



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
and the
ENVIRONMENT DEPARTMENT

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Electronic Transmission

April 8, 2024

Thomas Shelley
Environmental Services Manager
Freeport-McMoRan Tyrone Inc.
P.O. Box 571
Tyrone, NM 88065

**Re: Joint Agency Conditional Approval of Open Pit Highwall Risk Analysis and Closure
Access Workplan for the Tyrone Mine, MMD Permit No. GR010RE and NMED DP-1341**

Dear Thomas Shelley,

The Energy, Minerals and Natural Resources Department, Mining and Minerals Division (MMD) and the New Mexico Environment Department (NMED) (collectively, the Agencies) reviewed the Freeport-McMoRan Tyrone Inc. (Tyrone) September 20, 2022 submittal titled *Open Pit Highwall Risk Analysis Work Plan*, which includes both a Highwall Risk Analysis and Closure Access Workplan (Workplan). The Workplan was originally requested by and submitted to NMED to satisfy DP-1341 conditions C110.C and C110.D. MMD requested similar information to DP-1341 condition C110.D in a comment letter regarding the Revision 21-1 application (Emma Expansion) for Permit No. GR010RE, dated June 13, 2023. After discussions between the Agencies and Tyrone, it was determined that a joint-agency review of the Workplan would avoid redundancy in permitting. MMD informed Tyrone of this joint review in a comment letter dated July 19, 2023.

The Agencies hereby approve the Workplan provided that the following conditions are addressed:

Open Pit Highwall Risk Analysis – Attachment 1

1. Attachment 1 of the Workplan states, "(p)er Copper Rule 20.6.7.33.C.3.b, waste and leach stockpiles within an OPSDA are not required to be graded and covered. Therefore, the stockpiles within the OPSDA will not be impacted by failure of open pit highwalls." NMED would like to clarify that this statement is not correct; Subsection C of 20.6.7.33 NMAC

states that, “the waste rock and leach outsoles within an open pit surface drainage area are not required to be graded and covered.” Subsection F of 20.6.7.33 NMAC states, in part, “(f)or leach and waste rock stockpiles located within the open pit surface drainage area, a thirty-six inch cover is only required on top surfaces.” As such, the Highwall Risk Analysis shall consider the impacts failure of open pit high walls could have on all reclaimed mine units and infrastructure necessary for water treatment at closure, including those located inside the open pit surface drainage area.

Closure Access Work Plan – Attachment 2

2. It is unclear whether fencing, floating barriers, and hazing devices proposed to prevent access by wildlife and unauthorized members of the public are included in the facilities listed in Table 1 of Attachment 2. Potential impacts to these protection measures should be included in the analysis and final Highwall Risk Analysis Report.
3. Task 2 of the Closure Access Work Plan states: “Tyrone will evaluate the following options for the sumps listed above and provide an assessment of advantages and disadvantages: Minor waste rock backfilling, floating barriers, and new technologies such as enhanced evaporation.” In addition to the options listed above, and as proposed by Tyrone as part of the Closure Access Work Plan, the Agencies require that Tyrone include a sitewide trade-off analysis on the feasibility of backfilling open pits to an elevation higher than the predicted groundwater table, including the proposed Emma Pit, to the point where there is no surfacing water body or need for a small water management sump at closure. The analysis shall consider options such as installation of vertical turbine wells/pumps to maintain hydraulic capture, where necessary, and evaluate maintenance costs and consequences if hydraulic capture cannot be maintained or water levels managed in a way to prevent a surfacing water body.
4. Page 6 of the Workplan describes current methods that Tyrone implements to prevent wildlife from accessing open pits, including existing employees (i.e., security), floating barriers, bird hazing and hazing devices, fencing, and berms. Please include a general schedule for a minimum of 100 years post-closure for maintenance and replacement of these methods/structures in the Final Report. The Agencies may request that Tyrone include these costs in the next site-wide cost estimate during the next Closure/Closeout Plan update.

The results of the Workplan shall be submitted to the Agencies as a Final Report within 270 days of the date of this letter (by January 3, 2025), as proposed by Tyrone in the Workplan. Please contact respective MMD and NMED permit leads Carmen Rose at (505) 216-8399 and Brad Reid at (505) 372-8533 with any questions regarding permitting issues for the Tyrone Mine.

Sincerely,

Brad Reid, Permit Lead
Mining Environmental Compliance Section
Ground Water Quality Bureau - NMED

Carmen Rose, Permit Lead
Mining Act Reclamation Program
Mining and Minerals Division-EMNRD

cc: Joseph Fox, Program Manager, NMED-MECS (joseph.fox@env.nm.gov)
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