



## 1. Application details

### 1.1. Permit application details

Permit application No.: 388/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Black Swan Nickel Pty Ltd

### 1.3. Property details

Property: M27/200  
Local Government Area: City Of Kalgoorlie/Boulder  
Colloquial name: Black Swan Nickel

### 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 20: Low woodland; mulga mixed with <i>Allocasuarina cristata</i> & <i>Eucalyptus</i> sp. (Shepherd et al. 2001)	The flora species present in the area to be cleared are well represented in the surrounding vegetation. (MPI Nickel, 2004a)	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The aerial photography shows that the areas under application are very degraded with vegetation appearing as isolated clumps. (MPI Nickel, 2005)

## 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**  
The area under application is a small area (5ha) of a well represented vegetation association (1,552,021ha) which has more than 99% remaining (Shepherd et al 2001). The area is highly disturbed as it is in the footprint of the Black Swan Nickel processing plant. Therefore it is unlikely that the area under application would have higher biodiversity than the surrounding areas.

**Methodology** MPI Mines Ltd (2004)  
Shepherd et al. (2001)

### (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 is not likely to be at variance to this Principle**  
The area under application is within the footprint of the Black Swan Nickel processing plant. Therefore given the highly disturbed nature and the high degree of traffic around the area under application, it is unlikely to be suitable habitat for fauna.

**Methodology** MPI Mines Ltd - 2004 TRIM Ref. IN19585

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

**Comments** **Proposal is not likely to be at variance to this Principle**  
There are no Declared Rare or Priority Species within 30km of the proposed areas of clearing. The site is highly disturbed due to being in the footprint of the processing plant.

**Methodology** GIS databases: -

**(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 likely to be at variance to this Principle**  
 There are no Threatened Ecological Communities within 30km of the area under application. The area is already highly disturbed.

**Methodology** GIS databases: -  
 Threatened Ecological Communities - CALM 12/4/051

**(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 State Government is committed to the National Objectives Targets for Biodiversity Conservation 2001-2005 (AGPS 2001) which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-European (Department of Natural Resources and Environment 2002; EPA 2000). Beyond this value, species extinction is believed to occur at an exponential rate and any further clearing may have irreversible consequences for the conservation of biodiversity and is, therefore, not supported.

The vegetation at the site is a component of Beard Vegetation Association 20 of which there is 99.6% of the pre-European extent remaining (Shepherd et al. 2001, Hopkins et al. 2001). This vegetation type is therefore of least concern for biodiversity conservation (Department of Natural Resources and Environment 2002).

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation Status**	% in reserves/CALM-managed land
IBRA Bioregion - Murchison	28,206,195	28,206,195	~100	Least concern	
Shire - City of Kalgoorlie/Boulder		No information available			
Beard vegetation association:					
20	1,558,296	1,552,012	99.6	Least concern	0.0

\* Shepherd et al. (2001)

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

**Methodology** Hopkins et al. 2001  
 Shepherd et al. 2001  
 Department of Natural Resources and Environment 2002  
 EPA 2000  
 AGPS 2001

**(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 likely to be at variance to this Principle**  
 The area under application is approximately 300m from the nearest drainage line and is separated from it by processing plant infrastructure. The nearest salt/clay pan is 6-7km to the south west and does not appear to directly connect, through drainage, to the area.

**Methodology** MPI Mines Ltd - 2004 TRIM Ref. IN19585

GIS databases: -  
 Geodata, Lakes - GA 28/06/02  
 Rivers 250K - GA

**(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 area under application is within the footprint of the processing plant and open areas are controlled by the air emission conditions of the site Environmental Protection Licence. These conditions control dust emissions and therefore erosion by wind is unlikely to occur as the surface would be treated to prevent dust generating. Water erosion is also unlikely as the area is not within a drainage channel and there is little runoff during a normal rainfall season given the average annual rainfall is 250mm and the average annual evaporation rate is 2800-3000mm.

**Methodology** DoE Licence to Operate 6933/8 - DoE File L54/96

GIS databases: -  
 Evaporation Isoleths - BOM 09/98  
 Isohyets - BOM 09/98

**(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 likely to be at variance to this Principle**  
 The nearest conservation area to the proposed clearing is Bullock Holes Timber Reserve which is 11.5km to the south east. Given the distance to this conservation reserve and the small area covered by the application the clearing is not likely to be at variance with this Principle.

**Methodology** GIS databases: -  
 CALM Managed Lands and Waters - CALM 1/06/04

**(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 likely to be at variance to this Principle**  
 The groundwater of the area under application is between 14,000 - 35,000mg/L. This, with the low rainfall and high evaporation rate, makes the likelihood of impact on groundwater and surface water levels and quality unlikely.

**Methodology** GIS databases: -  
 250K Map Series, Aquifers - WRC 02/08/02  
 Groundwater Salinity, Statewide - 22/02/00

**(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 likely to be at variance to this Principle**  
 Due to the absence of watercourses and the gentle slope of the areas under application (370-390mm), it is unlikely that the clearing as proposed would affect the peak flood height or duration.

**Methodology** GIS databases: -  
 Rivers 250k -  
 Geodata Lakes 250k -  
 Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**  
 There are three Native Title Claims over the area under application by the Central East Goldfields, Maduwongga and Widji peoples. Mining tenements for purposes consistent with the clearing have been granted and the clearing will be for a purpose consistent with the granted leases. Therefore the granting of a clearing permit is not a future act under the Native Title Act.

The Department of Industry and Resources has no objection to the clearing as proposed.  
**Methodology** Direct interest letter submission - DOIR (ND617)

**4. Assessor's recommendations**

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	5	Grant	The clearing principles have all been addressed and the proposed clearing is not likely to be at variance with any of them.  The assessing officer advises that the clearing be granted.

**5. References**

AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.  
 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.  
 EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.  
 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.  
MPI Mines Ltd (2004) Documentation attached to application. TRIM Ref. IN19585  
MPI Mines Ltd, Black Swan Nickel Pty Ltd (2004a) Silver Swan and Cygnet Sulphide Nickel Project Annual Environmental Report, 1 January 2003 - 30 December 2003, File L54/96  
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.