GIS Database), and these soils may be susceptible to erosion if vegetation cover is removed.

The application area is gently undulating with topographic variation of approximately 10 metres across the site (GIS Database). Two seasonal drainage lines pass through the application area, only flowing briefly following significant rainfall events (GIS Database). The low annual rainfall of the region, coupled with the relatively low topographical relief of the application area minimise the potential for significant erosion downslope.

Topsoil will be removed from cleared areas and conserved in stockpiles for later use in rehabilitation (Focus Minerals Ltd, 2013). The potential for erosion will be minimised by minimising clearing and managing surface water flows on the site (Focus Minerals Ltd, 2013).

The proposed clearing of up to 30 hectares of native vegetation within a total application area of approximately 272 hectares is unlikely to result in appreciable land degradation.

	Based on the above, the proposed clearing is not likely to be at variance to this Principle.
Methodology	Focus Minerals Ltd (2013) GIS Database: - Geodata, Lakes - Hydrography, linear - Soils, Statewide - Topographic Contours, Statewide
(h) Native the env	vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on ironmental values of any adjacent or nearby conservation area.
Comments	Proposal is not likely to be at variance to this Principle The nearest conservation areas to the CNX project area are the Kangaroo Hills Timber Reserve, which is located approximately 5.5 kilometres to the south-west of the application area, and the Kurrawang Nature Reserve, which is located approximately 14 kilometres to the north-east (GIS Database). The proposed clearing is unlikely to have any impacts on the environmental values of these or any other conservation area.
Mathedalam	Based on the above, the proposed cleaning is not likely to be at variance to this Principle.
Methodology	- DEC Tenure
(i) Native in the q	vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration juality of surface or underground water.
Comments	Proposal is not likely to be at variance to this Principle
	There are two minor, non-perennial watercourses passing through the application area (GIS Database). These seasonal drainage lines are dry for most of the year, only flowing briefly following significant rainfall events (Focus Minerals Ltd, 2013). The proposed clearing is unlikely to have any significant impact on surface water quality.
	Groundwater within the application area occurs at a depth of approximately 8-11 metres (Focus Minerals Ltd, 2013). The application area falls within the Raeside-Ponton catchment area which covers a total area of approximately 1,158,953 hectares (GIS Database). The proposed clearing of 30 hectares of vegetation within this catchment area is unlikely to have any significant impact on groundwater levels or quality.
	Based on the above, the proposed clearing is not likely to be at variance to this Principle.
Methodology	Focus Minerals Ltd (2013) GIS Database:
	Hydrographic Catchments - Catchments - Public Drinking Water Source Areas (PDWSAs) - WRC Estate
(j) Native inciden	vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the ce or intensity of flooding.
Comments	Proposal is not likely to be at variance to this Principle The climate of the region is semi-arid, with a low average rainfall of approximately 200-300 millimetres per year (Cowan, 2001).
	There are no permanent water courses or waterbodies within the application area (GIS Database). Temporary localised flooding may occur during heavy rainfall events. However, the proposed clearing of 30 hectares of native vegetation within a total application area of approximately 272 hectares is unlikely to increase the incidence or intensity of natural flooding events.
	Based on the above, the proposed clearing is not likely to be at variance to this Principle.
Methodology	Cowan (2001) GIS Database: - Hydrography, linear

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

Comments

The clearing permit application was advertised on 13 May 2013 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received in relation to this application, raising concern over the proximity of the application area to a townsite boundary, and a lack of consultation between the proponent and the local Shire. A written response was provided on the matters raised.

There is one native title claim (WC10/14) over the area under application (GIS Database). This claim 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 located 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
- Native Title Claims Filed at the Federal Court
- Native Title Claims Registered with the NNTT

4. References

- Cowan, M (2001) Coolgardie 3 (COO3 Eastern Goldfields subregion) Subregional description and biodiversity values, dated August 2001. In: "A biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002". Report published by the Department of Conservation and Land Management, Perth, Western Australia.
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

Focus Minerals Ltd (2013) Native Vegetation Clearing Permit Application: CNX Gold Mine Project (M15/645 and M15/1432). Revision 1. May 2013. Focus Minerals Operations Pty Ltd, Western Australia.

Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.

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

MBS Environmental (2013) Reconnaissance (Level 1) Flora and Fauna Survey. Focus Minerals Limited Coolgardie Operations CNX Project Area. May 2013. Prepared for Focus Minerals Limited, by Martinick Bosch Sell Pty Ltd, Perth.

Western Australian Herbarium (2013) FloraBase - the Western Australian Flora. Department of Environment and Conservation. <u>http://florabase.dec.wa.gov.au/</u>

5. Glossary

Acronyms:

BoM CALM DAFWA DEC DEH	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
DLI	Department of Indigenous Analis Department of Land Information, Western Australia
DMP	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.
- 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 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 declared to be fauna that is need of special protection.
- 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 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.