Ron Curry, Cabinet Secretary
State of New Mexico Environment Dept.
P. O. Box 261100
Santa Fe, New Mexico 87502-0110

Re: Establishment of Background Water Quality for Clean up of Pollution from the Homestake Mill, Cibola County

Dear Mr. Curry:

As you are aware, the quality of water in the San Mateo alluvial (and now the Chinle formation) has been contaminated by Homestake Mining Company's mill.

This aquifer has also been contaminated by the mining and milling in the Ambrosia Lake area during the years that the mines and the mills were allowed to dump their water into the arroyos that flow into the San Mateo drainage. This water ran as a stream to just above the curve on New Mexico 53 (now 605) in Section 6, T12N, R9W, where it soaked into the alluvial approximately 4 miles upstream of Homestake mill in Section 26, T12N, R9W.

Based on my experience with groundwater flow in alluvial aquifers, the flow rate can be as high as 200 ft. per day. At a 10 ft. per day flow rate, it required only 5–6 years to reach the Homestake mill and Murray Acres area. I believe everyone agrees that some of the contamination has come from the Ambrosia Lake activities prior to this discharge being stopped in the 1980s.

Therefore, we expect NMED, EPA & NRC to require cleanup to pre-mining-milling conditions. We realize this will require cleanup above Homestake's millsite and will require the participation of not only Homestake but also Kerr McGee, Phillips (or NRC as they are now responsible for the Phillips Mill Site) as well as other producers that operated in the Ambrosia Lake area mining or milling and discharging water to the arroyos.

As the New Mexico Department of Public Health and the NM State Engineers Office both had knowledge of water samples that showed Homestake's mill ponds were polluting the alluvial aquifer less than 2 years after the mill start-up, we believe the State of New Mexico is also responsible for not stopping the pollution then or at a minimum, should have informed the public so that they could make decisions based on this knowledge.

If you review the pre-1958 data in the area of the Homestake mill, it is quite obvious the water was of good, potable quality. The samples in T12N, R10W, Sections 27, 29 and 30 and T11N, R10W, Sections 21, 22 and 26 average the following:

•	sulfate	272
•	chloride	38.4
•	fluoride	0.44
•	nitrate	10.09
•	TDS	624
•	Spec. Cond.	1021
•	pН	7.56

As residents of this area and would-be users of these aquifers, we feel very strongly that the water must be cleaned to pre-1958 conditions and be kept clean in the future. Attached you will find the background levels our community finds acceptable. (See Exhibit-A, attached). This will require moving the tailings piles to lined ponds that are not on top of an alluvial aquifer. It may also require removing the contaminated soils below the existing tailings down to the alluvial aquifer.

Sincerely,

Milton Head, Vice-President

Murray Acres Irrigation Association

Von Hearl

P. O. Box 2038

Milan, New Mexico 87021

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