



1. Application details

1.1. Permit application details

Permit application No.: 242/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Kyarra Gold Mine Pty Ltd

1.3. Property details

Property: M51/324
Colloquial name: Mt Clere Rd, Garden Gully, 22km from Meekatharra

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		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 18: Low woodland; mulga (Acacia aneura) (Hopkins et al 2001).	The vegetation under application (6-10ha) is located on the mining tenement M51/324, located in Garden Gully on Mt Clere Rd, 22km from Meekatharra in the Meekatharra Shire. The site is on the upper slope of an inclined (slopes ~ 5%) landscape in the Wiluna Land System. The soil is shallow red earth and hard setting duplex's less than 50cm deep on weathered basalt and greenstone. The only vegetation remaining on the site is approximately 100-120 Acacia aneura (DAWA, 2004).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The land proposed to be cleared has historically been used for mining - first worked between 1909 and 1916 (P. Gokus pers. comm. Kyarra mine owner and operator, 2004) . During this period, most of the vegetation was removed. Photographs of the site (Trim ref: IN18411) indicate that the vegetation has not been restored and there is no groundcover or understorey (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 at variance to this Principle

The area under application has been used for mining purposes since 1909 (Gokus, pers. comm. 2004). Photographs of the site provided by the proponent (Kyarra Gold Mine Pty Ltd, 2004), indicate that the area has been extensively cleared and never regenerated. There is no understorey or groundcover remaining (DAWA, 2004). Given the nature of land use to date, the site does not represent an area of significant biodiversity.

Methodology DAWA, 2004.
Application for a clearing permit (area permit) - Kyarra Gold Mine 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 is not likely to be at variance to this Principle

No information was available to make an assessment of this Principle, however the historical land use (P.Gokus, pers. comm. 2004) and associated clearing of this site would suggest that the proposed clearing is not likely to be at variance to this Principle.

Methodology

(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**

A Priority 3 species, *Menkea draboides* is known to occur approximately 7.8km from the site of proposed clearing, however the area under application has had all understorey and groundcover removed and only *Acacia aneura* remains (DAWA, 2004). The area under application is therefore unlikely to contain Declared Rare Flora.

Methodology GIS databases: Declared Rare and Priority Flora List-CALM 13/08/03. (Data pertaining to pertaining to outlying mining tenements is limited and does not necessarily constitute a comprehensive listing of significant flora of the area in question).
DAWA, 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**

A Priority 3 species, *Menkea draboides* is known to occur approximately 7.8km from the site of proposed clearing, however the area under application has had all understorey and groundcover removed and only *Acacia aneura* remains (DAWA, 2004). The area under application is therefore unlikely to contain Threatened Ecological Communities.

Methodology GIS databases: Declared Rare and Priority Flora List-CALM 13/08/03, Threatened Ecological Communities-CALM 15/07/03, Environmentally Sensitive Areas-DOE 22/10/04 (Data pertaining to outlying mining tenements is limited and does not necessarily constitute a comprehensive listing of significant ecological communities of the area in question).
DAWA, 2004.

(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 the Beard vegetation association 18 and lies in the Meekatharra Shire in the Murchison Bioregion. There is greater than 50% of association 18 remaining in Western Australia. The Murchison Bioregion also has a vegetation extent greater than 50% (Shepherd et al, 2001). This vegetation type and the bioregion are therefore considered of least concern for bioregional conservation (Department of Natural Resources and Environment 2002).

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	Reserves/CALM-managed land, %
IBRA Bioregion - Murchison	28,206,195	28,206,195	100	Least concern	
Shire - Meekatharra	No information available				
Beard veg type - 18	24,675,970	24,659,110	99.9	Least concern	4.8

* (Shepherd et al, 2001)

** (Department of Natural Resources and Environment 2002)

Methodology GIS databases: Interim Biogeographic Regionalisation of Australia-EA 18/10/00, Local Government Authorities-DLI 08/07/04, Pre-European Vegetation-DA 01/01, EPA Position Paper No 2 Agriculture Region-DEP 12/00. Shepherd et al, 2001 (This reference is not up to date and the probability of a greater extent of clearing than stated is high).

(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 lies within the Murchison River basin in the Murchison River catchment. There are 2 minor non-perennial watercourses in the vicinity of the clearing. The closest is approximately 64.6m away and the second is known as Garden Gully Creek and is 416.4m away. The proponent intends to strip and stockpile vegetation and top soil for the purposes of a waste dump. The proposed clearing is relatively close to these minor creeks, however a bund wall will be constructed to contain any run off (R. Shaw, pers. comm., affiliation, 2004).

The historical land use and associated clearing of this site (P. Gokus, pers. comm., 2004) would suggest that these minor watercourses would not represent an ecosystem of significant environmental value. Therefore, the

proposed clearing is not likely to be at variance to this Principle.

Methodology GIS databases: Hydrographic Catchments-Catchments-DOE 03/04/03, Hydrography Linear-DOE 01/02/04. DAWA, 2004.

(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 removal of native vegetation will not contribute to salinity, waterlogging or flooding but may contribute to wind and water erosion (DAWA, 2004). DAWA (2004) concluded that if the vegetation is cleared to facilitate the intended land use, minimal land degradation will occur.

The area of vegetation under application is relatively small and given the historical land use and associated clearing, the removal of vegetation is not likely to be at variance to this principle.

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**

The area under application falls within a Waters and Rivers Commission Estate reserved area. This reserve is a remnant of the days when stock were moved across the country and required areas along the way to water animals. As there are no protected public drinking water areas in the vicinity of the proposed clearing, this WRC Estate is no longer considered to be a conservation area. There are no CALM managed lands within 10km (DoE, 2004) of the area under application, therefore the proposed clearing is not at variance to this Principle.

Methodology GIS databases: PDWSA data sets (Priority Areas - Gazetted-WRC 24/05/02 and Policy-WRC 01/11/02, Protection Zones-DoE 07/01/04, Gazetted-WRC 01/11/02 and Policy-WRC 01/11/02), CALM Regional Parks-CALM 12/04/02, WRC Estate-WRC 05/99, CALM Managed Lands & Waters-CALM 01/06/04, Proposed National Parks FMP-CALM 19/03/03, Register of National Estate-EA 28/01/03. DoE, 2004.

(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**

The area under application lies in the Murchison Basin in the Murchison Catchment. The closest bore to the proposed clearing is approximately 685.5m away and belongs to the Water Corporation. This bore is not currently operating and there are no protected public drinking water areas within close proximity of the site. Given the small scale of clearing (approximately 10ha) and the degraded state of the remaining vegetation, it is not likely that the proposed clearing will cause deterioration in the quality of surface or underground water.

Methodology GIS databases: Current WIN data sets (sites-all custodians, surface water sites-other-DEWCP and non-DEWCP, surface water sites-stream gauging-DEWCP and non-DEWCP, telemetry sites-DEWCP, uncatalogued sites-DEWCP and non-DEWCP), PWDSA data sets (priority areas-gazetted-WRC 24/05/02, priority areas-policy-WRC 01/11/02, protection zones-WRC 01/11/02, gazetted-WRC 01/11/02 and policy-WRC 01/11/02) and Public Drinking Water Source Areas (PWDSAs)-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**

DAWA (2004) state that the removal of vegetation will not contribute to flooding. Given the degraded condition of the vegetation structure remaining, it is not likely that the proposed clearing will cause or exacerbate the incidence of flooding.

Methodology DAWA, 2004.

Planning instrument or other matter.

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

The Meekatharra Shire Council have not indicated that there are any planning requirements/approvals that would affect the clearing.

Methodology

4. Assessor's recommendations

Purpose	Method Applied	area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	10	Grant	The area under application has been used for mining purposes since 1909. The area has been extensively cleared, with no understorey or groundcover remaining. Given the relatively small scale of the proposed clearing (10ha) and the degraded nature of vegetation remaining, the proposal is unlikely to be at variance with any of the environmental protection Clearing Principles.

5. References

- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref GD216.
- 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.
- Kyarra Gold Mine Pty Ltd (2004) Application for a clearing permit (area permit) – Kyarra Gold Mine Pty Ltd. DoE Trim ref IN18411.
- 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.