



1. Application details

1.1. Permit application details

Permit application No.: 145/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Central Norseman Gold Corporation Ltd

1.3. Property details

Property: M63/15

Local Government Area:

Colloquial name: Bullen Decline

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4.6		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 (<i>E. torquata</i>) and Goldfields blackbutt (<i>E. lesouefii</i>) (Hopkins et al. 2001, Shepherd et al. 2001).	The previously disturbed area in the south east has been subject to rehabilitation and has scattered Eucalypt and saltbush vegetation. The undisturbed area, which is centrally located within the proposal, is characterised by a Eucalypt/Tea tree over-storey with a degraded saltbush understorey (DAWA 2004).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Vegetation condition is based on the 'undisturbed area' which makes up approximately 40% of the proposal. Vegetation condition for the disturbed areas is dependent upon the degree of rehabilitation and include areas that are good, degraded or completely degraded (Keighery 1994, DAWA 2004).

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 previously disturbed area in the north west is being temporarily used for ore storage. The previously disturbed area in the south east has been subject to rehabilitation and has scattered Eucalypt and saltbush vegetation. The undisturbed area in the centre of the area under application is characterised by a Eucalypt/Tea-tree over -storey with a degraded saltbush understorey (DAWA 2004)

Methodology Site visit (DAWA, Trim HD18925)

(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**
Approximately 60% of the area under application has been disturbed by historical mining and exploration activities. The south-eastern portion has varying degrees of rehabilitation (Rally Revegetation & Environmental Services 2004). Given the general disturbance of the area, the vegetation in the area under application is unlikely to be significant for indigenous fauna. A baseline fauna survey was conducted by Ecologia Environmental Consultants in May 1999 and reported no significant fauna or fauna habitat in the area under application (Croesus Mining NL June 2004)

Methodology Rally Revegetation & Environmental Services (2004).
Croesus Mining NL (June 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 likely to be at variance to this Principle**
No known species of Declared Rare or Priority Flora, listed by the Department of Conservation and Land Management were located in the Bullen tenement (Rally Revegetation and Environmental Services 2004).

Methodology Rally Revegetation and Environmental Services (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 likely to be at variance to this Principle**
There are no known Threatened Ecological Communities identified within 10km of the proposal. No known Threatened Plant Communities are identified within 10km of the proposal.

Methodology GIS Databases:
- Threatened Ecological Community Database - CALM 15/07/03
- Threatened Plant Communities - DEP 06/95

(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 part of Beard vegetation association 9, in the Coolgardie Bioregion in the Shire of Dundas. All categories record greater than 50% remaining and therefore of least concern (Department of Natural Resources and Environment 2002)**

Pre-European	Current Area (ha)	Remaining extent (ha)	%*	Conservation status**	In Reserves/CALM-managed land, %
IBRA Bioregion; - Coolgardie Shire - Dundas	12,917,718 9,272,500	12,719,084 <9,272,500	98.5 <100.0	Least concern Least concern	
Beard vegetation type remaining: - 9 Medium woodland; coral gum and Goldfields blackbutt	250,894	250,183	99.7	Least concern	5.7

* (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**
The nearest watercourse lies 800m to the east. No wetlands are located within 3km of the area 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 likely to be at variance to this Principle**
The proposed clearing of 4.6 ha is not likely to cause appreciable on site and off site land degradation (DAWA 2004)

Methodology Site visit.
Department of Agriculture WA Advice (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 likely to be at variance to this Principle

The area under application is located 8.5km from an unnamed timber reserve to the south.

Methodology GIS Database:
- CALM Managed Lands and Water - CALM 01/08/04

(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

Clearing of 4.6ha of vegetation is a sufficiently small area and is unlikely to effect surface or underground water. Groundwater within area of proposal is approximately 14,000-35,000mg/L.

Methodology GIS database:
- 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

The waste rock that will be dumped on the land will in itself act as a barrier to impede run-off should a significant rain event occur (Croesus 2004)

Methodology Croesus (2004)

Planning instrument or other matter.

Comments Proposal is not at variance to this Principle

Shire of Dundas (2004) has made no objection to the current clearing proposal.

Methodology Shire of Dundas (2004)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	4.6	Grant	The proposal to clear 4.6ha of native vegetation is either not at variance or is not likely to be at variance to the clearing principles. Approximately 60% of the proposal has previously been disturbed as a result of mining activity. There are high levels of native vegetation remaining within the Shire of Dundas and also within the Coolgardie Bioregion as well as 99.7% of the pre-European extent of the vegetation unit that covers the area subject to the proposal.

5. References

Croesus Mining NL (2004) Addendum to the Environmental Impact and management Plan for the Bullen Decline - Norseman - Waste Dump Extension - M63/15. DoE TRIM Ref ND517.

DAWA (2004) Land Degradation Advice. Office of the Commissioner of Soil and Land Conservation. Department of Agriculture Western Australia. DoE TRIM Ref ND479.

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.

Hastie, K. (2004) Correspondence. Shire of Dundas. DoE TRIM Ref ND196.

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

Rally Revegetation and Environmental Services (2004) Proposed Rehabilitation Monitoring Program - Bullen Waste Dump - Norseman. DoE TRIM ref ND481.

Rankine, N. (2004) Correspondence. Croesus Mining NL. DoE TRIM Ref ND503

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.