Date: September 6, 2015

To: David Ohori, Permit Lead Little Rock Mine, david.ohori@state.nm.us

From: Rebecca M Summer, PhD Hydrology, Geomorphology, Retired becsummer@gmail.com

Re: FMI and NMMMD meeting, Little Rock Mine Expansion, September 2, 2015

Thank you for accepting comments on Little Rock Mine Expansion. I attended the meeting from 4:30 to 5:45 pm and spoke with Mr. Martin Soltero, but had to depart for another engagement.

I have questions about the Little Rock Mine Expansion and Closure-Closeout Plan. These questions relate to the hazardous substances associated with the proposed pit lake and coarse rock fragment "leach cap", which has not been demonstrated to 1) meet reclamation standards and 2) not affect groundwater quality. I look forward to hearing from you regarding these questions.

[1] Mining extraction for ~150 years has scarce documentation on waste water movement. Unknown growth of contaminated groundwater plumes from mine wastes continues to occur today in the mining area. The latest contamination analyses were done sometime between 1980-2006 (Office of Natural Resource Trustee, 2012). Data were gathered on ground water at the Chino, Cobre and Tyrone Mines from 1980-2006. The hazardous and related substances from the Mines were detected at elevated concentrations and were, in most cases, above the relevant human-health-based water quality standards (Federal and State of New Mexico groundwater standards for human health and domestic water supply). For example, sulfate was 300X the national water quality standards. The analyses were reported by NM Office of Natural Resource (2012). The list of the hazardous substances with elevated concentrations includes:

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Cobalt
Copper
Ferrous, ferric sulfate
Lead
Manganese
Nickel
Selenium
Sulfate
Sulfuric acid
Thallium
Toluene
Zinc

Will your company be utilizing monitoring wells on a frequent basis to determine the concentration of hazardous substances over time? Are you planning on using various methods to remove contamination and substantially reduce levels to a human-health-based water quality standard? Will your team be the first to document and mitigate the movement of polluted waste

water within and surrounding your expansion so that wildlife, birds, and those who will remain living here on this land will not be faced with contamination problems over time?

It is important to note that high density monitoring well data with related chemical and physical analyses at the FMI Tyrone mining facilities do not exist or have not been made available to the public. Limited monitoring well data exist but have serious gaps in the spatial coverage of affected down gradient areas.

[2] Complexity of the geology and hydrology creates high uncertainty of water and waste movement. Please note that this area is within Transition Zone Physiographic Province. As the name suggests, it exhibits the characteristics of both the Basin and Range (south) and the Colorado Plateau Provinces (northwest). Characteristics include faulting, folding, volcanism and magma intrusions, erosion and sedimentation over time. Overall the area is structurally complex and diverse.

Are you and your team considering these factors and making them an integral part of the decision-making process?

Ennis, David, EMNRD

From: Jan McCreary <cascabel@gilanet.com>
Sent: Saturday, September 05, 2015 7:45 AM
To: Ohori, David, EMNRD
Subject: Opposition To Freeport's Little Rock Mine Expansion

Dear Mr. Ohori,

I am writing you today to express my concerns about the Little Rock Mine Expansion. It is my understanding that the expansion will create a pit lake that will be very acidic and will kill birds and wildlife. There are 79 bird species, 18 mammal species, and 5 reptile species that will be adversely affected by a toxic lake. This is inexcusable! I am totally opposed to such a plan.

We live in the Oak Grove North Subdivision, very close to the proposed Little Rock Mine. Obviously we and our neighbors are EXTREMELY CONCERNED about mine waste and chemicals entering our groundwater and contaminating our water wells! At the very LEAST, Freeport should continuously monitor the contamination of our aquifers that they plan to recklessly pollute!

Freeport is insisting on using "leach cap" as a cover material. They euphemistically refer to it as "topsoil", when in actuality it is comprised of coarse rock fragments. Freeport has not yet demonstrated that the rock is suitable material to grow vegetation on reclaimed stockpiles and leach piles and has not yet demonstrated that it will be effective at preventing erosion of the piles or infiltration of storm water. It has been recommended that Freeport use Gila Conglomerate, a recognized and approved base material easily collected in Grant County, as the cover material instead. Again, at the very LEAST Freeport be forced to do a decent job of attempting to restore the environment they have ruined.

In short, we have lived in Oak Grove North Subdivision happily for 15 years and we are very worried that Freeport will ruin our wells, deflate our property values, and ultimately force us to leave our home. If that happens, you can be sure we and our neighbors will seek legal restitution from Freeport for what they have destroyed.

Sincerely,
Jan & Pat McCreary