Ohori, David, EMNRD

From: Myers, Kevin, OSE
Sent: Friday, November 19, 2010 3:32 PM
To: Ohori, David, EMNRD
Cc: Rappuhn, Doug H., OSE; Johnson, Mike S., OSE
Subject: NM OSE Comments RE: Freeport McMoRan Tyrone Incorporated, CCP Waiver Modification - MMD Revision 10-1, Permit No. GR010RE

David,

NM OSE Hydrology has reviewed the Closure, Closeout Plan Waiver Modification (Waivers) for Freeport McMoRan Tyrone Incorporated (FMTI) - MMD Revision 10-1, Permit No. GR010RE. On September 22, 2010, NM OSE received the MMD request for review and comment for the Waivers dated July 28, 2010. MMD requested a response within 60 days, so this response is timely.

NM OSE agrees that considerable costs may be incurred for reclamation of some waste rock piles, leach ore stockpiles and pits. Due to the lack of concurrent reclamation planning at the initial phases of open pit mining, reclamation costs may be excessive at some locations of the mine. Depending upon MMD and NMED approvals, some areas may be waived from full scale reclamation requirements.

NM OSE has no objections to the proposed Waivers.

As a clarification, NM OSE requests that FMTI consider that costs for maintenance may have been omitted for un-reclaimed, steep sloped waste rock piles, leach ore stockpiles and open pits. Without reclaiming slopes, intense precipitation events may erode piles and cause relatively small slides that represent large repairs to infrastructure (roads, ponds, pipelines, electrical and channels). These repairs and replacements would be more frequent than in areas with flatter, reclaimed slopes. If not included, the costs may eventually be passed on to taxpayers and water users in the form of a loss of water resources or increased treatment costs before putting water to beneficial use.

NM OSE has the following specific comments:

1. Pages 8-9, Section 2.2. The cost estimation methods are different for FMTI 2010 than for Chino 2003. When considering the cost estimate methodologies, the average cost ($66,000 to $139,000) between Tyrone (2010) and Chino (2003) do not appear to be comparable.

2. Page 2, Attachment A; and Page B-2, Attachment B. Using an assumption that reclaimed slopes will be 3.5 to 1 with 3.0 to1 inter bench slopes, FMTI may overestimate the earthwork costs when compared to designs that have been implemented for Tyrone reclamation. The assumptions used in life of mine calculations compared 3.0 to 1 slopes to 1.5 to 1 slopes (horizontal to vertical). FMTI should clarify or justify why slope assumptions vary within the same document.

3. Page 9, Section 2.2; Page 10, Section 2.2; Page 12, Section 3.1; Page 16, Section 3.4; and Table A-1, Appendix A. In several sections of the proposed Waivers, FMTI cites environmental unsoundness, unfavorable cost benefit analysis and potential negative economic impact on the community as the rationale for Waivers. While FMTI analyzed its costs and benefits plus potential economic impact from a loss in mine life, this cost benefit analysis lacks an assessment of the loss of natural resources, such as water.

4. Figure 1; Table A-1, Figure B1, Appendix B. The costs omit additional costs of maintenance that would be expected for un-reclaimed, steep sloped waste rock piles, leach ore stockpile and pit walls. The costs may underestimate infrastructure repairs necessary to maintain pumping locations and access in perpetuity. Due to headward erosion at the transition from un-reclaimed slopes to reclaimed top surfaces, the repair costs may be significantly different than where these reclaimed top surfaces adjoin reclaimed slopes. Steeper slopes are less stable and more susceptible to erosion than flatter slopes. FMTI assumes reclaimed areas for its operation and maintenance cost estimate of channels, pipelines, access roads and electrical transmission lines. FMTI should reconsider its assumptions about maintenance costs in un-reclaimed areas.

If you have any questions about the above comments, please contact me.

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