



Tyrone Operations  
P.O. Box 571  
Tyrone, NM 88065



January 31, 2017

**Certified Mail #9171999991703580007147**  
**Return Receipt Requested**

Mr. David Ohori  
Energy, Minerals and Natural Resources Department  
Mining and Minerals Division  
Mining Act Reclamation Program  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Dear Mr. Ohori:

**Re: Freeport-McMoRan Little Rock Mine, Modification**  
**Request to Permit No. GR007RE – Condition 8.P.1 (b)**

Freeport-McMoRan Tyrone (Tyrone) is requesting to modify Condition 8.P.1 (b) of Permit No. GR007RE, which currently states “*Within 180 days of approval of this Revision the Permittee shall modify the Test Plot Study Work Plan to include the testing of organic and/or other amendments in the Test Plot Study approved or required by MMD to achieve the revegetation standards of Appendix A.*”

The Little Rock Test Plots were originally constructed on the 7A Stockpile at the Tyrone Mine using Precambrian Granite overburden from the Copper Mountain Pit. When the Little Rock Test Plot work plan was originally developed (2001 with major revisions in 2004) it was impractical to access the overburden from the Little Rock Pit because mining had not started and the haul road to Tyrone was not constructed. The Copper Mountain materials were used because of their similarity to the overburden from the Little Rock Pit and the availability of materials.

Once mining at Little Rock commenced, it was possible to construct test plots using overburden from the Little Rock Pit. In August 2014, Tyrone submitted an application to update the Little Rock test plots to include the construction of the USNR test plot. The MMD tentatively agreed to the construction of the test plots, with the condition that erosion monitoring is included. The USNR test plots were constructed and seeded in 2015 and the erosion transect were installed in May 2016.

Because the MMD rejects the notion that Copper Mountain and Little Rock overburden are similar, they have requested that Tyrone emphasize the USNR test plots with respect to approval of the Precambrian Granite cover materials. Although, Tyrone does not agree that the Copper Mountain and Little Rock overburden are fundamentally different in character, the USNR test plots were constructed using improved material handling techniques and schedule for seeding (i.e., soon after earthwork construction and during

optimum months for seed germination). The USNR test plots better represent the capabilities of Precambrian Granite overburden as cover in general. Thus, Tyrone agrees that the replacement of the 7A test plots with the USNR test plots is warranted with respect to the Little Rock Permit requirements and generally with respect to the future use of Precambrian Granite overburden in reclamation.

Tyrone suggests Condition 8.P.1 (b) of Revision 14-1 to Permit GR007RE be modified to state: *The United States Natural Resources (USNR) Test Plot Work Plan, dated November 26, 2014, will supersede the Little Rock Test Plot Work (November 15, 2000) and subsequent amendments. The USNR Test Plots must comply with the following additional conditions:*

- a. *Quantitative vegetation monitoring shall be performed in years three after seeding (2018) and five after seeding (2020). The data and results of the quantitative vegetation monitoring events shall be reported to MMD within 180 days of each quantitative vegetative monitoring event. Tyrone shall notify the MMD at least 30-days in advance of the vegetation monitoring event. Tyrone shall perform vegetation monitoring on the MMD approved vegetation reference area in conjunction with the USNR test plot vegetation monitoring in 2020. These requirements may be modified with MMD approval.*
- b. *Erosion monitoring shall be performed in accordance with the methods applied at the Tailing Dam and No. 1 Stockpile Test plots, on the erosion transects that were installed at the USNR test plots in 2016. The data and results of the erosion monitoring events shall be reported to MMD within 180 days of each erosion monitoring event. These requirements may be modified with MMD approval.*
- c. *In the event that the results of the vegetation monitoring in 2018 and 2020 do not show a trajectory (e.g. plant density, species diversity, basal cover and canopy cover) towards meeting the approved reclamation vegetation standards after the 2020 monitoring, then Tyrone shall propose changes to the Little Rock test plot work plan that include the testing of organic and/or other amendments. This requirement for the evaluation of amendments may be modified with MMD approval.*
- d. *If the results of the Little Rock test plot study indicate that alternative closeout actions are necessary to meet New Mexico Mining Act requirements, MMD may require the Permittee to submit a request to modify or revise the Permit.*

Tyrone maintains that the 7A test plots are still valuable and continue to yield important information. Tyrone will continue to monitor the vegetation and erosion behavior of these test plots.

A check in the amount of \$1,000 is attached for processing this permit modification request. At your convenience, please contact Ms. Lynn Lande at (575) 912-5235 or Ms. Rita Lloyd-Mills at (575) 912-5778 with any questions.

Sincerely,



Thomas L. Shelley, Manager  
Reclamation