



1. Application details

1.1. Permit application details

Permit application No.: 449/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Agincourt Resources Ltd for Wiluna Operations Ltd

1.3. Property details

Property: M53/200
M53/96
M53/32
Local Government Area: Shire Of Wiluna
Colloquial name: Wiluna Operations

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
45		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 28 - open low woodland; mulga.	Vegetation associated with mining area is mulga low woodland/shrubland dominated by Acacia species particularly A. aneura. Other vegetation associations present include Eremophila/Shenna shrublands on shallow slopes and plains. (Supporting documentation with application TRIM ref. No IN20000)	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Early mining operations have degraded flora in Wiluna area. (Supporting documentation with application. TRIM ref. No. IN20000).
Beard vegetation association 125 - bare areas; salt lakes.			
Beard vegetation association 204 - succulent steppe with open scrub; scattered mulga and Acacia sclerosperma over salt bush and bluebush. (Hopkins et al. 2001, Shepherd et al. 2001)			

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**
Historically mining and grazing activities have degraded the vegetation in this region. (Agincourt Resources Ltd. 2005). Therefore, it is unlikely that the diversity of the vegetation under application is higher than in undisturbed areas of similar vegetation associations in the local area.

Methodology Hopkins et al. (2001)
Shepherd et al. (2001)
Agincourt Resources Ltd (2005)

(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 fauna of the Lake Way area has been depleted in numbers and diversity by both over grazing and the introduction of feral cats, foxes and dogs. A survey conducted by CSIRO in 1983 did not identify any endemic species in the local region (Agincourt Resources Limited 2005).

Methodology Agincourt Resources Ltd (2005) Supporting documentation with application TRIM ref. No IN20000.

(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 Declared Rare or Priority Flora species were identified within 10km of the area under application. Previous mining and grazing activities have degraded the vegetation in this region (Agincourt Resources 2005). It is therefore unlikely that the proposed clearing will impact on significant flora.

Methodology GIS Databases:
- Declared Rare and Priority Flora List - CALM 13/08/03
[The comprehensiveness of the database is dependant on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing].

(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**
No Threatened Ecological Communities (TECs) have been identified within 30km of the proposed clearing. Given that the region has been disturbed from historical mining activities (Agincourt Resources Ltd 2005), there appears to be a low probability of the clearing as proposed being at variance to this Principle.

Methodology Agincourt Resources Ltd (2005) Supporting documentation with application TRIM ref. No IN20000
GIS Databases:
- Threatened Ecological Communities - CALM 15/07/03
- Environmentally Sensitive Areas - DOE 22/10/04
[The comprehensiveness of the database is dependant on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing].

(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 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). The IBRA region (Murchison) and the two Beard vegetation associations, 28 and 204 within the area under application, all have over 80% vegetation remaining (Shepherd et al 2001). Therefore the clearing as proposed is not considered to be at variance with the Principle.

	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 - Wiluna	No information available				
Beard vegetation associations:					
28	355,797	355,797	~100	Least concern	0.0
204	234,593	232,975	99.3	Least concern	0.0

* Shepherd et al. (2001)

** Department of Natural Resources and Environment (2002)

Methodology Department of Natural Resources and Environment (2002)
EPA (2000)
Shepherd et al (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**
Lake Violet, a salt lake, is approximately 2km from the proposed tailings storage facility (TSF). The area between the proposed clearing area and the lake has been disturbed by the Wiluna Gold plant and previous TSFs. There are no other wetlands or watercourses in the local area.

Methodology GIS Databases:
- Rivers 25K - GA
- Geodata, Lakes - GA 28/06/02

(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 flow of water across the cleared site is of 'sheet' flow type with no defined major streams or channels (Coffey Geosciences Pty Ltd 2004). It is unlikely that the proposed clearing would cause appreciable on site and off site land degradation with the implementation of appropriate management strategies to address any resultant surface water runoff.

Methodology Coffey Geosciences Pty Ltd, 2004.

GIS Databases:

- Evaporation Isopleths - BOM 09/98
- Rainfall, Mean Annual - BOM 30/09/01

(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

No conservation reserves have been identified within 30 km of the area under application.

Methodology GIS Databases:

- CALM Managed Land and Waters - 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 at variance to this Principle

With an average annual rainfall of 200mm and an average annual evaporation rate of 3.8m there is little surface flow during normal seasonal rainfall. It is only during major rainfall events that there is any significant surface flow. Surface flow during these events tends to be relatively fresh. With high annual evaporation rates and low rainfall there is little recharge into the regional groundwater table which, at this site is between 3,000mg/l and 7,000mg/l and is considered to be brackish to saline. The property is not in a groundwater catchment area. The proposed clearing of native vegetation is unlikely to have an impact on regional surface or groundwater considering the magnitude of the regional Yilgarn-Goldfields groundwater province (>290,000 sq km) and the extent of native vegetation remaining in the region (~100%).

Methodology GIS Databases:

- Groundwater Provinces - WRC 98
- Public Drinking Water Source Areas (PDWSAs) - DOE 04/11/04
- Isohyets - BOM 09/98
- Evaporation Isopleths - BOM 09/98
- 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 at variance to this Principle

Lake Way, contained within the area under application is a salt lake. The region experiences low annual rainfall, 300mm, and high evaporation rates, 3.8m.

With an average annual rainfall of 300mm and an annual evaporation rate of 3.8m there is little surface flow during normal seasonal rains. It is only during major rainfall events that there is a likelihood of flooding for which the broad valleys and lake systems of the region are designed to compensate and sustain floodwaters. It is considered that the removal of vegetation from the site would have no impact on peak flood height or duration.

Methodology GIS Databases:

- Evaporation Isopleths - BOM 09/98
- Rainfall, Mean Annual - BOM 30/09/01

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

Comments

No comment.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mining	Mechanical Removal	45	Grant	<p>The assessable criteria have been addressed and the clearing as proposed is not at variance with the Principles. Given the historical disturbance of the area under application, it is unlikely that the clearing as proposed will have significant negative impacts on the local area. Thus, the assessing officer recommends that the permit should be granted.</p> <p>The Department of Indigenous Affairs Database indicates that there is one Aboriginal Site of Significance within the area under application. The proponent is advised to contact the Department of Indigenous Affairs re this issue.</p>

5. References

- Agincourt Resources Ltd. 1.1 Existing Environment. Supporting documentation with the application for a Clearing Permit (Purpose Permit). DoE TRIM ref IN20000.
- Coffey Geosciences Pty Ltd(2004) Tailings Storage Facility I. Wiluna Operation. Notice of Intent. Accompanied Works Approval Application (W4081) in DoE File L88/87 v 4.
- 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.
- 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.