



**Resources
& Energy**

V11/108
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Howard Reed
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Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: George Mobayed

Dear Mr Reed

**Tomingley Gold Project (09_0155)
Exhibition of Environmental Assessment**

I refer to your letter dated 8 November 2011 regarding the Alkane Resources Limited proposal to develop the Tomingley Gold Project. NSW Trade & Investment, Regional Infrastructure & Services (DTIRIS), Division of Resources & Energy (DRE) has reviewed the *Tomingley Gold Project Environmental Assessment* dated November 2011 (EA) and provides the following comments which are directed at specific areas of DRE responsibility for this proposal:

MINERAL RESOURCES

- There appears to be a discrepancy between the amount of ore treated during the life of the mine (6.56 million tonnes) compared to the volume of tailings produced (3.9 million cubic metres - section 2.7.3, page 2-50).
- Low grade ore/mineralised waste – there is no indication of where low grade ore and/or mineralised waste would be stored in the mine layout. Given that the rate of ore extraction rate varies over the life of the mine from a peak of 1.5 million tonnes to a few hundred thousand tonnes near the end of the mine life there is a need for the temporary storage of low grade ore/mineralised waste. If this material is to be sterilised by placing it onto the waste dumps then there is a significant resource utilisation issue that needs to be addressed.
- There is a lack of detail regarding the rate of ore processing given that the ore extraction rate varies significantly from year to year.

MINING TITLE

As gold is a prescribed mineral under the *Mining Act 1992*, the proponent is required to hold appropriate mining titles from DRE in order to mine this mineral. The project is within Mining Lease Application 399 and Exploration Licence 5675 held by the proponent.

REHABILITATION

Geotechnical Stability

The issue of pit stability was raised with regard to the Caloma Pit and the Newell Highway in the DRE submission to the Director General Requirements (DGRs). That issue and the related matter of the location of Waste Rock Emplacement 3 possibly within the zone of instability of the Wyoming Three open cut, **has not been addressed in the EA** or recognised as a risk in the EA risk analysis.

Final Landform

At the 2009 Planning Focus Meeting, the project concept was for three open pits. Late in 2010 Alkane submitted a revised project description outlining *four* sequentially mined open cuts and an underground operation beneath the Wyoming One Open Cut. The company was advised at the time that the retention of 4 mine voids in the post closure landform **would require justification** and that opportunities for backfilling mined out voids should be explored.

As submitted, the EA proposes a final land form consisting of four final voids that are between 100 and 180 metres deep, two each either side of and in close proximity to the Newell Highway. These voids will progressively fill with water that over time will become gradually more saline. The likely fact that the four remaining and un-rehabilitated open cuts will provide no benefit to the community and have the potential to become a long term liability is not acknowledged in the EA.

Furthermore, the EA's justification for the retention of the voids in the rehabilitated landscape is superficial as it presents no quantitative information. The justification for not utilising the Caloma (both pits) and Wyoming void spaces to store waste rock; is that gold mineralisation continues beneath and that backfilling the pits would potentially prevent future underground mining of resources. However no resource information has been submitted to substantiate these statements, nor an estimation of the value of the underground resources for each pit.

DRE would be seeking further justification for this proposed final landform.

Other Rehabilitation Considerations

The post closure proposal of leaving the 66KV substation, water pipeline, buildings and highway underpass intact upon mine closure is at this stage not acceptable, until planning approval for the subsequent uses of those facilities is obtained. Until post mine closure uses are better defined, it is appropriate to assume that mine infrastructure will be de-commissioned and removed from the site.

Rehabilitation Strategy

Figure 2.18 of the EA indicates that at mine closure there will be no revegetation of the open cut voids and surrounds. The nominated final land use for this area is stated as Native Vegetation Conservation. It is the Departments experience that an active revegetation strategy will need to be adopted to achieve the stated land use goal.

As previously discussed with the Department of Planning and Infrastructure, any planning approval should not include separate plans such as Mine Closure Plans, Landscape Management Plans and Rehabilitation Management Plans, but rather be replaced by a single plan called the Rehabilitation Plan.

The Rehabilitation Plan should address all aspects of rehabilitation, including landscape, final void management and mine closure. DRE requests that all references to Mine Closure Plans, Landscape Management Plans and Rehabilitation Management Plans referred to in the EA and previous Development Consents be replaced by the Rehabilitation Plan as required by the Rehabilitation and Environmental Management Plan (REMP) process under the Mining Act.

In conclusion, DRE does not support the EA in its present form. Consideration will need be given to the following issues:

- More information regarding in-situ resources to provide justification for not back filling Caloma, Caloma 2 and Wyoming 2 voids.
- The location of Waste Rock Emplacement 3 possibly within the zone of instability of the Wyoming Three O/C, as a risk in the EA risk analysis.
- An active revegetation strategy will need to be adopted to achieve the stated land use goal.

Should you have any enquires regarding this matter please contact Steve Cozens, Senior Project Officer, Industry Coordination on (02) 8289 3932.

Yours sincerely

William Hughes
A/Director
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