



State of New Mexico  
Energy, Minerals and Natural Resources Department  
Mining and Minerals Division (MMD)  
Jerry Schoeppner, Director

Mining Act Reclamation Program  
David Otori, Permit Lead

Tyrone Mine  
Permit Revision 21-1 Application  
Emma Project Closeout Plan

Public Hearing  
August 16, 2022

# Public Hearing Purpose

- This hearing has several purposes:
  - 1) The Tyrone Mine will present information on the Tyrone Mine Emma Project and Closeout Plan.
  - 2) MMD will describe its process to review the Tyrone Emma Project Closeout Plan in accordance with the New Mexico Mining Act Rules.
  - 3) The Gila Resources Information Project (GRIP) will present their comments.
  - 4) The public will ask questions and comment on the Tyrone Emma Project Closeout Plan.

# New Mexico Mining Act Rules (19.10.5 NMAC)

A Permit Revision Application is processed by MMD under Part 5 of the Mining Act Rules (19.10.5 NMAC) which addresses permitting actions for Existing Mining Operations:

*“mines that produced marketable minerals for a total of at least two years between January 1, 1970 and June 18, 1993” (19.10.1.7.E(2) NMAC).*

Tyrone is permitted as an Existing Mine.

# Permit Revision Application Elements

- Permit Revision Factors: significant environmental impact, and/or significant increase to the financial assurance (FA), and/or significantly departs from nature or scale of the permit.
- This Application includes: Closeout/Reclamation Plan & FA Cost Estimate
- Application also includes: Proof of Public Notices, Permit Application Fee, Any additional information as requested by the Director

# Tyrone Mine Permitting History

- Permit No. GR010RE approved by MMD July 10, 1996.
- Revision 01-1, incorporating the Closeout Plan into the permit was approved by MMD on April 12, 2004.
- Revision 03-1, for the Cu Mtn. So. Pit Expansion was approved on May 6, 2005.
- Revision 10-1, renewing the Open Pit Waiver was approved April 30, 2012.
- Revision 09-1, reissuing the Permit and approving the Site-Wide Updated Closeout Plan was approved on March 29, 2021.



# Permitting History (continued)

- Permit Modifications, have been processed by MMD since 2000 for changes to the Tyrone Mine permit that did not require a permit revision.
- These Modifications were approved for partial financial assurance releases for completed reclamation, clarification and minor changes to reclamation requirements, the addition of waste rock piles, and changes to the financial assurance instruments, for example.

# Application for Revision 21-1

- The application for Revision 21-1 was submitted by Tyrone to MMD on October 22, 2021.
- Tyrone supplemented the application for Revision 21-1 with a Closeout Plan and a Third-Party Reclamation Cost Estimate on November 12, 2021.
- The 2021 application was further updated in 2021, and in 2022 with additional, updated technical information that supplemented the 2021 application.
- Application & Supplements are on the MMD Website.

# Application for Revision 21-1

- Tyrone will present details of the mining plan and Closeout Plan in their presentation. The Closeout Plan supplements the approved Closeout Plan for the other Tyrone Mine disturbances and affected areas.
- MMD provided initial comments and the comments from other state agencies to Tyrone on the proposed Emma Project Closeout Plan. Tyrone has responded to the comments in submittals.
- MMD may provide Tyrone with additional comments on the Emma Project Closeout Plan as needed in the near future.



# MMD Reclamation Standards

- Specified in 19.10.5.507 NMAC. Requires that the Closeout Plan specify incremental reclamation work to be done within specific time frame.
- Self-Sustaining Ecosystem (SSE) – the goal of reclamation; site-specific, life-zone appropriate.
- Post-Mining Land-Use (PMLU)– beneficial or multiple uses established in permit area after mining.
  - PMLU is selected by the landowner (Tyrone) and may include active management.
  - PMLU's for the Emma Project area– Wildlife habitat, and Water Treatment & Management (Main North Area, sump and lower pit walls in the Emma Pit).

# MMD Reclamation Standards (continued)

- Specified in 19.10.5.508 NMAC, New Units. For New Discrete Units requires consideration of mine operations and requires higher revegetation standards for the reclamation work to be done.
  - The Emma Project application is being processed under New Unit requirements, in part:
  - Requiring operations and reclamation to be planned and conducted to assure protection of human health & safety, environment, wildlife, including minimizing negative impact to the hydrologic balance of the New Unit area and potentially affected areas.
  - Requiring higher revegetation standards for a Wildlife Habitat PMLU than for areas permitted as Existing Mine areas.

# Proposed Emma Project Closeout Plan Cost Estimate\*

- Based on the Cost Estimate proposal for a Third-Party Contractor to complete the reclamation or closeout plan in the case of forfeiture.  
(19.10.12.1201.A NMAC)
- Earthwork, Water Management & Treatment Capital Costs:
  - \$5,325,807
- Earthwork and Water Treatment Operations & Maintenance Costs:
  - \$ 6,977,370
- Total Proposed Closeout Plan Cost Estimate:
  - \$ 12,303,177

\* *Subject to change based on additional comments*



# Where We Are in the Process

- A Public Hearing was requested by the Gila Resources Information Project (GRIP) and others.
- The MMD requirements for holding a Public Hearing are listed in Part 9 of the NM Mining Act Rules (19.10.9.904 NMAC).
- MMD will consider public comments from the Public Hearing in its review of the Permit Revision 21-1 Application.

# Moving Forward

- MMD will continue its review of the application.
- This Public Hearing is held for MMD to inform and to receive comments from the public. We will accept written comments until a date announced by the Hearing Officer.




# Moving Forward (continued)

- MMD will review written comments received after this hearing, to answer relevant questions, and address requirements that the MMD Director deems necessary.
- Tyrone is required to obtain an Environmental Determination from the New Mexico Environment Department (NMED) prior to MMD approval of Permit Revision 21-1.
- NMED is also processing changes to the Tyrone Discharge Permit(s) for the Emma Project.
- Tyrone will propose Financial Assurance including FA instruments after MMD deems the application Technically Approvable.

# Document Summary

- The documents discussed in this presentation are available online at the MMD Website:

*[https://www.emnrd.nm.gov/mmd/mining-act-reclamation-program/pending-and-approved-mine-applications/mining-applications-regular-existing/gr010re-tyrone-revision-21-1/?et\\_fb=1&PageSpeed=off](https://www.emnrd.nm.gov/mmd/mining-act-reclamation-program/pending-and-approved-mine-applications/mining-applications-regular-existing/gr010re-tyrone-revision-21-1/?et_fb=1&PageSpeed=off)*



Written comments related to the application for Revision 21-1 may be submitted to the MMD Director at the following address:

Jerry Schoeppner, Director  
Mining and Minerals Division  
NM Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
[Gerard.Schoeppner@state.nm.us](mailto:Gerard.Schoeppner@state.nm.us)