

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



July 11, 2014

Certified Mail #70131090000186131713 Return Receipt Requested

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

Dear Mr. Ohori:

RE: Construction of the 9AX Borrow Material Stockpile, <u>Permit Modification 14-1, Permit No. GR010RE, Tyrone Mine</u>

Freeport-McMoRan Tyrone Inc. (Tyrone) received comments from the New Mexico Mining and Minerals Division (MMD) for the permit modification application to construct the 9AX Borrow Material Stockpile in a letter dated June 27, 2014. The application request is to place Little Rock overburden material at the proposed location for future use as reclamation borrow material to closeout mine facilities. The New Mexico Environmental Department (NMED), in a letter dated June 6, 2014, amended Discharge Permit 435 and confirmed that the stockpile is not a discharging facility. The NMED required Tyrone to characterize the material in accordance with the Little Rock Mine approved material handling plan prior to placement in the stockpile. Only material that would be suitable reclamation material will be placed in the 9AX Stockpile. In accordance with the approved material handling plan, material with acid-generating potential will be placed on a waste stockpile. The leach cap material in this stockpile will not affect ground or surface water quality. The source and geologic character of the borrow material for the 9AX Stockpile is identical to that approved to be placed in the 9A and the Little Rock in-pit stockpiles.

Below are MMD comments followed by Tyrone responses as well as a summary of other state agency comments with Tyrone responses.

MMD Comments

1. Revision 01-1 to Permit No. GROIORE approves the use of Gila Conglomerate, or other approved cover material, as cover material for the stockpiles at the Tyrone Mine, including the 9A stockpile. Revision 01-1 provides for the demonstration that alternate cover material(s) will meet MMD requirements through the test plot studies. The "leach cap" material has been proposed by Tyrone as an alternate cover material. The suitability of the leach cap material is currently undergoing evaluation in the test plot studies and the test plot studies using leach cap cover material have not yet been completed. Therefore, the use of leach cap as cover

material for the 9AX stockpile cannot be approved. In addition, the "cost savings" discussed in the Conceptual Closure Cost Estimate section of the Application, cannot be considered in the proposed modification (Modification 14-1) to Permit No. GROIORE. Please revise the cost estimate to include placement of a three foot thick cover of Gila Conglomerate on the proposed 9AX stockpile.

Tyrone Response

In 2005 after extensive testing, the MMD and NMED approved the leach cap on the basis of its physical, chemical and mineralogical similarities to the Mine Area Gila Conglomerate. Tyrone maintains that the primary difference in the leach cap and Gila Conglomerate is the angularity of the fragments. In addition to the chemical and physical testing, the 2005 approval was based on the demonstration of natural revegetation in the Little Rock Open Pit and other areas. Thus, the primary objections to the use of leach cap now seem to be predicated on vegetation performance associated with the initial seeding of the 7A test plots. Tyrone understands that the MMD believes that the materials used on the Little Rock Copper Leach Pile Reclamation are in some way different than the proposed cover materials, but the nature of the difference has not been explicitly defined.

It is Tyrone's position that the leach cap is viable cover material which will ultimately allow for the re-establishment of a self-sustaining ecosystem. The chemical and physical characteristics of the leach cap are broadly similar to the mine area Gila Conglomerate and weight of evidence supports that revegetation is achievable. Reclamation activities utilizing leach cap as cover material have proceeded with approval from the MMD, and Freeport's New Mexico Operations intends to continue to use leach cap as warranted by site specific conditions. However, in the interest of conciliation and expediency, Tyrone will concede to provide a veneer of Gila Conglomerate over the leach cap cover on the 9AX Stockpile for purposes of calculating closure costs and determining financial assurance.

Tyrone's position is that requiring financial assurance for three feet of Gila Conglomerate over a borrow material stockpile is not technically needed to comply with the Mining Act nor is it consistent with MMD practice. There are many examples where MMD has approved the use of leach cap material as all or a portion of cover material for reclaimed areas, including covers over acid-generating stockpiles. The Little Rock Closure Closeout Plan (CCP), approved by the agencies in 2010, does not require a Gila Conglomerate Cover over the leach cap stockpiles. In 2010 the Agencies approved a cover system on the 1C Stockpile with 4 feet of leach cap. As mentioned earlier, the leach cap was approved for use at the Copper Leach Pile, which has successfully revegetated. In modification 12-3 to Permit No. GR010RE and in a letter dated December 2, 2013, the MMD and NMED approved the application for financial release for grading and construction of the 1C/7A Stockpile unit, which included a leach cap cover system finding the application technically complete. In areas where the leach cap was 3 feet thick, Tyrone agreed to provide an additional foot of Gila Conglomerate. The 2013 Tyrone CCP update does not propose to use Gila Conglomerate as a reclamation cover on leach cap borrow material stockpiles, which is consistent with the 2001 CCP that was approved by the Agencies.

The installation of three feet of 3 foot thick store and release cover is required by NMED to address stockpile seepage with the potential to generate acidic solution that may affect ground and surface water. Because the overburden in the 9AX is inert and has no potential to affect ground or surface water, there is no technical basis to require three feet of Gila Conglomerate cover over this material.

As discussed at a meeting held on June 19, 2014, Tyrone proposes to reclaim 9AX using the existing leach cap cover with a veneer (3 to 4 inches) of Gila Conglomerate to act as a germination layer. Tyrone will adjust financial assurance to account for the Gila Conglomerate germination layer. Because the 9AX will not close for many years, the requirement for the application of the germination layer will ultimately be based on results of the leach cap cover performance in future planned reclamation, such as the USNR Stockpile.

MMD Comment

1. The Application and cost estimate should also include stormwater drainage features to handle a 100 year, 24-hour storm event for Gila Conglomerate cover material on the reclaimed 9AX stockpile. Please revise the Application and cost estimate to include these features.

Tyrone Response

Where slopes lengths exceed 300 ft., drainage channels will be planned to manage the 100 year, 24-hour storm event and a cost estimate included for FA. The Gila Conglomerate cover material is addressed in response number one above.

MMD Comment

2. *MMD* is continuing to review the proposed cost estimate including the revised cost estimate that Tyrone sent to MMD on June 13, 2014 and may have additional comments in the future.

Tyrone Response

No response is necessary at this time.

MMD Comment

3. The Application, as revised, projects that a 100 foot "buffer" will be provided between the reclaimed 9AX stockpile and the McCain Spring. Based on MMD's site visit on June 5, 2014 and the comments received from the New Mexico Dept. of Game & Fish ("NMDG&F") on the Application, MMD is concerned that the McCain Spring will potentially be adversely affected by the reclaimed 9AX stockpile. The McCain Spring appears to be a unique and important source of water for wildlife (e.g., several javelina were observed at the McCain Spring during the June 5 site visit. MME feels that a 100 foot buffer may be insufficient to protect the spring from the activities occurring during the construction and reclamation of the 9AX stockpile, and that the buffer zone should be increased. In addition, a berm, or other best management practices should be constructed and maintained along the toe of the reclaimed 9AX stockpile to prevent stormwater runoff from the reclaimed 9AX stockpile from impacting the spring. Please revise the application to address these concerns.

Tyrone Response

As described under response number 1 only, rock that meets the cover material characterization plan specifications will be placed at this location. Therefore, no surface or groundwater impacts to McCain Spring are anticipated. The proposed operational stockpile and spring are separated by a topographic divide; therefore, stormwater from the stockpile will not reach the spring. However, during or after reclamation, if there is a chance that material from the stockpile will wash into the spring, a berm will be constructed to direct water away from the spring.

Javelina and other large mammals also frequent the tailing reclamation areas around the mine as identified in the Vegetation and Wildlife Monitoring Report sent to MMD on April 30, 2014 (attached to the "Animal Reports, Fees and Associated Information" letter). The presence of these larger animals is not unique to the McCain Spring area.

MMD Comment

5. The Introduction section of the Application states that, "Adjustments to the existing financial assurance will be addressed more definitively as part of the 2013 CCP update." Adjustment to the financial assurance for the proposed 9AX stockpile closeout plan shall be addressed under Permit Modification 14-1. In this case, in accordance with 19.10.12.1201.A NMAC, Tyrone shall provide a financial assurance proposal to MMD following MMD's determination that the permit modification application is approvable, but prior to the permit modification approval. Alternately, the updated closeout plan that MMD is currently processing under Revision 09-1 may be revised to include the proposed 9AX stockpile, however, this action would delay the approval of the proposed 9AX stockpile until MMD approves Revision 09-1.

Tyrone Response

As described to the MMD, there is a short window of opportunity in the mine schedule to place this borrow material at this specific location. Tyrone will update financial assurance in accordance with the rule and conditions of Permit No. GR010RE and this modification to expedite construction.

Failure to approve this request in a timely manner could result in mixing this overburden with potentially acid forming waste rock. Tyrone believes that maintaining the integrity of the materials is important for the long-term closure planning.

OSE Comment

To summarize the response, the OSE recommends that all wells (boreholes, wells, PODs) be plotted on a similarly sized map such as Figure 2 or 4.

Tyrone Response

One monitoring well, 4.5-2005-03, is located in the footprint of the reclaimed stockpile and a map showing that location will be sent to the OSE in 30 days.

USFWS Comment

The USFWS recommended creating a berm above the spring to catch any material that might fall or wash down from the stockpile.

Tyrone Response

The proposed stockpile and spring are separated by a topographic divide, therefore, stormwater from the stockpile will not reach the spring. However, during or after reclamation, if there is a chance that material will wash into the spring, a berm will be constructed around the spring.

SHPO Comment

The office recommended that an archaeological consultant conduct an archaeological survey of any areas that have not been surveyed previously, or were surveyed more than 15 years ago.

Tyrone Response

Dr. Neal Ackerly (Dos Rios, Consultants Inc.) completed a Class III Cultural Resources Survey for part of the area of the proposed stockpile in support of the Little Rock MPO Amendment in 2014. No sites are recommended as eligible for listing on the National Register of Historic Places (NRHP). Prior Class III Cultural Resources Surveys cover the remaining area of the stockpile. One site, LA 102134, was determined to be not eligible for listing on the NRHP and mitigation was completed for a second site, LA 109238. The eligibility determinations and the status of treatments applied for these sites are documented in the *1997 Final Environmental Impact Statement for the Little Rock Mine Project* and the related administrative record. Additionally, the BLM reaffirmed that the results and recommendations of the prior studies remained valid in 2010.

NMED Comment

The NMED granted amendment approval with comment in a letter dated June 6, 2014.

NMAQB Comment

In summary, the AQB does not regulate fugitive dust; however, we do recommend controls to minimize emissions of particulate matter from fugitive dust sources.

Tyrone Response

Tyrone Inc. operates pursuant to NSR 2448-M1R6 and Title V P147 and is preparing the necessary permit revisions to incorporate this activity. Consequently, the activity will fully comply with all state and federal air quality regulations.

Tyrone looks forward to satisfying the MMD requirements to move forward with the construction of this borrow material stockpile. The window of opportunity for stockpile construction is limited and alternatively, this material could be mixed with potentially acid forming waste rock. Tyrone believes that maintaining the integrity of the materials is important for the long-term closure planning. Tyrone contends the weight of evidence supports the use of leach cap as a viable cover. However, in the interest

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of expediency, Tyrone proposes to place a 3 to 4 inch Gila Conglomerate germination layer over the leach cap cover. Tyrone would like to meet with the MMD at their earliest convenience to resolve any outstanding issues. If you have additional questions, please contact Lynn Lande at (575) 912-5235.

Sincerely,

Timothy E. Eastep Senior Manager – Administration New Mexico Operations

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c. Fernando Martinez, Director Holland Sheperd, Program Manager