



*Promoting Healthy Communities by
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February 20, 2020

Mr. Holland Shepherd, Manager
Mining Act Reclamation Program, Mining and Minerals Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Mr. Kurt Vollbrecht, Manager
Ground Water Quality Bureau, Mining Environmental Compliance Section
New Mexico Environment Department
P.O. Box 5469
Santa Fe, New Mexico 87502

Re: Freeport-McMoRan Chino, Tyrone and Continental Mines Closure/Closeout Financial Assurance

Dear Mr. Shepherd and Mr. Vollbrecht:

On behalf of Gila Resources Information Project (GRIP), this letter provides our response to the “Joint Agency Response for FMI–Chino, Tyrone & Continental Mines; NPV Calculation & Adjustments for FA Instruments; Closure Costs Related to the Continental Mine MMD Permit No. GR002RE & NMED DP-1403” dated January 8, 2020 and the Freeport-McMoRan letters dated January 23, 2020 and February 7, 2020.

First, I would like to thank you and your staff with the Mining and Minerals Division (MMD) and Ground Water Quality Bureau (NMED) for joining with Freeport-McMoRan Incorporated (FMI) Chino and Tyrone Mines to include our participation over the past two years as agreed to in our 2018 Memorandum of Understanding with Freeport. We believe that our participation has contributed positively to resolution of issues related to establishing current financial assurance (FA) amounts for closure/closeout of FMI’s Tyrone, Chino and Continental/Cobre Mines located in Grant County, New Mexico.

The closure/closeout plans, financial assurance, and associated permits for both Tyrone and Chino had not been revised every five years as required as a result of disagreements between the agencies and FMI. Our objective in actively participating in this latest round of review has been to mediate the disagreement by bringing to the table the extensive knowledge and background on financial assurance and FMI’s mines of our technical advisor, consulting engineer Jim Kuipers. In doing so, it is important to

note that his recommendations have primarily been based on the objective of getting the delayed revisions completed in a timely manner and identifying significant concerns to be addressed in the next five-year review.

We are pleased to note that objective has been met. However, we want to take this opportunity to ensure that our more comprehensive and long-term concerns with the outcome of this current effort are on the record for all parties to consider. Additionally, we have included comments related to the forms of financial assurance that are being utilized and/or proposed by FMI and the agencies. Finally, we are providing comments we have emphasized in the past concerning future revisions to ensure that future submittals are conducted in a timely manner.

GRIP reiterates that our objective in these comments and our involvement in these matters is to protect water quality, public health and well-being, and taxpayer liability. GRIP believes the cost of providing acceptable amounts and forms of financial assurance is a reasonable cost to FMI of doing business in the 21st century and rejects any suggestion that increased financial assurance amounts or requiring real forms of financial assurance threatens the viability of future mining at any of FMI's mines.

Financial Assurance Cost Estimation

There were three specific aspects of financial assurance (FA) cost estimation that were addressed to reach the present amounts for FMI's Tyrone, Chino and Continental Mines: Direct Costs, Indirect Costs, and Net Present Value.

Direct Costs - The methodology ultimately used by FMI and its consultants to estimate direct costs, while acceptable from an engineering practice standpoint, is not entirely consistent with the methodology used by Chevron for the Questa Mine, or the methodology used by NM Copper Corporation for the proposed Copper Flat project. The Copper Flat FA estimate used the Standard Reclamation Cost Estimator (SRCE) model which is extensively used in Nevada and being used at a majority of other hardrock mines in the U.S. The Mining and Minerals Division (MMD) should establish the use of a common methodology for estimation of financial assurance, and we recommend that they consider using the SRCE model as it would also establish uniformity between the method used by New Mexico and most other states as well as the federal agencies who also have financial assurance requirements. Additionally, in order to establish consistency, MMD should also create and maintain/update a direct cost database and require that it be used in estimating FA costs.

Indirect Costs - There was considerable discussion as well as general disagreement among the parties as to the appropriate indirect costs to apply to the FA estimate. The application of MMD's Guidance for Calculating Capital Indirect Costs for Mine Reclamation and Closure Cost Estimates (dated June 2019) to both short and long-term tasks resulted in a figure that was unacceptable to FMI, and in turn FMI proposed a figure that was equally unacceptable to the agencies. Following prolonged discussions about the categories and basis for indirect costs and at our recommendation, the parties agreed to an interim compromise for this revision of 30% of direct capital costs for short-term tasks, and 17.5% of direct operation and maintenance costs for long-term tasks. It was our understanding that the amounts used did not set a precedent and the intention of the parties was to further discuss indirect costs and for MMD to issue a definitive guidance document following those discussions but prior to the next renewal. We would note that in future discussions GRIP will advocate for indirect cost amounts greater than those used for interim purposes. We believe that the amount agreed to would most likely be insufficient

to cover the costs if the state needed to take over the site and conduct the necessary reclamation activities.

Net Present Value – Similar to the previous aspects, the discussion with respect to Net Present Value (NPV) also resulted in considerable discussion and disagreement. We appreciate the agencies’ effort to reach a compromise. The result, which is shown in Table 1, was to use a relatively conservative net discount rate of 2.85% for short-term (years 1-10) costs, while using a less conservative net discount rate of 3.58% for long-term costs. This in comparison to our *interim compromise recommendation* of 3% for both categories. The net result when applied to the costs for the various sites is approximately 3.2% and is only slightly less conservative than our recommendation.

Table 1. 2019 FMI Mines FA NPV Calculation Rates

Estimation Factor	Years 1-10	Years 11-100
Escalation Rate	2.24%	2.54%
Discount Rate	5.09%	6.12%
Net Discount Rate	2.85%	3.58%

GRIP looks forward to participating in further discussions and development of revised MMD guidance for NPV. We would note in advance of those discussions that we intend to advocate for the use of a very conservative net discount rate for long-term costs due to uncertainty in future inflation and earnings rates, and the need to ensure the funds to complete the associated tasks are retained.

Continental Mine FA Estimate

We have reviewed the February 7, 2020 letter from FMI to the agencies addressing the Continental Mine FA estimate. The revised Closure/Closeout cost estimate appears to have been performed consistently with the methods and agreements reached for the Chino and Tyrone Mines. We would note that the details of the cost estimate bear further discussion in the future, particularly with respect to the estimation methodology used to suggest a decrease over time in long-term costs.

As we commented at the Chino MMD hearing and in our written comments dated August 7, 2019, the proposed cost estimation method reduces some monitoring, maintenance and operating costs over the 100-year estimate period. But there is no actual basis for reducing costs, and the method used is not consistent with those used in other estimates for long-term costs. Therefore the actual reductions in costs are hypothetical as they may or may not occur, or occur sooner or much later.

GRIP’s recommendation is that ongoing costs should not be reduced in long-term cost estimates. When reduction in costs is proven or accepted, Continental can submit a new cost estimate and reduce financial assurance at that time.

Form of Financial Assurance

The result of the financial assurance cost estimate discussions in terms of the total previous FA required, and that required by the current estimates, is shown in Table 2. It should be noted that the previous FA amounts shown are based on Closure/Closeout Plans for 2008 for Chino and 2013 for Tyrone. Table 2 also shows a breakdown of the various FA instruments that have been used and are proposed for use as the current FA. The information is based on that contained in the agencies’ letter to FMI dated January

8, 2020 and FMI's response to the agencies dated January 23, 2020 concerning Chino, Continental and Tyrone Permits.

As Table 2 shows, the total previous FA for the Tyrone Mine was \$179.5M while the new total FA amount would be \$173.5M, a reduction of \$6.0M. The previous FA instruments consisted of a cash trust (base amount of \$48.2M), a third-party guarantee (TPG) of \$50.8M, an approved collateral value of \$48.5M, surety bonds for \$31.8M, and a letter of credit (LOC) of \$0.2M. The proposed new FA instruments would largely be the same except the TPG would be reduced by \$6.0M corresponding with the overall decrease of the same amount between the previous and current FA.

For the Chino Mine the total previous FA was \$175.2M while the new total FA amount would be \$227.3M, an increase of \$52.1M. The new Chino Mine FA estimate included the addition of water management and treatment costs of NPV \$103M. The previous FA instruments consisted of a cash trust (base amount of \$121.0M), a TPG of \$45.3M, and surety bonds for \$8.9M. The proposed new FA instruments would be the same except the TPG would be increased by \$52.1M corresponding with the overall increase of the same amount between the previous and current FA. As a result, approximately half of the increased costs for water treatment are being addressed by a TPG. GRIP strongly believes that the long-term costs should be covered by secure forms of financial assurance such as a cash trust.

For the Continental Mine the total previous FA was \$28.0M while the new total FA amount would be \$21.4M, a decrease of \$6.6M. The previous FA instruments consisted of a cash trust (base amount of \$5.3M), a TPG of \$8.1M, an approved collateral value of \$13.9M, and surety bonds for \$0.6M. The proposed new FA instruments would be the same except the TPG would be decreased by \$6.6M corresponding with the overall decrease of the same amount between the previous and current FA.

Cash Trust – GRIP has always appreciated the establishment of a cash trust as a significant part of the FA package for FMI's mines. For this reason, we are concerned that the present FA proposal would reduce the total cash amount from 45.2% of the previous total to 41.1% of the present total. The cash trust is intended as a highly conservative and immediately available form of cash and the goal of the agencies and FMI should be to increase the percentage of the cash trust over time until the entire FA amount is in that form.

It is important to emphasize that the New Mexico Mining Act as contained in NMAC 19.10.12.1208 Financial Assurance Mechanisms E. states "Trusts shall be subject to the following conditions" including "(2)(c) investments of the trust shall be reviewed and approved by the director and may include fixed income investments such as U.S. treasury obligations, state issued securities, time deposits and other investments of similar risk as approved by the director"(underline added). GRIP recommends that MMD require that the Trustee (Wells Fargo) disclose the specific Fixed Income Bond Funds and the associated risk level in which the cash trust is invested. We are concerned that the return being achieved is inconsistent with that of other similar funds of which we are aware. **GRIP would like access to this information so that we can judge consistency with Appendix A of the cash trust agreements.**

We are also concerned with FMI's proposal to vary the "floor" amounts for the trust funds given the explanation contained in their January 23, 2020 letter. FMI's February 7, 2020 letter for the Continental Mine proposes increasing the cash trust floor from \$5.3M to \$5.5M, an increase of approximately 3.8%, however it provides no basis for the increase. It is not clear if the same change would be applied to all floor amounts. **GRIP would like to be informed in more detail as to the basis of the floor amounts as well as for any changes to those amounts.**

Table 2. 2019 FMI Mines FA Amounts and Instruments

FA Instrument	Tyrone Mine	Chino Mine	Cobre Mine	Little Rock Mine	Total	%
Total FA Previous						
Cash Trust (Base Amount)*	\$48,200,000	\$121,000,000	\$5,300,000	NA	\$174,500,000	45.2%
Third Party Guarantee (3PG)	\$50,804,400	\$45,336,545	\$8,146,372	NA	\$104,287,317	27.0%
Approved Collateral Value	\$48,549,200	NA	\$13,908,900	NA	\$62,458,100	16.2%
Surety Bonds	\$31,780,518	\$8,885,433	\$632,612	\$2,944,583	\$44,243,146	11.5%
Letter of Credit	\$170,874	NA	NA	NA	\$170,874	0.0%
Total FA Previous	\$179,504,992	\$175,221,978	\$27,987,884	\$2,944,583	\$385,659,437	100.0%
Total FA Current						
Cash Trust (Base Amount)*	\$48,200,000	\$121,000,000	\$5,500,000	NA	\$174,700,000	41.1%
Third Party Guarantee (3PG)	\$44,807,373	\$97,416,979	\$1,403,389	NA	\$143,627,741	33.8%
Approved Collateral Value	\$48,549,200	NA	\$13,908,900	NA	\$62,458,100	14.7%
Surety Bonds	\$31,780,518	\$8,885,433	\$632,612	\$2,944,583	\$44,243,146	10.4%
Letter of Credit	\$170,874	NA	NA	NA	\$170,874	0.0%
Total FA Current	\$173,507,965	\$227,302,412	\$21,444,901	\$2,944,583	\$425,199,861	100.0%

Third party guarantee (TPG) - As the agencies and FMI are aware, GRIP is fundamentally opposed to related parties providing TPGs as financial assurance. Regardless of arguments otherwise, it is GRIP's opinion that a TPG from FMI or Freeport Minerals Corporation (FMC) constitutes a self-guarantee and is self-insurance. Most importantly, in the event that FMI/FMC went bankrupt and the agencies were to try and collect the funds represented by the TPG, they would be left with a paltry sum or nothing at all. Based on experiences at other sites in the U.S. where this has occurred, the agencies would be forced to enter a claim into U.S. bankruptcy courts and would be lucky to receive 10 cents on the dollar. Most likely, the state would ultimately have nothing more than the scrap value of the paper the TPG was written on. Additionally, having this kind of FA undermines the efforts that have been taken to establish a reasonably accurate revised cost estimate given that the entire increase in FA for FMI mines will be in the form of an additional \$40 million TPG. This results in TPGs being increased from 27.0% of the previous total FA to 33.8% of the current FA. If anything, the amount of TPG should have been decreased from that previously accepted.

GRIP requests that the agencies provide us with the information used to review both FMI and FMC's eligibility as TPGs. GRIP will treat this information as confidential if required. Before allowing the TPGs, we believe the agencies must address how, in the event the designated party is no longer eligible for a TPG at any point in the future, replacement with a real form of FA can be accomplished, given that the company's financial situation that causes the ineligibility in the first place will most likely make it impossible for them to do so without causing further financial hardship.

Collateral – It is notable that NM is one of the few states to allow for collateral as a form of FA. As we have previously stated, it puts the state in the position of becoming a real estate agent if it ever becomes necessary, and the ability of the state to sell the property in a timely and cost-effective manner is questionable. Therefore, even where it is allowed by regulation, we would note that many states have chosen not to accept collateral as FA given their experience. While we appreciate the approach taken by the state to only approve 80% of the estimated market value, GRIP recommends that this form of FA not be accepted.

The current proposal is to cover \$62.5M in financial assurance for Tyrone and Continental mines through collateral in the form of ranch properties owned by FMI. We reiterate for your concerns with Freeport's collateral proposal brought to the attention of the agencies in GRIP's letter dated October 12, 2016 regarding Chino, Tyrone, and Continental mines Third Party Guarantee:

- Freeport ranch properties represent 30% of the deeded land in Hidalgo County and 7.5% of the deeded land in Grant County. If the state had to liquidate ranch properties in the event of an FMI default, putting that much land on the market at once would flood the market and depress prices. Because of this, it is likely that the values proposed are overestimated despite the 20% discount factor applied to the fair market value.
- It is also unclear if collateral would be protected from bankruptcy court should FMI default, calling into question whether or not the State of New Mexico would have access to the \$62.5 million in collateral. We would like clarification from the agencies on this.

We would like to request the updated appraisals proposed for collateral when available. Electronic copies are preferable.

Closure/Closeout Plan and FA Revision Scheduling

Based on the Director's determination that closure/closeout plans (CCPs) and schedules are to be conducted every five years. Given that the FA amount estimated are based on 2019 dollars, and by every reasonable expectation the FA should have been finalized in 2019, we would anticipate the renewal of all three mines to occur again in 2024, however we already note that the agencies are suggesting they be renewed in 2025.

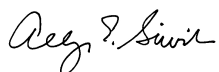
We strongly suggest this is inadvisable for both the agencies and FMI, as well as public participants. The concept of financial assurance is to capture the potential liabilities for the proceeding or upcoming five-years, so as to ensure during that five-year future period if the company goes bankrupt, to allow the agencies to proceed with the reclamation of features disturbed up until that time. With the exception of Continental, the agreed upon 2019 dollars-based FA is predicated on mine and closure/closeout plans representing the prior period, from 2014 – 2019 due to the delays that have occurred. As has been noted in our comments on the CCPs that they are therefore inaccurate as to actual present liabilities. GRIP recommends that the agencies and FMI voluntarily agree on a schedule for update of the CCPs and FA that begins with Tyrone or Chino in 2022 and initiates an additional update in 2023 leaving only one mine for revision in 2024.

As a case study we would point out FMI's 5-10 year plans for the Tyrone mine that have been recently provided by FMI. The present FA for Tyrone, in order to be accurate, should have been based on a 2020-2024 mine plan that captured the potential future mine areas that could be disturbed during the upcoming five-year period. The plan and FA would be highly conceptual, but that is consistent with practice throughout the U.S. It is highly notable that the currency of the Tyrone and Chino plans and FA addressing past liabilities but not future liabilities is unprecedented in our experience elsewhere, and reflects poorly on the agencies administration of the Mining Act as consistent with accepted regulatory practice.

Overall Conclusions

It is GRIP's overall conclusion that while the revision of the long-overdue FA amounts for FMI's three Grant County mines is a significant accomplishment, the results themselves are somewhat disappointing due to the increase in FA being proposed in the form of an increase in the TPG. In total, if FMI were to ever go bankrupt, which is the primary purpose of FA to address, the result would be a decrease in funds available to the state due to the increase in inappropriate forms of FA such as the TPGs. As a result GRIP will continue to urge that the New Mexico Mining Act be revised to close these loopholes that put taxpayers at risk for the cost of reclamation and cleanup.

Sincerely,



Allyson Siwik,
Executive Director

Cc: Jim Kuipers, Kuipers and Associates