



1. Application details

1.1. Permit application details

Permit application No.: 138/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: South Kal Mines Pty Ltd

1.3. Property details

Property: LOT 48 ON PLAN 226304 (FEYSVILLE 6431)

Local Government Area: City of Kalgoorlie/Boulder

Colloquial name: Hampton East Location 48, Goldfields Hwy.

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|-----------------------|
| 21.57 | | Cutting Burning | Mining Aquaculture |

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 Associations- 468: Medium Woodland; Salmon gums and Goldfields blackbutt. 9: Medium woodland; Coral gum (E. torquata) and Goldfield's blackbutt (E. lesouefii) | The area proposed to be cleared supports three vegetation communities which have been mapped at a 1:25000 scale. They comprise: 1) Mixed eucalypt woodland with chenopod dominated understorey on alkalime loams with calcrete nodules. Dominant species include Eucalyptus gracilis, E. griffithsii with occasional E. salmonphloia. 2) Thickets on boggy red clays in depressions. Jam thicket vegetation of Acacia acuminata. 3) Broad drainage tracts with Eucalyptus salmonophloia, E. salubris woodlands with Eremophila ionantha sclerophyll understorey. Salmon gum woodlands support E. salmonophloia, Eremophila parvifolia ssp. auricampa, Atriplex nummularia, Olearia muelleri, senna artemisioides ssp. filifolia, Westringia ridida and Scaevola spinescens (broad leaf form) (Western Botanical 2004). | Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994) | A flora survey was conducted over the area of the proposed pit and possible sub-economic stockpile and infrastructure locations. No declared rare or priority flora were identified. |

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**
No information was provided to enable an assessment against this Principle. However given information provided in the flora survey, it is unlikely that this Principle will be adversely impacted.

Methodology CALM (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 at variance to this Principle**
Clearing will cause minimal impact based on information available.

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**
Western Botanical conducted vegetation and flora assessment on 17th February 2004. The assessment concluded that 'no significant species are known to be present within or immediately adjacent to the development site, nor are they expected, given the land forms, soils and habitats present at both sites' (Western Botanical 2004). CALM has advised that they consider there to be a low likelihood of Declared Rare and Priority Flora occurring in the areas proposed to be cleared.

Methodology CALM (2004), Western Botanical (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**
The proposal is not at variance with this principle as the flora/vegetation survey did not identify the presence of a threatened ecological community (Western Botanical 2004). CALM's advice suggests that there is a low probability of the proposal being at variance with the principle (CALM 2004).

Methodology Western Botanical (2004), CALM (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 proposal is not at variance with this principle as the vegetation is well represented.

| | Pre-European % in reserves/CALM- area (ha) | Current extent (ha) | Remaining %* | Conservation status** | managed land |
|----------------------------|--|------------------------|-----------------|--------------------------|--------------|
| IBRA Bioregion -Coolgardie | 12,917,718 | 12,719,084 | 98.5 | Least Concern | |
| Beard veg type-468 | 476,124 | 476,120 | 100 | Least Concern | 0.2 |
| Beard veg type-9 | 250,894 | 250,183 | 99.7 | Least Concern | 3 |

* (Shepherd et al. 2001)
** (Department of Natural Resources and Environment 2002)

Methodology Shepherd et al (2001), Department of Natural Resources and Environment (2002)

(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 proposal is not at variance with this principle as there will not be any impacts on wetlands or watercourses.

Methodology South Kal Mines (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 at variance to this Principle**
Advice from the Commissioner for Soil and Land Conservation indicates that the proposed clearing of 21.57 hectares is not likely to cause appreciable on site and off site land degradation (CSLC 2004)

Methodology Site assessment, CSLC (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 proposal is not at variance with this principle as there are no conservation areas that are likely to be impacted by the clearing (CALM 2004)

Methodology CALM (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 proposal is not at variance with this principle as exploration drilling has shown that groundwater is generally at depths greater than 55m below ground surface and there is minor ground water flow.

Methodology South Kal Mines (2004)

(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 proposal is not at variance with this principle as the area is not prone to flooding.

Methodology South Kal Mines (2004)

(k) Planning instrument or other matter.

Comments The proposal is not at variance with any planning instrument.

Methodology

4. Assessor's recommendations

The recommendations of the Department of Environment to the CEO of the Department should be made consistent with the outcomes of the assessment by each of the agencies. Any conditions on the approval should also be outlined. These may be developed in consultation with such other agencies as required.

| Purpose | Method | Applied area (ha)/ trees | Decision | Comment / recommendation |
|-----------------------|--------------------|--------------------------|--------------|--|
| Aquaculture Mining | Burning Cutting | 21.57 | Grant | The proposal is not at variance with the clearing principles, and the applicant has nominated management procedures to mitigate impacts associated with the clearing of the native vegetation. It is recommended that the permit be granted. |

5. References

- CALM (2004) Land clearing proposal advice. Department of Conservation and Land Management Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref ND191, CEO1164/04.
- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref NI809CEO1320/04. 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.
- Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.
- 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.
- South Kal Mines (2004) Review of environmental factors for mining the BD1 open pit and expansion of the inclined shaft open pit. Unpublished report. South Kal Mines Pty Ltd, Boulder, Western Australia. DoE TRIM ref IN17980
- Western Botanical (2004) Flora, vegetation and habitats of the Harmony Gold Locations, Kambalda, WA. Part A. Location 48, Woolibar, Samphire, Location 51 and Wildcatters. Aug- Sept 2003. Unpublished report for Harmony Gold Ltd. South Kal Mines, Boulder, Western Australia. DoE TRIM ref AD53.