



## 1. Application details

### 1.1. Permit application details

Permit application No.: 159/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Australian Nickel Mines NL

### 1.3. Property details

Property: L15/254

Local Government Area: Shire Of Coolgardie

Colloquial name: 2.5km haul road for access from Coolgardie Esperance Highway

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5		Mechanical Removal	Mining

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation association 9- medium woodland; coral gum (E. torquata) and Goldfields blackbutt (E. lesouefii)	The predominant community is a woodland of Eucalyptus salmonophloia occasionally interrupted by patches of Eucalyptus lesouefii	Pristine: No obvious signs of disturbance (Keighery 1994)	Advice received from CALM (2004) concluded that while there was a likelihood of DRF and/or Priority flora occurring within the notified area. Mattiske Consulting Pty Ltd (December 2004) was commissioned in November 2004 by Titan Resources Ltd to undertake a DRF and Priority Flora search and vegetation assessment of the proposed haul road route connecting Armstrong mine lease with the Coolgardie-Esperance Highway. No endangered or vulnerable species, pursuant to Section 178 of the Environmental Protection and Biodiversity Conservation Act 1999 were located during the survey. The community is not considered to be Locally Significant nor considered regionally Significant (Mattiske Consulting Pty Ltd, December 2004)
Beard vegetation association 936- Medium woodland; Salmon gum (Hopkins et al. 2001, Shepherd et al. 2004)	woodland. A total of 47 taxa comprising 17 families and 23 genera were found along the survey route. Species representation was greatest amongst Myrtaceae, Myoporaceae and Chenopodiaceae, a composition typical of the Coolgardie Botanical District (Mattiske Consulting Pty Ltd, December 2004). Only one introduced weed species was collected.		

## 3. Assessment of application against clearing principles

### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

**Comments** **Proposal is not likely to be at variance to this Principle**  
Flora and fauna surveys indicate that there is a low probability of the area being locally or regionally significant. Furthermore, the linear area under application is relatively small, incorporates an existing exploration track and is unlikely to have a large impact on the biodiversity of the area.

**Methodology** CALM (2004)  
Mattiske Consulting Pty Ltd (2004)

### (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.

**Comments** **Proposal may be at variance to this Principle**  
Species known to occur in the local area (10km radius) include:  
(b1) - Chuditch Dasyurus geoffroi, Malleefow Leipoa ocellata, Peregrine Falcon Falco peregrinus, Carpet

Python Morelia spilota imbricata  
 (b2) - Western Rosella (inland ssp) Platycercus icterotis xanthogenys, Crested Bellbird (southern) Oreoica gutturalis gutturalis, White-browed Babbler (western wheatbelt) Pomatostomus superciliosus ashbyi

**Methodology** CALM (2004)

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, significant flora.**

**Comments Proposal is not at variance to this Principle**

CALM (2004) indicated that based on CALM's Threatened and Priority Fauna Database, 12 populations of DRF (Pityrodia scabra), one population of Eremophila praecox ms (P1 species) and one population of Acacia websteri (P1 species) are known to occur within 50km radius of the area under application. Based on CALM's Herbarium Specimen Collection Database (WAHerb) Pityrodia scabra (DRF), 19 P1 species, 18 P2 species, 14 P3 species and 6 P4 species are known to occur in the local area (50 km radius). Subsequent to this report a site specific survey was conducted by Mattiske Consulting Pty Ltd (2004). This survey indicated that No Declared Rare Flora species, pursuant to Subsection 2 of Section 23F of the Wildlife Conservation Act (1950) and listed by the Department of Conservation and Land Management (2004), were located during the survey. No Priority Species were located during the survey. Furthermore, no endangered or vulnerable species, pursuant to s178 of the Environmental Protection and Biodiversity Conservation Act (2000) were located during the survey.

**Methodology** CALM (2004)  
 Mattiske Consulting Pty Ltd (2004)

**(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significant ecological community.**

**Comments Proposal is not at variance to this Principle**

No threatened ecological communities have been recorded within or near to the project area.

**Methodology** GIS databases:  
 - Threatened Ecological Community Database - CALM 15/07/03

**(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.**

**Comments Proposal is not at variance to this Principle**

The vegetation under application is well represented.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in reserves/CALM-managed land
IBRA Bioregion- Coolgardie	12,917,718	12,719,084	98.5	Least concern	
Beard veg type- 9	250,894	250,183	99.7	Least concern	3.0
Beard veg type- 936	1,016,210	906,826	89.2	Least concern	2.3

\* (Shepherd et al. 2001)

\*\* (Department of Natural Resources and Environment 2002)

**Methodology** Shepherd et al. (2001).  
 GIS database: Pre-European Vegetation - DA 01/01.

**(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 not at variance to this Principle**

There are no watercourses or wetlands that are likely to be impacted by the clearing under application.

**Methodology** GIS database: Hydrography, linear - DOE 01/02/04.

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

**Comments Proposal is not at variance to this Principle**

Advice from the Commissioner for Soil and Land Conservation (DAWA 2004) indicates that the proposed clearing is not likely to cause appreciable on site or off site land degradation.

**Methodology** DAWA (2004)

**(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.**

**Comments** **Proposal is not at variance to this Principle**  
 CALM (2004) reports a low probability of the proposed clearing being at variance with this Principle. No CALM managed conservation area are known to occur within a 10km radius.

**Methodology** CALM (2004)  
 GIS databases: CALM Managed Lands and Water - CALM 01/08/04  
 Cadastre - DLI 1/09/04

**(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.**

**Comments** **Proposal is not at variance to this Principle**  
 There are no proclaimed catchments or groundwater dependent ecosystems in the nearby area. Ground water in this area is saline to hypersaline. Sensitive drainage construction should mitigate any impacts on surface water flow.

**Methodology** GIS databases:  
 - Public Drinking Water Source Areas (PDWSAs) - DoE 01/06/04.

**(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.**

**Comments** **Proposal is not at variance to this Principle**  
 The small area of clearing is not likely to affect flood height or duration.

**Methodology** DAWA (2004)

**Planning instrument or other matter.**

**Comments** The proposal is not inconsistent with any planning instrument.

**4. Assessor's recommendations**

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	5	Grant	<p>The proposal may be at variance with Principle b. Given that the linear area under application is relatively small and incorporates an existing exploration track, is unlikely to have a large impact on the habitat for fauna. It is therefore recommended that permission to clear the native vegetation as applied be granted.</p> <p>DoIR recommends that standard environmental conditions, where appropriate, will be applied to Australian Nickel Mines NL L15/254 as part of their Mining Act approval. CALM advises</p> <ul style="list-style-type: none"> <li>- the Forest Products Commission should be notified on the intent to clear any Santalum spicatum (Sandalwood),</li> <li>- that road construction through any natural streamlines are designed such that drainage is not affected,</li> <li>- that dust generated from the mining process or vehicle movement along any road does not impact on the surrounding vegetation and</li> <li>- that the use of saline water for the mining process or dust suppression does not impact on surrounding vegetation.</li> </ul>

## 5. References

- CALM (2004) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref CEO1666/04.
- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref ND331.
- 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.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske Consulting Pty Ltd (December 2004) Declared Rare and Priority Flora Search Proposed Haul Road . Armstrong Mine.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.