

Freeport-McMoRan Chino Mines Company P.O. Box 10 Bayard, NM 88023

April 3, 2023

## Certified Mail #7018220000117919014

Mr. David Ennis
Energy, Minerals and Natural Resources Department
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

## Dear Mr. Ennis:

Re: Response to Agency Technical Comments on North Lampbright Leach Stockpile Closure/ Closeout Plan, Modification 22-1, Chino Mine, Grant County, New Mexico, Permit No. GR009RE

Freeport-McMoRan Chino Mines Company (Chino) submitted the North Lampbright Leach Stockpile Extension- Closure/ Closeout Plan ("CCP"), dated April 2022. The New Mexico Environmental Department and Mining and Minerals Division in a letter dated December 13, 2022, and January 19, 2023, respectively, requested additional information regarding this CCP. NMED's and MMD's requests for additional information are provided in italics below followed by Chino's responses.

## MMD Comments:

1. Section 2.2.6 Cover Material Characteristics- MMD appreciated FMI's commitment to soil salvage in new areas of disturbance. For this project, FMI estimates that approximately 97,000 to 145,000 cubic yards of soil could be salvaged. In order to keep track of this valuable reclamation material, please identify an anticipated location for the stockpiling of salvaged material.

Chino response: The salvaged material proposed location will be within the footprint of the STS2 stockpile.

2. The Earthwork Cost Estimate for the North Lampbright Waste Rock Stockpile (Telesto, Solutions, Inc., dated January 2016) included a stormwater channel along the north edge of the stockpile at closure to prevent run-on to the reclaimed surface. This stormwater channel ties into the operational channel proposed at the far northeast of the stockpile/leach pile. This run-on stormwater channel does not appear to have been included in the closure design or cost estimate for the leach stockpile CCP. Please clarify this difference in design.

- Chino response: The stormwater channel will be constructed as part of operations. Therefore, it is not included in the closure design or cost estimate for the NLLS CCP.
- 3. Several of the costs used in the CCP appear a little outdated (e.g. fuel costs based on 9/02/21, labor rates from 2021, escalation of unit costs from Rocky Mountain Reclamation, etc.). However, MMD agrees that the amount of financial assurance provided for the North Lampbright Waste Rock Stockpile (~\$3.5M) exceeds the amount estimated for the North Lampbright Leach Stockpile at year five of construction (~\$2M). Costs for leach stockpile reclamation shall be re-addressed at renewal of the site-wide Chino CCP in the year 2025.

Chino response: Thank you for your comment. Chino agrees to update the leach stockpile reclamation costs in the next renewal application of the CCP in the year 2025.

## Mining Environmental Compliance Section (MECS) Comments:

1. The CCP, dated April 2022, was submitted to the MECS on August 19, 2022. It is included as part of the Ground Water Discharge Permit modification application (application) for the DP-376 renewal and modification dated October 21, 2021, and supplemented with additional information on May 31, 2022 and July 8, 2022. Technical review of the application pursuant to the Water Quality Act (WQA) and the Water Quality Control Commission (WQCC) Regulations, including the Copper Mine Rule (20.6.7 NMAC), is currently in progress. MECS expects to have additional comments based on technical review of the application and associated operational, monitoring and closure plans, including the CCP. As such, any additional comments on the application and CCP will be submitted under separate letterhead directly to Freeport-McMoRan Chino Mines Company with copy to MMD.

Chino response: Thank you for taking the time to review the application.

2. Section 2.2.5 of the CCP states, "The existing PLS Sumps, 1, 2 and 3 will be replaced by a new collection Pond at or near the existing Fleming Pond to the west of the proposed NLLS." According to the North Lampbright Leach Stockpile Design Report by Golder Associates, dated October 7, 2021, Lampbright Sumps 1, 2, and 3 will be incorporated into the West Underdrain as part of NLLS foundation construction. PLS that reports to these sumps from the Main Lampbright Leach Stockpile will be collected though the West Underdrain and will first report to the proposed West Underdrain Sump. According to Chino's Response to NMED's RAI dated March 2022 for DP-376 Renewal and Modification dated May 31, 2022, Fleming Pond will be referred to as Fleming Pond 2 after it is converted in to a PLS collection impoundment. Fleming Pond 2 will be the primary PLS collection impoundment for NLLS and will receive PLS though a series of collection pipes constructed above the NLLS foundation. These discrepancies in the submittals noted above should be resolved.

Chino response: Lampbright Sumps 1, 2 and 3 will be incorporated into the West Underdrain. Incidental PLS that reports to these sumps will be collected at the West Underdrain and will be pumped via two barge pumps to the proposed Fleming Pond. Fleming Pond will be referred to as Fleming Pond 2 after it is converted into a PLS collection impoundment as per Copper Rules. Fleming Pond 2 will be the primary PLS collection impoundment for NLLS.

3. Section 2.2.6 of the CCP states, "Ripping tests conducted by Chino indicated that the materials can be worked to produce a viable cover material. Chino currently has a test plot program of the Rubio Peak material, and the annual assessment also indicates the viability of this material for reclamation." Chino should provide citations for the most recent annual assessment(s) and results from the ripping tests.

Chino response: Please see the February 28, 2023 semi- annual monitoring report for DP-1340. Within this report, Chino summarized the status of the Rubio Peak test plot program.

For the most recent assessment of the ripping test, please refer to the as-built report of the Rubio Peak Formation Demonstration Plot submitted to the agencies on July 5, 2016. Chino investigated the suitability of the Rubio Peak cover material by constructing a demonstration plot in 2015. Requested information of the performance of the ripping test can be found in Figure 5 and 6. Figure 5 shows how the vegetation and soil were stripped off the surface using a Caterpillar Medium D6 dozer, exposing the Rubio Peak Formation. Figure 6 shows the test pit with a depth of approximately 9 feet.

4. Section 3.0 of CCP states, "The stockpile will cover approximately 120 acres and is bounded by the Fleming Pond on the west, the Main Lampbright Stockpile to the south, and the East Headwall Impoundment on the east." The current DP-376 indicates the North Lampbright Waste Rock stockpile footprint is 187 acres and North Lampbright Leach Stockpile Design Report by Golder Associates dated October 7, 2021 also indicates the NLLS footprint will be 187 acres. This discrepancy should be clarified.

Chino response: The current permitted footprint for the North Lampbright Waste Rock Stockpile is 187 acres as stated in the current DP-376 and the NLLS Design Report. The proposed North Lampbright Leach Stockpile will lie within this footprint and will cover approximately 120 acres as shown in the Figure 1-2 of the North Lampbright Leach Stockpile Extension- Closure/ Closeout Plan dated April 2022.

5. It is not clear to NMED whether Fleming Pond 2 and the West Underdrain sump will be reclaimed or utilized post-closure.

Chino response: Fleming Pond 2 and the West Underdrain sump will be utilized post-closure as a water treatment facility for 100 years.

6. Appendix A Earthwork Cost Estimate Summary Report refers to a "Frog Pond". Please clarify if this is referring to Fleming Pond 2 referenced in Chino's Response to NMED's RAI dated March 2022 for DP-376 Renewal and Modification dated May 31, 2022. The CCP as approved for the North Mine Area in DP-1340 indicates Fleming Pond will be reclaimed at closure.

Chino response: Sorry for the naming error, the Appendix A Earthwork Cost Estimate Summary Report should have referenced "Fleming Pond 2". The CCP as approved for the North Mine Area in DP-1340 is based upon a plan where the NLLS was a waste stockpile. Therefore, for the leach stockpile, Fleming Pond 2 will be utilized post-closure.

7. The August 16, 2016 Golder report titled, "Determination of Reclamation Cover Material Water Holding Capacity – Chino North Mine Area," describes the water holding capacity estimation in Section 3.4. Please note that NMED will not consider final approval of proposed reclamation cover material, including the Rubio Peak Formation, until a demonstration or justification that 100 cm is representative of field capacity for site-specific material is provided.

Chino response: Please see the February 28, 2023 semi-annual monitoring report for DP-1340. Within this report, Chino submitted a complete report summarizing the status of the Rubio Peak test plots. The Rubio Peak reclamation cover material analysis demonstrated compliance with the Copper Rule requirement for water holding capacity (NMAC 20.6.7.33)

Please contact Christian Krueger at (575) 313-6718 or Mariana Lafon at (575) 519-9572 if you have any questions.

Sincerely,

Sherry Burt-Kested, Manager

**Environmental Services** 

20230329-002

cc: Jordan Anderson, MECS (via email)

Joseph Fox, Program Manager, NMED-MECS (via email)

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David Ennis, NMED (20230329-002 via certified mail dated 4/3/2023)