State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

Fernando Martinez, Director Mining and Minerals Division

December 20, 2016



Mr. Thomas L. Shelley, Manager Freeport-McMoRan Chino Mines Company P.O. Box 10 Bayard, NM 88023

RE: Additional Technical Comments on Revision 16-1 North Lampbright Stockpile, New Unit Expansion, Chino Mine, Grant County, New Mexico, Permit No.

GR009RE

Dear Mr. Shelley:

The Mining and Minerals Division ("MMD") has reviewed the reclamation cost estimate submitted by Freeport-McMoRan Chino Mines Company ("Chino"), dated September 28, 2016, and has reviewed comments from the public on proposed Revision 16-1 to the Chino Mine Permit Number GR009RE for construction of the North Lampbright Stockpile ("NLS"). All public comments received by MMD post-hearing from the public are available from MMD's website for your review (http://www.emnrd.state.nm.us/MMD/MARP/documents/PublicComments_Rev16-1NorthLampbrightStockpile_ChinoMine_GR009RE_000.pdf).

After review of the reclamation cost estimate and public comments, MMD has the following comments that are required to be addressed in writing by Chino, in order for MMD to proceed with permitting Revision 16-1:

Application for Revision 16-1 and Cost Estimate

- The application for Revision 16-1 does not specifically address 19.10.5.508.A of the Mining Act Rules. MMD requests that Chino specifically evaluate how the proposed operation of the NLS and reclamation design of the NLS is the most appropriate technology and employs best management practices.
- 2. In the document entitled "Application to Revise Mining Permit GR009RE for North Lampbright Waste Rock Stockpile" dated January 19, 2016 submitted by Chino, attachment 1 and 3 from Knight Piesold Consulting provide a conceptual level design of the "operational stcrmvvater diversion channel" proposed to the passt of the NLS. This operational channel was conceptually designed to accommodate the 100-year/24-hour storm event, which is consistent with the requirements under 19.10.5.508.B(5) NMAC.

However, at closure of the NLS, an unnamed second diversion channel approximately 5,000 feet long is proposed as shown in Appendix A within the document entitled "North Lampbright Waste Rock Stockpile Extension Closure/Closeout Plan" dated January 15, 2016. This second diversion channel runs the length of the north side of the NLS with surface flow shown to be in two directions: ~2,500 feet toward the operational stormwater diversion channel and ~2,500 feet toward the pit. The conceptual design and

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hydraulic analysis of the operational stormwater diversion channel by Knight Piesold does not appear to take into account the added surface water flow from the additional watershed that will occur at closure once the unnamed second diversion channel ties into the operational stormwater (as shown in Appendix A of the Closure/Closeout Plan).

Please address the design adequacy of the operational stormwater channel taking the added ~2,500 feet of additional channel and associated watershed into account as well as the requirements of:

- 19.10.5.508.B(4)(d)(ii) for diversions that have a watershed larger than 10 acres, diversion channels shall be designed to safely pass the peak runoff from a 10year, 24-hour precipitation event;
- 19.10.5.508.B(4)(d)(iii) for diversions that have a water shed larger than 10 acres, diversion channels shall be certified by a NM professional engineer;
- 19.10.5.508.B(5)(a) for permanent diversions, the diversion shall be adequate to safely pass the 100-year, 24-hour precipitation event.
- 3. The cost estimate for the NLS utilizes a capital indirect cost of 22.5% for the closure estimate and 17.5% for operation and maintenance. MMD has recently issued a guidance document for the calculation of indirect costs. It is MMD's understanding that FMI is not yet ready to apply this guideline to the NLS cost estimate, while the guidance document is in review by industry, New Mexico Mining Association representatives, and/or non-governmental organizations. In the meantime MMD will consider the approved Chino site-wide capital indirect cost of 39.6% to be utilized for the cost estimate. This is consistent with recently approved modifications for the North Chino Haul Road (Modification 15-2) and 3A Stockpile (Modification 14-2). Indirect costs can be re-evaluated during renewal of the site-wide Chino Closure/Closeout Plan.

Public Comments

Several public comments, which are provided on MMD's website in the hyperlink above, were received on the Revision 16-1 application that are required to be addressed by Chino in order for MMD to proceed with permitting Revision 16-1:

- 4. Please address Chino's future operational plans for leaching on top of the NLS. See GRIP comment page 2 for additional details.
- During operation of the NLS, please address how Chino proposes to characterize the waste material that will be placed in the NLS. See GRIP comment page 4 for additional details and concerns.
- 6. One of the public comments pertains to the financial assurance proposal for the NLS (see GRIP comment page 5). Please identify the financial assurance instrument that Chino will likely use for bonding the NLS.

Please provide the requested responses within 30-days after receipt of this letter.

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If you have any questions, please feel free to contact me at (505) 476-3434 or by email at david.ennis@state.nm.us.

Sincerely,

David J. (DJ) Ennis, P.G., Permit Lead

Senior Reclamation Specialist

Mining and Minerals Division

cc: Mine File (GR009RE)

Brad Reid, NMED Permit Lead

Allyson Siwik, GRIP