

State of New Mexico  
Energy, Minerals and Natural Resources Department

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Susana Martinez  
Governor

David Martin  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

Fernando Martinez, Director  
Mining and Minerals Division



August 11, 2015

Ms. Lynn Lande, Chief Environmental Engineer  
Freeport-McMoRan, Tyrone Operations  
P.O. Box 571  
Tyrone, NM 88065

**RE: Additional Comments on Little Rock Mine Expansion and Updated Closeout Plan, Revision 14-1, Permit No. GR007RE**

Dear Ms. Lande,

The New Mexico Mining and Minerals Division ("MMD") received a submittal from Freeport-McMoRan, Tyrone Operations ("Tyrone") titled, "Permit GR007RE – Little Rock Mine Existing Mining Operation, Permit Revision Application for Expansion of the Little Rock Mine", dated July 10, 2014 ("Application"). The Application letter included an Updated Closure/Closeout Plan for the Little Rock Mine ("Updated CCP"), dated June 19, 2014. MMD has assigned Revision 14-1 to process the Application and Updated CCP. MMD provided comments ("MMD Comments") on the mine expansion and Updated CCP in a letter to Tyrone, dated February 10, 2015, including comments from other state agencies and tribal entities. MMD received a letter from the New Mexico Environment Department ("NMED"), dated August 6, 2015, with additional comments on the Updated CCP (attached).

Please respond to the additional comments within 30 days of receipt of this letter.

Please contact me at (505) 476-3432 or at [David.Ohori@state.nm.us](mailto:David.Ohori@state.nm.us) if you have any questions.

Sincerely,

David Ohori, Permit Lead  
Mining Act Reclamation Program ("MARF")

Enclosure

cc: Holland Shepherd, Program Manager, MARP  
John Hall, NMED Ground Water Quality Bureau  
Allyson Siwik, Executive Director, Gila Resources Information Project

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Mine File (GR007RE)





SUSANA MARTINEZ  
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JOHN A. SANCHEZ  
Lieutenant Governor

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RYAN FLYNN  
Cabinet Secretary


BUTCH TONGATE  
Deputy Secretary

MEMORANDUM

DATE: August 6, 2015

TO: David Otori, Lead Staff, Mining Act Reclamation Program

FROM: Keith Ehlert, Lead Staff, Ground Water Quality Bureau

THROUGH: John Hall, NMED Mining Act Team Leader 

RE: **NMED Comments to Freeport McMoRan on Updated Closure Closeout Plan Associated with DP-1236 Renewal/Modification, Little Rock Mine, MMD Permit GR007RE**

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The New Mexico Environment Department (NMED) received an application dated April 2, 2015 for renewal and modification of Discharge Permit 1236 (DP-1236) from Freeport-McMoRan (FMI). NMED reviewed this application, including the updated Closure Closeout Plan (UCCP) associated with it, and provided FMI the following comments related to the CCP:

1. In Section 2.1.3, Page 7 of the UCCP it is indicated that the North Stockpile is currently being colonized by native vegetation and no additional reclamation measures are proposed for portions that will remain at the EOY 2017. However, the Little Rock Mine Amendment to the Mine Plan of Operations (AMPO) dated September, 2013 indicates that the North Stockpile will be removed. Please clarify.
2. In Section 4.1, page 25 of the UCCP it is indicated the second in-pit stockpile (North In-pit Stockpile) is projected to be developed in 2018. However, Figure 2-1 shows that the North In-pit Stockpile is already under construction by the EOY 2017. Please clarify.
3. Sheet 5 of Appendix A of the UCCP shows post reclamation areas to be vegetated. The topography shown on Sheet 5 indicates that at EOY 2017 the central portion of the North In-pit Stockpile will be a closed basin, which will likely pond storm water. It has been NMED's experience that ponded water inhibits vegetation growth.

4. In Section 2.3.2., Page 11 of the UCCP it is indicated Figure 2-5 is a generalized geologic map showing exposed geology associated with the open pit at EOY 2017. However, Figure 2-5 shows a cross-section through the Little Rock Mine, and no geologic maps showing exposed geology in the open pit at EOY 2017 are included with the UCCP. NMED requests that the Applicant provide a geologic map showing exposed open pit geology at EOY 2017.
5. In Section 5.1, Page 31 of the UCCP, it is indicated that storm water from the in-pit stockpile area will be routed along the inside of the benches to the stockpile and pit wall contact and down to the pit sump. Additionally, in a response to Mining and Minerals Division (MMD) comments regarding the UCCP, the Applicant provided a response letter dated July 21, 2015 which includes a map showing that the northwest diversion channel along the northwest margin of the reclaimed copper leach stockpile will drain over the high wall, in waterfall fashion, onto the reclaimed in-pit stockpile, and flow along the contact between the stockpile and pit wall into the pit lake. Please indicate what measures will be taken to insure that the concentrated flow along the contacts does not result in erosion of the stockpile.
6. In Section 5.1.1 Page 32, of the UCCP it is indicated that four additional groundwater monitoring wells will be installed by EOY 2017. Part A of the application for renewal and modification of DP-1236 includes an attachment consisting of a monitoring well installation plan which indicates six new monitoring wells will be installed. The proposed location of the six monitoring wells was agreed upon during a March 19, 2015 meeting between NMED and the Applicant. The plan does not indicate when the wells will be installed. The six new monitoring wells shall be installed within six months of the effective date of renewal and modification of DP-1236.

NMED understands that a hearing has been scheduled for Revision 14-1 for this facility in early September. NMED will provide a determination after the above questions have been addressed, the hearing record is closed, and all information necessary to issue the Mining Act Reclamation Program permit has been received.

If you have any questions, please contact Keith Ehlert at (505) 827-9687 or John Hall at (505) 827-1049.

cc: Holland Shepherd, Program Manager, EMNRD-MMD (signed PDF: holland.shepherd@state.nm.us)  
Kurt Vollbrecht, Program Manager, MECS (signed PDF: kurt.vollbrecht@state.nm.us)  
Keith Ehlert, Lead Staff, MECS (signed PDF: keithw.ehlert@state.nm.us)