

State of New Mexico
Energy, Minerals and Natural Resources Department

Michele Lujan Grisham
Governor

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Mining and Minerals Division



Electronic Transmission

October 23, 2023

Erich J. Bower, President, and General Manager
Freeport-McMoRan Tyrone Inc.
P.O. Box 571
Tyrone, NM 88065

RE: Agency Comments on the Cost Estimate for the Closure/Closeout Plan, Tyrone Mine Emma Expansion Project, Revision 21-1, Permit No. GR010RE

Dear Mr. Bower,

The New Mexico Mining and Minerals Division (MMD) is currently processing an application to revise Permit No. GR010RE, Tyrone Mine and Mill (Revision 21-1) operated by Freeport-McMoRan Tyrone Operations (Tyrone). Revision 21-1, referred to as the Emma Pit Expansion, proposes to mine a new open pit unit and develop three new stockpiles. MMD has received and sent a number of technical comment/response letters from Tyrone regarding Revision 21-1, all of which can be found on our website at: <https://www.emnrd.nm.gov/mmd/mining-act-reclamation-program/pending-and-approved-mine-applications/mining-applications-regular-existing/gr010re-tyrone-revision-21-1>.

This letter serves to provide comments specifically on the cost estimate in Appendices B and C and associated Excel Cost Estimate Spreadsheet in the Revision 21-1 application. MMD has reviewed the cost estimate submitted as Appendix B in the Closure/Closeout Plan dated November 12, 2021, and is requesting additional information from Tyrone. MMD sent a request for comments on the Revision 21-1 cost estimate to the New Mexico Environment Department (NMED) on August 7, 2023, and received responses on October 4, 2023. Please review and respond to the attached NMED comment letter. In addition, please respond to the following items from MMD. Please note that in order to aggregate all comments on the cost estimate in this letter, MMD is repeating/adapting comment 23 from a previous agency comment letter, dated April 25, 2022.

MMD Comments

1. (Previously Comment 23 from the April 25, 2022 MMD comment letter). Section 8.0, Capital and Operation and Maintenance Cost Estimates, pages 38-41 of the CCP; Appendix B,

Earthwork Cost Basis Document; and Excel Cost Estimate Spreadsheets 20210012_Emma_Stockpile_Earthwork_RCE.xlsm.

- a. Please update all labor, fuel, and equipment rates to 2023 values and adjust the cost estimate accordingly.
 - b. The Equipment Watch user adjustment for the mechanics wage is the hourly rate for a Group I-Unskilled Laborer. MMD believes that the appropriate hourly rate used should be for a Group III-Skilled Laborer instead. Please justify the use of the Group I-Unskilled Laborer rate over the other laborer Groups' hourly rate using the New Mexico Administrative Code or change the hourly rate for the mechanics wage to the Group III-Skilled Laborer rate.
 - c. The Cost Estimate uses the Group VI-Operator hourly rate for the EX3600-5 shovel. According to the New Mexico Administrative Code Section 11.1.2.18.AH, the Group-VIII-Labor rate should be used for shovels. Please change the labor rate used in the Cost Estimate for the EX3600-5 to the Group VIII rate.
2. Appendix D.5 *Direct Quotes* in Appendix B provides a direct quote for estimated costs per acre for revegetation efforts from Rocky Mountain Reclamation from 2018. Please provide an updated quote to reflect 2023 values and adjust the cost estimate accordingly.
 3. Have replacement fencing and floating barriers costs been accounted for in long term O&M?
 4. Please refer to MMD comment 6 in the MMD comment letter dated June 13, 2023: *For the purpose of this Revision 21-1, MMD will require that Tyrone provide a plan and financial assurance (FA) to address placing a minimum of 6 inches of salvaged soil and 6 inches of Gila Conglomerate reclamation cover material over reclaimed areas.* Please update the cost estimate to account for these changes from the original plan.

Please respond to the MMD and NMED comments within 45 days of receipt of this letter. If you have any questions, concerns, or would like to meet again regarding these comments, please contact me at (505) 216-8399 or at carmen.rose@emnrn.nm.gov.

Sincerely,



Carmen Rose, Permit Lead
Mining Act Reclamation Program (MARP)
Mining and Minerals Division

Attachments: October 4, 2023 NMED Comment Letter

CC: DJ Ennis, Program Manager, MARP, MMD
Joe Fox, Program Manager, NMED
Brad Reid, Permit Lead, NMED
Tom Shelley, Environmental Manager, Tyrone
Raechel Roberts, Environmental Scientist, Tyrone
Allyson Siwik, Executive Director, GRIP



Electronic Transmission

MEMORANDUM

Date: October 4, 2023

To: David Ennis, Program Manager, Mining Act Reclamation Program

Through: Anne Maurer, Mining Act Team Leader, Mining Environmental Compliance Section (MECS)

From: Brad Reid, MECS
Susan Styer, Surface Water Quality Bureau (SWQB)
Sufi Mustafa, Air Quality Bureau (AQB)

Subject: **New Mexico Environment Department (NMED) Comments, Freeport-McMoRan Tyrone Operations, Emma Expansion Project, Revision 21-1, Cost Estimate, Grant County, New Mexico, New Mexico Mining Act Permit No. GR010RE**

The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on August 7, 2023, requesting that NMED review and provide comments on the above-referenced MMD permitting action. Pursuant to the Mining Act, this is a regular existing mine. MMD requested comments on the application within 45 days of receipt of the request for comments. NMED requested an extension to submit comments by October 3, 2023. NMED has the following comments.

Background

MMD received an application from Freeport-McMoRan Tyrone Operations (applicant) to revise Mining Act Permit No. GR010RE for the Emma Expansion Project. The revision application proposes the following:

1. Expansion of the Tyrone Mine Permit and Design Limit boundaries to include the Emma Open Pit, EMW Waste Rock Stockpile, the Southern Emma Haul Road, and miscellaneous facilities.

Additionally, the applicant proposes to construct the 6HW Waste Rock Stockpile and the Northern Emma Haul Road that will be located within the current Tyrone Mine Permit Boundary.

2. A Closure/Closeout Plan (CCP) for the Emma Expansion Project disturbances.

The CCP contains a cost estimate for reclamation and long-term operation and maintenance of the mine. MMD requested NMED review the cost estimate.

Air Quality Bureau

The Air Quality Bureau has no comments.

Surface Water Quality Bureau

The Surface Water Quality Bureau comments are attached.

Mining Environmental Compliance Section

MECS has the following comments:

- 1) The *Sampling* tab in the 2021 cost estimate addresses operation and maintenance costs associated with water quality sampling. The table shown in the *Sampling* tab is as follows:

Item	Quantity
Monitoring Wells	3
Pit Sump	1
Surface Water Locations	2
Samples/ Location	6
Sampling (\$/sample)	\$550
Semi-Annual Sampling Cost	\$3,300
Annual Sampling Cost	\$1,650
Total Yearly Sampling Cost	\$4,950

Based on a review of the Sampling and Analysis Plan (SAP) dated January 19, 2023, for DP-396, the table above needs to be updated to reflect what is approved in the SAP for the Emma Expansion and what will be reflected in the Draft DP-396.

- 2) Based on a review of the cost estimate, it is not clear if the cost(s) for pumping fluids out of the Emma Pit Water Management Sump and conveyance to the Tyrone Mine closure water treatment plant have been addressed. NMED understands that up to 57,600 gallons per day will be pumped out of the Emma Pit Water Management Sump in perpetuity. Please indicate if these costs have been accounted for in the cost estimate.

Mr. David Ennis
Emma Expansion Project, Revision 21-1
October 4, 2023

NMED Summary Comment

NMED is withholding issuance of the determination pending completion of the technical review of the application and CCP associated with DP-396 and the Copper Mine Rule.

If you have any questions, please contact Anne Maurer at (505) 660-8878.

cc: Carmen Rose, Permit Lead, EMNRD-MMD
Joseph Fox, Program Manager, NMED-MECS
Shelly Lemon, Bureau Chief, NMED-SWQB
Elizabeth Bisbey-Kuehn, Bureau Chief, NMED-AQB



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

MEMORANDUM

DATE: September 28, 2023

TO: Anne Maurer, Mining Environmental Compliance Section, Ground Water Quality Bureau, New Mexico Environment Department

THROUGH: Shelly Lemon, Chief, Surface Water Quality Bureau, New Mexico Environment Department

FROM: Susan Styer, Watershed Protection Section, Surface Water Quality Bureau, New Mexico Environment Department

SUBJECT: **Request for Review and Comment, Cost Estimate, Emma Expansion Project, Tyrone Mine, Revision 21-1, Freeport-McMoRan Tyrone Operations, Grant County, New Mexico Mining Act Permit No. GR010RE**

The New Mexico Environment Department (NMED)-Surface Water Quality Bureau (SWQB) received the subject request for comments on August 31, 2023. The application for permit revision 21-1 is to expand the Tyrone Mine via the Emma Expansion Project and associated closure/closeout plan (CCP) cost estimate. NMED-SWQB provided comments to permit revision 21-1 on March 11, 2022, and responded with no comments on June 17, 2022. SWQB does not have any comments on the cost estimate associated with the Emma Expansion Project revision to permit revision 21-1.

For questions related to these comments, please contact Susan Styer, SWQB, at 505-819-9923.