



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

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Electronic Transmission

June 14, 2019

Sherry Burt-Kested, Manager
Environmental Services
Freeport-McMoRan Chino Mines Company
P.O. Box 10
Bayard, NM 88023

**Re: Joint Agency Comments on Updated Closure/Closeout Cost Estimate Continental Mine MMD
No. GR002RE and NMED DP-1403**

Dear Ms. Burt-Kested,

The Energy, Minerals and Natural Resources Department, Mining and Minerals Division (MMD) and the New Mexico Environment Department (NMED) reviewed the Freeport-McMoRan Chino Mines Company (Chino) - Continental Mine Financial Assurance Cost Estimate and Net Present Value Calculation Permit No. GR002RE and Discharge Permit 1403 (DP-1403) (Continental Mine Cost Estimate and NPV Calculation) dated April 2, 2019. At a meeting in Santa Fe with MMD, NMED, Chino and Gila Resources Information Project (GRIP) on May 14, 2019, the parties discussed several issues about Chino cost estimates. This letter provides written agency comments regarding a few follow up issues on the Continental Mine Cost Estimate and NPV calculation.

Cost Estimate

1. Attachment 1, Appendix A, Page 8, Facility Characteristics Forms – Miscellaneous. The reclaimed acreage of 133.4 acres and seed & mulch capital cost of \$42,390 results in a cost of about \$318 per acre, when the other facilities characteristic forms use a unit cost closer to \$824 per acre. In Appendix B.1.2, Stockpile Spreadsheet #14 shows two line items for a combined 51.4 acres at \$42,192, which is a cost of approximately \$821 per acre. Provide clarification which acreage is correct.

2. Attachment 1, Appendix B.1.2, Table of Adjusted EquipmentWatch Specific Inputs. *“The Annual Use Hours were adjusted in EquipmentWatch 50 minute work hour.”* Chino adjusts heavy equipment usage by first removing then adding back in the 50-minute work hour. Provide supporting documentation for the basis that EquipmentWatch uses a 50-minute work hour.
3. Attachment 1, Appendix B.2.5 Direct Quotes, Layne Christensen Company. The quoted exploration borehole plugging cost is approximately \$10.5 per foot. Some wells may require a more detailed plugging plan of operations than an exploration borehole. Older wells may require ripping, drilling, removing or cutting casing for an adequate seal of the annulus to limit hydraulic connections and subsurface pathways. Generally, undamaged, properly sealed wells should have less complexity during plugging except when adjacent wells may be impacted from sealant flowing beyond the sand/gravel filter pack of the plugged well. Supplement this quote with another recent quote or invoice for the plugging costs of cased wells.

NPV Calculation

4. Attachment 2, NPV Calculation and Supporting Information, Escalation and Discount Rates. Chino cites a preference for the longest possible data sets for escalation (35-100 years) and discount (43-46 years) rates, and these inputs calculate a net discount rate per year of cash flow. While the larger data sets are useful for evaluating historical trends, MMD and NMED recommend using a time period of the last 25 years for geometric means of escalation and discount rates. Please provide an updated NPV calculation using the revised escalation and discount rates.
5. Attachment 2, NPV Calculation Flow Sheet. The duration of earthwork includes the major capital expenditures, and this interval should track the usage of the short-term discount rate. Please update the NPV calculation to be consistent with 1-6 years of earthwork and 7-100 years of long-term costs.

Since the Continental Mine closure/closeout permits have recently been approved by the MMD and NMED, this process is in partial fulfillment of subsections 8.N.6 and N.8 of MMD Permit No. GR002RE and Section C113 of NMED DP-1403. The remaining steps include Chino’s response to agency comments, agency approval of the cost estimate, resolution of the NPV calculation and review/adjustment of Financial Assurance (FA) instruments. In order to keep the process moving to completion for this update of the cost estimate and FA, please respond to the comments in 30 days or no later than July 15, 2019.

June 14, 2019

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Please contact respective MMD and NMED permit leads Kevin Myers at 505-476-3438 and Anne Maurer at 505-827-2906 with any questions regarding permitting issues for the Continental Mine.

Sincerely,



Anne Maurer
Mining Environmental Compliance Section
Ground Water Quality Bureau - NMED



Kevin Myers
Mining Act Reclamation Program
Mining and Minerals Division-EMNRD

cc: Kurt Vollbrecht, Program Manager – MECS (kurt.vollbrecht@state.nm.us)
Holland Shepherd, Program Manager, EMNRD-MMD (Holland.shepherd@state.nm.us)
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