



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3409/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Focus Minerals (Laverton) Pty Limited

1.3. Property details

Property: Miscellaneous Licence 38/120
Mining Lease 38/73
Mining Lease 38/261
Local Government Area: Shires of Laverton and Menzies
Colloquial name: Fish to Burtville Haul Road

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
205		Mechanical Removal	Road Construction and Maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 5 June 2014

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 and are useful to look at vegetation in a regional context. Three Beard Vegetation Associations are located within the application area (GIS Database):

- Beard Vegetation Association 18: low woodland; Mulga (*Acacia aneura*);
- Beard Vegetation Association 389: succulent steppe with open low woodland; Mulga over Saltbush;
- Beard Vegetation Association 1239: hummock grassland; open medium tree and Mallee steppe; Marble gum and Mallee (*Eucalyptus youngiana*) over hard Spinifex *Triodia basedowii* on sandplain.

Western Botanical conducted a flora and vegetation survey of the application area in July and October 2007. Sixteen vegetation units were identified within the application area (Western Botanical, 2008):

Stony Ironstone Mulga Shrublands (SIMS)

The Stony Ironstone Mulga Shrubland vegetation unit occurred on gentle slopes towards the north-western end of the proposed Fish Haul Road and occupied 3.8 kilometres or 6.6%. The substrate was typically a dusky-red sandy loam with abundant surrounded ironstone pebbles at the surface. Vegetation was dominated by *Acacia aneura* and *A. ramulosa* var. *ramulosa* scrub (15% Projected Foliage Cover (PFC), 4 metres tall) over *Eremophila forrestii* subsp. *forrestii* and *Scaevola spinescens* low scrub (20% PFC, 1 metre tall). The Priority 1 taxon, *Phyllanthus baeckeoides* was recorded within the SIMS vegetation unit.

Granite Rock Mulga Shrubland (GRMS)

Granite Rock Mulga Shrubland was restricted to a small isolated area of the proposed Fish Haul Road and occupied 0.38 kilometres or 0.67%. This vegetation unit was associated with shallow sandy soils over granite. Vegetation was dominated by *Acacia quadrimarginea* and *A. aneura* open scrub (10% PFC, 3 metres tall) over *Dodonaea rigida*, *Eremophila latrobei* subsp. *latrobei* and *Sida* sp. unisexual open low scrub (5% PFC, 1.5 metres tall).

Stony Quartz Mulga Shrubland (SQMS)

Stony Quartz Mulga Shrubland was located on slopes associated with the breakdown of granite. SQMS was restricted to several small areas along the proposed Fish Haul Road, totalling 6.2 kilometres or 10.8%. The substrate was reddish sandy loam with abundant quartz fragments at the surface. Vegetation was dominated by *Acacia aneura*, *A. burkittii* and *A. ramulosa* var. *ramulosa* scrub (15% PFC, 3.5 metres tall) over *Senna cardiosperma*, *S. artemisioides* subsp. *filifolia*, *Eremophila forrestii* var. *forrestii* and *Scaevola spinescens* low scrub (20% PFC, 1.2 metres tall).

Greenstone Acacia Shrubland (GAS)

Greenstone *Acacia* shrubland was restricted to two small areas of the proposed Fish Haul Road and occupied 0.74 kilometres or 1.3%. This vegetation unit occurred on slopes with a rocky greenstone substrate. Vegetation was dominated by *Acacia grasbyi*, *A. burkittii* and *A. ramulosa* var. *ramulosa* scrub (20% PFC, 2.5 metres tall) over

Senna cardiosperma, *Dodonaea lobulata*, *D. rigida* and *Scaevola spinescens* open low scrub (8% PFC, 1.5 metres tall) over *Halgania integerrima* and *Chrysocephalum puteale* scattered low shrubs (<2% PFC, 0.4 metres) over *Aristida contorta* and *Enneapogon caeruleus* scattered grasses (<2% PFC, 0.2 metres tall).

Calcophytic Casuarina – Acacia Woodland / Shrubland (CCAS)

Calcophytic *Casuarina* – *Acacia* Woodland Shrubland was restricted to several small areas along the length of the proposed Fish Haul Road, totalling 2.8 kilometres or 4.9%. These areas were characterised by an abundance of calcareous fragments at the surface and shallow soils. Vegetation was dominated by *Casuarina pauper* open low woodland (<10% PFC, 12 metres tall) over *Eremophila scoparia*, *Dodonaea rigida* and *Senna artemisioides* subsp. *filifolia* low scrub (20% PFC, 1.8 metres tall) over *Paspalum basicladum* and *Enneapogon caeruleus* scattered grasses (<2% PFC, 0.3 metres tall).

Stony Plain Mulga Shrubland (SPMS)

This vegetation unit was restricted to a single location occupying 1.68 kilometres or 2.95%, towards the north-eastern end of the proposed Fish Haul Road on a colluvial outwash plain. This area was close to Merolia Station and vegetation appears to have suffered from grazing in the past. Vegetation was dominated by *Acacia aneura* scrub (20% PFC, 4 metres tall) over *Eremophila forrestii* subsp. *forrestii*, *E. latrobei* subsp. *latrobei*, *Philotheca tomentella* and *Spartothamnella teucriflora* low scrub (15% PFC, to 1 metre tall) over *Enneapogon caeruleus* and *E. polyphyllus* scattered grasses (<2% PFC, 0.2 metres tall).

Mulga Wandarie Grassy Shrubland (MUWA)

This vegetation unit covered a substantial area over the length of the proposed Fish Haul Road (10.34 kilometres) totalling 18%. MUWA occurred on red sand, commonly with an abundance of ironstone gravel on the surface. Vegetation was dominated by *Acacia aneura* scrub (15% PFC, 4 metres tall) over *Ptilotus obovatus*, *Eremophila margarethae* and *Prostanthera althoferi* subsp. *althoferi* scattered shrubs (<2% PFC, to 1 metre tall) over *Eragrostis eriopoda* and *Monochather paradoxa* open grasses (25% PFC, 0.4 metres tall). Towards the south-eastern end of the Fish Haul Road the lower stratum of MUWA became dominated by smaller grasses such as *Aristida contorta*, *Enneapogon polyphyllus* and *E. caeruleus*.

Sandplain Spinifex Hummock Grassland (SASP)

This vegetation unit was extensive across the deep sandplains of the proposed Fish Haul Road occupying 14.71 kilometres or 26%. The SASP vegetation unit was complex and could be further divided into several subunits likely relating to fire history and soil depth. The subunits were not delineated at this scale. SASP was typically dominated by *Eucalyptus gongylocarpa* low woodland (15% PFC, 15 metres tall) over *Triodia basedowii* hummock grassland (40% PFC, 0.5 metres tall). Whilst the shrub component was relatively sparse, the diversity was high. Large areas of SASP were mallee dominated, predominantly *Eucalyptus youngiana* and *E. oleosa* subsp. *oleosa*. In a few restricted areas eucalypts were absent and vegetation was dominated by *Melaleuca hamata* shrubland. Three Priority 3 species of *Bossiaea eremaea*, were located in long unburnt SASP.

Sandplain Mulga – Spinifex Shrubland (SAMU)

SAMU occurred on deep sandplains and was widespread along the proposed Fish Haul Road, occupying 10.13 kilometres or 18%, it was commonly intergraded with the SASP vegetation community. Vegetation was dominated by *Acacia aneura* low woodland (20% PFC, 5 metres tall) over *Triodia basedowii* hummock grassland (35% PFC, 0.5 metres tall). The Priority 1 flora species, *Phyllanthus baeckeoides* was recorded in one location of SAMU.

Frankenia Low Shrubland (FRAN)

This vegetation unit was located at the base of duricrust breakaways, restricted to a small portion of the proposed Fish Haul Road totalling 2.2 kilometres or 3.85%. Vegetation was dominated by *Hakea preissii*, *Acacia aneura* scattered tall shrubs over *Frankenia setose*, *Maireana pyramidata* and *Atriplex bunburyana* low shrubs.

Calcophytic Pearl Bluebush Shrubland (CPBS)

CPBS occurred at a single location at the southernmost point of the proposed Fish Haul Road occupying 0.87 kilometres or 1.5%. There was clear evidence of historical pastoral activity in this area. Vegetation was dominated by *Acacia aneura* and *Eremophila oldfieldii* subsp. *angustifolia* scattered tall shrubs over *Maireana sedifolia* and *M. pyramidata* low chenopod shrubland (20% PFC, 0.8 metres tall) over scattered grasses.

Samphire Low Shrubland (SAMP)

Samphire Low Shrubland occurred at two small isolated areas along the proposed Fish Haul Road alignment on a saline flat, totalling 1.07 kilometres or 1.8%. Vegetation was dominated by two *Halosarcia* species and *Frankenia punctata* dwarf shrubland (30% PFC).

Melaleuca – Chenopod Shrubland (MCS)

MCS occurred on the dunes up from the saline flat totalling 0.54 kilometres. Vegetation was dominated by *Melaleuca xerophylla* scrub (25% PFC, 3 metres tall) over various chenopods.

Kopi Dune Woodland (KOPI)

KOPI vegetation occurred on the raised dune systems associated with saline areas, which was restricted to 0.74 kilometres or 1.3%. Vegetation was dominated by *Eucalyptus lesouefii* woodland (15% PFC, 15 metres tall) over *Eremophila scoparia*, *Dodonaea viscosa* subsp. *angustissima* and *Senna artemisioides* subsp. *filifolia* open scrub (5% PFC, 1.5 metres tall) over scattered grasses. The Priority three taxon *Melaleuca apostiba*, was collected from KOPI.

Drainage Tract Mulga Shrubland (DRMS)

DRMS was restricted to flat areas/ groves associated with drainage lines and covered 0.78 kilometres or 1.37%. Vegetation composition was highly variable and largely depended on the vegetation surrounding. This vegetation type appeared to have suffered some degree of pastoral grazing in the past. DRMS was dominated by *Acacia aneura* low forest (35% PFC, 5 metres tall) over a variable shrub layer.

Open Drainage Line Shrubland (ODR)

Vegetation was dominated by scattered *Acacia aneura* over sparse shrubs such as *Eremophila forrestii*, *Ptilotus obovatus*, and *Senna cardiosperma*. These areas covered 1.19 kilometres and showed impacts of heavy grazing from pastoral activity.

Clearing Description Fish to Burtville Haul Road.
Focus Minerals (Laverton) Pty Limited (Focus) proposed to clear up to 205 hectares of native vegetation, within a boundary of approximately 302 hectares for the purpose of road construction and maintenance. The project is located 27 kilometres south-east of Laverton and continues for approximately 61 kilometres in a south-easterly direction.

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 rating is derived from information provided by Western Botanical (2008). Western Botanical (2008) reports that vegetation has been impacted by pastoral activity and this is particularly evident around drainage flats and plains. Furthermore, fire history has played an important part in shaping the vegetation patterns, particularly on the spinifex dominated sandplains (Western Botanical, 2008).

The purpose of the proposed clearing is for the construction and maintenance of the proposed Fish to Burtville haul road (Crescent Gold, 2009). The road will be approximately 61 kilometres long and 32 metres wide with an extra 10 metres for associated infrastructure. Vegetation will be cleared by bulldozer or other heavy plant machinery and vegetation and topsoil will be stockpiled for rehabilitation purposes.

For the majority of the proposed Fish to Burtville haul road route the haul road is to be constructed parallel and directly to the east of the existing Merolia to Coggia road (Crescent Gold, 2009). Crescent Gold (2009) reports that there will be a safety gap of uncleared bush between the public road and the haul road of approximately 8 metres, however in some instances the haul road alignment will cross over the Coggia to Merolia public road.

Clearing permit CPS 3409/1 was granted to Crescent Gold Limited by the Department of Mines and Petroleum on 24 December 2009 for the clearing of 205 hectares of native vegetation for the purposes of road construction and maintenance.

On 15 April 2014, Focus Minerals (Laverton) Pty Ltd applied to amend CPS 3409/1 to change the name of the permit holder from Crescent Gold Limited to Focus Minerals (Laverton) Pty Ltd, due to a change of company name.

3. Assessment of application against clearing principles

Comments

The amendment to change the name of the permit holder will not change the environmental impacts of the proposed clearing. The size of the area approved to clear and the permit boundaries remain unchanged.

The assessment against the clearing principles remains consistent with the assessment in decision report CPS 3409/1.

Methodology

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

Comments

There are no Native Title Claims over the area under application (GIS Database). 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 two 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, Department of Parks and Wildlife 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

- Crescent Gold (2009) Clearing Permit Application Supporting Documentation, November 2009.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Western Botanical (2008) Flora and Vegetation of the Proposed Fish Haul Road Alignment. Western Botanical, Western Australia.

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.