

Your reference Our reference Contact : MP10_0121 : FIL10/3414 : Duncan McGregor

Mr George Mobayed Mining and Industry Projects Department of Planning GPO Box 39 SYDNEY NSW 2001

Dear Mr Mobayed,

RE: Proposed Dargues Reef Gold Mine – Proponents Response to unresolved issues – MP10_0121

I refer to your electronic mail of 4 March 2011 which included the proponent's response to outstanding issues raised previously by the Department of Environment Climate Change and Water (DECCW) at the Response to Submissions (RTS) stage of the project.

The Department of Environment, Climate Change and Water (DECCW) have reviewed the additional information provided by the applicant. DECCW consider that the following conditions need to be applied to any consent that may be granted for the project.

Air Quality

The proponent has not provided adequate information regarding the smelting process, which while small, needs to assessed, so that appropriate limits can be licensed. A thorough AQIA is required in order to assess the proposal's compliance with the *Protection of the Environment Operations Act 1997*, in particular the following:

 Compliance with the statutory discharge concentration limits imposed on all plant in NSW through the *Protection of the Environment (Clean Air) Regulation 2010*. For example the limits applying to smelting as part of the primary production of non-ferrous metals (excluding aluminium) on a new scheduled premises are:

Pollutant	Maximum Allowable Concentration (mg/m³)
Total Solid Particles	50
NO _x (as NO ₂)	350
Type 1 and Type 2	
substances (in aggregate)	1
Cadmium	0.2
Mercury	0.2
Note: Other statutory discharge limits may apply to the premises.	

The Department of Environment and Climate Change is now known as the Department of Environment, Climate Change and Water

- 2. Compliance with the impact assessment criteria for ground-level concentrations (glcs) for all pollutants as listed in the approved methods; and
- 3. Minimisation of principal toxic air pollutants to the maximum extent achievable.

DECCW require a thorough and complete AQIA produced in accordance with the approved methods prior to issuing an EPL for the premises and recommend that the AQIA be produced prior to the construction.

Aboriginal Cultural Heritage

DECCW has reviewed the response from the proponent dated 3 March 2011 and advises that the response:

- a) has not provided a review of Williams (1987) and Boot (1999) but has contended that the literature review is complete as further review of these reports is unnecessary.
- b) commits to the identification and fencing of the extent of the two Aboriginal cultural heritage sites discovered during investigations for this project closest to the proposed area of disturbance.
- c) does not commit to the fencing of all known Aboriginal cultural heritage sites on the property.
- d) has provided comments regarding the significance of the sites.
- e) indicates that although the consultant wishes to lodge Aboriginal Site Recording Forms for Aboriginal cultural heritage sites discovered during investigations for this project with DECCW when the final footprint of the project has been determined, the proponent will request that these forms are lodged immediately.

Whilst the literature review has not been completed as requested, DECCW accepts the response. DECCW does not agree with fencing of only two of the five known Aboriginal cultural heritage sites on the property. The project may result in unanticipated impacts to these sites and fencing coupled with an appropriate induction program would mitigate the potential for such impacts. Whilst the response comments on the significance of the sites, the information regarding this important component of archaeological assessment is not presented in standard format and does not add value to the information provided in the original report. Nevertheless, DECCW does not intend to request further clarification on site significance. DECCW welcomes the proponent's commitment to immediately provide the Aboriginal Site Recording Forms for Aboriginal cultural heritage sites discovered during investigations for this project.

DECCW recommends that:

- 1) Aboriginal Site Recording Forms for the five Aboriginal cultural heritage sites discovered on the property during investigations for this project must be lodged with DECCW prior to project commencement for entry into the DECCW Aboriginal Heritage Information Management System.
- 2) The five known Aboriginal cultural heritage sites on the property must be fenced prior to the commencement of work on the project. The extent of each known Aboriginal cultural heritage site to be fenced should be determined by reference to the Aboriginal Site Recording Forms lodged with DECCW for those sites and in consultation with the Aboriginal stakeholders. Fencing should be erected at least 20m beyond the identified extent of each site.

- 3) The induction program for the project must include an Aboriginal cultural heritage component that identifies the five fenced Aboriginal cultural heritage sites and the need to avoid impacts within those fenced areas.
- 4) All workers entering the project area must be inducted regarding Aboriginal cultural heritage management for the project.

Biodiversity

DECCW do not agree with the proponents comments regarding potential impact on biodiversity values of forest communities as a result of the use of groundwater in the mining process.

DECCW recommend that if a consent be granted, then a condition be included that requires the proponent to develop a comprehensive Groundwater Dependent Ecosystem Management Plan. This plan should comprehensively address the following issues:

- 1. The sensitivity of offset areas, EECs, other phreatophytic vegetation and any other ecosystems (including both surface and subsurface ecosystems) to changes in groundwater levels;
- 2. The predicted impact of the proposed activities on the ecosystems referred to in 1. above;
- 3. Monitoring proposed to determine when actions are required to avoid irreversible damage to the ecosystems referred to in 1. above;
- 4. The appropriate triggers which will prompt investigative and mitigative actions to determine and avoid or mitigate damage to the ecosystems referred to in 1; and
- 5. The mitigation measures to be employed by the proponent when adverse affects are predicted to occur. These may include but should not be limited to intermittent dewatering of the mine to allow some recovery of groundwater and supplemental watering of areas of vegetation.

If you have any queries or wish to discuss this matter further, please contact myself or Duncan McGregor on 6229 7002.

Yours sincerely

DR SANDRA JONES

Head Operations Unit - South East Region Environment Protection and Regulation Group