



Freeport-McMoRan Chino Mines Company
P.O. Box 10
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Sherry Burt-Kested
Manager, Environmental Services
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March 20, 2019

Certified Mail #7018068000000228945
Return Receipt Requested

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

Certified Mail #7018068000000228952
Return Receipt Requested

Ms. Jennifer Pruitt, Acting Director
New Mexico Environment Department
Water Protection Division
P.O. Box 5469
Santa Fe, New Mexico 87502

Dear Mr. Martinez and Ms. Pruitt:

**Re: Freeport-McMoRan Chino Mines Company -
Chino Mine Financial Assurance Cost Estimate and
Net Present Value Calculation, Permit No. GR009RE and Discharge Permit 1340**

Freeport-McMoRan Chino Mines Company (Chino) submitted to the Mining and Minerals Division (MMD) and the New Mexico Environment Department (NMED), an application to update the Chino Mine Closure/Closeout Plan (CCP) in a letter dated February 16, 2018, which supplemented prior applications. The CCP update provided a conceptual plan for closure and reclamation (technical scope of work) of the site. A work group comprised of representatives of the Chino and Tyrone Mines, MMD, NMED and the Gila Resources Information Project (GRIP) was established in August 2018 to 2019 to set the basis for developing financial assurance (FA) cost estimates. The working group came to an agreement on December 11, 2018. This letter transmits the FA cost estimate for the Chino Mine as well as a net present value calculation.

Current Dollar Cost Estimate

Since May 2018, Chino has responded to comments and agreed to incorporate changes in the CCP and cost estimate. The primary changes that were incorporated into this cost estimate include: reclamation of Highway to Heaven, Triangle and 9 Waste Rock Stockpiles as well as the South and East In-Pit Waste Stockpiles; addition of 1 foot of cover material for Groundhog No.5, use of articulated blocks instead of riprap for dewatering construction and the addition of 200 acres of contingency reclamation area to account for small changes in disturbance areas over the next five years. The cost estimate was developed in accordance with the FA work group agreement. A copy of the agreement is included as Appendix C of Attachment 1. Attachment 1 contains the Earthwork Cost Estimate with accompanying text explaining the estimating process as well as derivation and standard practice sources for unit rates. This cost estimate does not include the 3A and North Lampbright Stockpiles which were permitted and FA provided separately for a total of \$8,630,633 net present value (NPV). Attachment 2 is the Water Management and Treatment Cost Estimate with text explaining the cost estimating process as well as derivation and standard practice sources for unit rates.

The FA in place for Chino in current dollars (including expansion projects such as the Chino North Haul Road, 3A and North Lampbright Waste Rock Stockpiles) is \$365,654,697. The updated FA in current dollars excluding 3A and North Lampbright Stockpiles is \$426,135,460 (see table 1 below for details).

Table 1
Freeport-McMoRan Chino Mines Financial Assurance Summary

Category	Current Dollar	Total	NPV
2018 CCP			
Earthwork (excluding 3A and North Lampbright Stockpiles)	\$185,445,696	\$426,135,461	\$212,219,667
Water treatment/management	\$240,689,765		
Stockpile Expansion (3A, North Lampbright)			
3A Stockpile	\$5,890,986	\$9,989,500	\$8,630,633
North Lampbright Stockpile	\$4,098,514		
Current FA			
Earthwork (including 3A, North Lampbright and Chino North HR)	\$129,209,228	\$365,654,697	\$175,221,978
Water treatment/management	\$236,445,469		

Net Present Value (NPV) and Financial Assurance (FA) Proposal

Attachment 3 to this letter contains the NPV calculations, supporting information and justifications. Based upon application of 19.10.12.1205 NMAC and established agreements for the FA cost estimate calculation with MMD and NMED, the proposed NPV amount for Chino Mines excluding 3A and North Lampbright Stockpiles (\$8,630,633) is \$212,219,677 (See Attachment 3A). Chino calculated the appropriate escalation rate for earthwork as 3.41% and water treatment/management as 2.99% (see Attachment 3B). Chino calculated the appropriate discount rates for both earthwork and water management to be 7.09% and 7.27% applied to cash flow years 1 -10 and 11- 100 respectively based on Barclays US Government/Credit and Barclays US Aggregate Indices (See Attachment 3C). Attachment 3D contains an electronic copy of the NPV calculations. Table 2 shows the comparison between the current FA and the updated FA (2018 CCP+ expansion projects) both in current and NPV dollars.

Table 2
Freeport-McMoRan Chino Mines Financial Assurance Comparison

Category	Current Dollar	Total	NPV
Current FA			
Earthwork (including 3A, North Lampbright and Chino North HR)	\$129,209,228	\$365,654,697	\$175,221,978
Water treatment/management	\$236,445,469		
2018 CCP and Stockpile Expansion (3A, North Lampbright)			
Earthwork	\$195,435,196	\$436,124,961	\$220,850,300
Water treatment/management	\$240,689,765		
Change from Current FA		\$70,470,264	\$45,628,322

Mr. Martinez, MMD and Ms. Pruitt, NMED
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Electronic Copy of Submittal

Attachment 4 is a compact disk which contains an electronic copy of each submittal (including spreadsheets).

Thank you for taking the time to review and approve this information. Once these figures are reviewed and approved, Chino will be prepared to submit a proposal for the financial assurance instruments in accordance with the agreed-upon schedule. Please contact Ms. Rita Lloyd-Mills at (575) 912- 5778 if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sherry Burt-Kested".

Sherry Burt-Kested, Manager
Environmental Services

SBK:rim
20190320-001
Enclosures

c: Holland Shepherd, Manager, Mining Act Reclamation Program, MMD
Kurt Vollbrecht, Manager, Mining Environmental Compliance Section, NMED