



Our reference: EF13/4088; DOC13/41023
Contact: Sandie Jones (02) 62297002

Planning Officer
Mining Projects
Department of Planning and Infrastructure
SYDNEY NSW 2000

Attention: Alice Smith

Dear Ms Smith

Dargues Gold Mine Proposed Modification 2, (Major Project 10_0054 MOD2)

Thank you for your email notification to the Environment Protection Authority (EPA) received on 7 August 2013 regarding the Public Exhibition of the proposed project modification of the Dargues Reef Gold Project (10_0054 MOD 2).

The EPA has reviewed the Environmental Assessment (EA) from Unity Mining Limited (Unity) and provides the following comments:

Noise

It appears from the noise assessment undertaken by Spectrum Acoustics and detailed in their letter dated 11 July 2013 that the re-assessment of noise for the modification was based on the parameters and layout used in the 2010 noise modelling. The EPA understands from correspondence on 14 March 2013 from Unity that attended noise monitoring undertaken by SLR Consulting on behalf of Big Island Mining (BIM) indicated that exceedance of noise limits was recorded from three sensitive receivers, R27, R29 and R108.

Given that BIM were aware that actual noise levels were higher than those predicted by the original noise modelling, the EPA would expect that any new noise model run for this modification would have been calibrated against actual noise measurements. The EPA therefore recommend that noise modelling done in support of the proposed modification be calibrated using actual measurements recorded by BIM or its consultants as part of the noise monitoring for the premises. This will enable any potential noise issues to sensitive receivers to be identified and mitigation measures developed.

Increase in the on-site storage of hydrocarbon

The EPA notes that the proposed modification includes an increase in the volume of diesel that will be stored on the premises from 50 000 L to 68 000L. It is a requirement that this diesel is stored and dispensed in accordance with the relevant Australian Standard and fuel storage and refuelling areas are bunded appropriately.

Sediment and Erosion Control

The EPA notes that one of the objectives of the proposed modification is to "*enhance the sediment and erosion control capabilities of the Project.*"

The EPA has concerns regarding the adequacy of previous stormwater assessments, particularly as sediment laden water has been discharged from the premises into Major's Creek on multiple occasions through the construction phase of the project without any approved water discharge points being included in the EPL.

Rather than "*verify*" assumptions used in the preparation of the *Sediment and Erosion Control Plan*, as stated in Section 4.5, page 48 of the EA, the EPA requires a complete review of the design capacity of existing erosion, sediment and stormwater management controls and their adequacy for capturing run-off generated on the site. Given the multiple times that sediment laden water has discharged from the premises, the assumptions of the current stormwater management practices and sediment and erosion control plan appear inadequate and require testing against reasonable performance standards which could be expected at any discharge location to the environment. This recommendation is consistent with a recent Pollution Reduction Program (PRP) that was placed on the EPL.

As provided in previous correspondence to the proponent this review needs to involve consideration of:

- i. The Average Recurrence Interval (ARI) of rainfall at the premises;
- ii. Meteorological data relevant to the premises;
- iii. The physical properties and behavioural characteristics of soils present at the premises;
- iv. Appropriate basin design;
- v. Appropriate drain capacity and design;
- vi. An assessment of the capacity of sub-catchments within the premises to generate run-off;
- vii. The provision of dedicated stormwater detention ponds with adequate storage capacity.

No updated *Sediment and Erosion Control Plan* or *Water Management Plan* was included with the EA, so the EPA is unsure how the objective of enhanced sediment and erosion control capabilities will be demonstrated as being met through the modification. Therefore, rather, than relying on Condition 5(4) of MP10_0054, as stated in the EA, the EPA recommends that should the Department of Planning and Infrastructure (DP&I) decide to grant consent for this modification, that a new consent condition be used to capture the sediment and erosion control enhancement requirements and how these are to be documented and implemented by the proponent in conjunction with the modification approval.

If you have any queries or wish to discuss this matter further, please contact Sandie Jones, on (02) 62297002 or queanbeyan@epa.nsw.gov.au

Yours sincerely



DR SANDIE JONES
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Environment Protection Authority