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April 12, 2008

Mr. Luis A. Reyes, Executive Director for Operations  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Dear Mr. Reyes:

Thank you for your response to my letter dated October 13, 2007 and forwarded to you by Senator Jeff Bingaman regarding the contamination from uranium mining and milling activities in the Grants Mineral belt, in the region from the Milan Village limits to Ambrosia Lake, San Mateo areas, and the Anaconda millsite near Bluewater Village.

When uranium activities began in the Grants area in 1950-1951, the Atomic Energy Commission (AEC) was placed in charge of directing these activities. The Atomic Energy Act of 1954 placed all regulatory authority for the industry under the AEC. With the passage of the Energy Reorganization Act of 1974, the Nuclear Regulatory Commission (NRC) replaced the AEC and all regulatory authority for the industry was assumed by the NRC.

Regulatory authority for milling has therefore always been under the authority of the NRC or its predecessor, the AEC. Thus, responsibility for the resulting contamination and lack of remediation rests with the NRC.

In 1961, pollution of the alluvial aquifer at the Anaconda Millsite and the Homestake Millsite was identified by the Public Health Service. No corrective action was taken by the AEC or the companies involved. Neither the general public nor nearby landowners were informed. The estimated area of contamination at the Homestake Site was 80-100 acres in areal extent of the alluvial aquifer. Monitoring wells were not established.

In 1974, in response to a request by the New Mexico's Environmental Improvement Agency (NMEIA—now called the New Mexico Environment Department or NMED) to the Region VI Office of the U.S. Environmental Protection Agency (USEPA or EPA), a survey of the Grants Mineral Belt was conducted to include water quality impacts to the area. (See EPA 906/9-75-002, September, 1975 Impact of Uranium Mining and Milling on Water Quality in the Grants Mineral Belt.) This study identified contamination throughout the Ambrosia Lake drainage area and in several domestic wells in the Murray Acres and Broadview Acres subdivisions in the alluvial aquifer. The NMEIA and the EPA then notified residents advising them not to use the water from these alluvial wells for drinking. The estimated area of contamination at this time for the Homestake Millsite was approximately 1,000 acres in areal extent in the alluvial aquifer only. Residents were advised by USEPA and NMEIA, that the Chinle and San Andreas aquifers were

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not contaminated and could be used to replace contaminated alluvial wells. Again, monitoring wells were not established to determine pre-contamination background levels.

Currently, after 31 years of so-called remediation, the areal extent of the contamination has been spread to an area in excess of 4,500 acres and has destroyed five aquifers (the alluvial and four Chinle aquifers). Also six wells in the San Andreas aquifer are now yielding samples with contamination. There are still no monitoring wells ahead of this contamination front to establish background data.

Clearly, the remediation has been mismanaged.

If you include the contaminated area from the Anaconda (now Department of Energy Bluewater) Site, to the Ambrosia Lake area, there is now in excess of 28,800 acres with contaminated waters of which only approximately 1,500 acres are currently being addressed under a NRC mill license or NMED discharge permit.

This leaves 27,300 acres of area with contaminated waters that are not being addressed. As these areas are upgradient of the Homestake Millsite, they are continually adding contamination to this site, causing the site to become larger and larger over time. (See 2<sup>nd</sup> Five-Year Review of Homestake Mining Company Site, EPA Publication, March 5, 2007, Issue-3??, p. ES-1 of Executive Summary). There are still no monitoring wells ahead of the contamination plumes.

✓ The irrigation system, and injection-collection system HMC is being allowed to use beyond the superfund site, is not regulated by NRC License SUA-1471 or NMED Discharge Permit DP-200. This allows HMC to do as they please--no public input or hearings, and no oversight.

✓ The water collected in this area is used to irrigate approximately 400 acres of land beyond the superfund site boundaries. The water is percolated back through the soils which act as a filter to remove many of the contaminants into the soils. These will later re-enter the aquifers over time as precipitation-irrigation waters percolate through the soils, pick up these contaminants and reinject them into the waters again.

The 100-acre field south of Murray Acres has been taken out of HMC's irrigation phase as it became so loaded with contaminants that the alfalfa stopped growing. This area has soils with heavy clay content. Therefore, the contamination is difficult to wash down below the root zone and the crop could not grow. Later in the season, when we received some good rains, the hay crop grew with the fresh water and a cutting of hay was taken off the area. It has not been farmed since.

✓ Throughout the history of this site, every time contamination is identified in a newly sampled well, we are told by NMED, EPA and NRC that without prior background data in the area of the well, that it is possible the results are due to "naturally-occurring contamination." Therefore, the regulatory agencies claim they cannot determine where the contamination is coming from, although the plume goes back to the Homestake and Anaconda millsites and to Ambrosia Lake mines and millsites.

It has been 47 years since contamination was discovered in the alluvial waters at the Homestake and Anaconda Millsites and we still do not have background wells in place, nor has data been gathered, to determine background before contamination reaches a new area.

To date, several residential wells in the area of contamination have not been sampled. Wells that have been sampled, with contamination identified, are still being used by residents because these people have not yet been connected to an alternate water supply.

There is not an established well monitoring program in place to determine what is happening to the private wells in the contaminated areas.

In addition, the inflow from the Ambrosian Lake area down the Arroyo Del Puerto to the San Mateo drainage to the Homestake site has never been determined. The areal extent of the San Mateo drainage has not been determined. Channelization within the drainage is not known. Inflow parameters from the Lobo Canyon drainage are unknown. The Rio San Jose drainage parameters that bring the Anaconda Bluewater Millsite contamination to coningle with the Homestake-Ambrosia Lake contamination at the Milan City limits area, have not been determined. Therefore what parameters do the agencies use to determine an effective remediation proposal?

Calculating conservatively, the quantity of contaminated waters that have been discharged into these alluvial drainages is more than 595,000 acre feet.

As of 2005, less than 13,000 acre feet of the total waters have been treated since 1978. (See 5-year review, Sept, 2006). I estimate the total waters now contaminated to be more than 5,472,000 acre feet. That is over five million acre feet of water that needs to be remediated, while less than 13,000 acre feet have been remediated in the last thirty years.

The current yearly treatment rate is 481.5 acre feet/year. At this rate, it will require 11,365 years to treat the total contaminated waters. It is readily apparent that the remediation program at the Homestake site is not adequate to the level of contamination. The contamination coming from Ambrosia Lake and from the Anaconda Bluewater site is overrunning the capacity of the Homestake site and is being spread over an ever-increasing area and into additional aquifers.

The AEC-NRC had total regulatory authority over the uranium industry until the 1970s (20 years) and still has full regulatory control over the uranium milling activities. It is apparent that the agency's regulation was not adequate then and is not adequate today to prevent contamination of the waters of the United States of America.

Again, I challenge the NRC to identify one uranium mining and/or milling project, in which water was contaminated, that has been cleaned and returned to the same standards that existed before the activity or to USEPA drinking water standards.

I take this opportunity to ask the agencies involved to place the entire area from north of Milan, New Mexico through the Ambrosia Lake area and Anaconda/Bluewater site into a superfund

site; identify all companies/operations that have contributed to the contamination and hold them and the NRC responsible for the cleanup of this area.

When the AEC released their authority over the mines to the states and the USEPA in 1971, it took less than 4 years for these agencies to begin identifying the problems and start taking corrective action. By 1980, all mine discharges were contained in lined ponds, surface flow was stopped. However, under NRC authority nothing has been done to curtail the mill tailings drainage into the alluvial waters to stop this source of pollution which continues to contaminate into perpetuity.

✓ All of the mill tailings piles in this area need to be removed from their present location, stored in an impervious shale formation, or isolated by bentonite slurry barriers to eliminate the migration of contaminants into adjoining aquifers.

✓ It is very apparent that the NRC does not intend to remediate the contamination in our area back to useable water for domestic purposes.

Based on this, I propose that the full area of contamination be identified, placed in a superfund site, all residents-landowners in the area be compensated at fair market value for their losses, the area be closed to all use into perpetuity as it is no longer habitable for humans.

Sincerely,



Milton Head, President  
Bluewater Valley Neighbors Association

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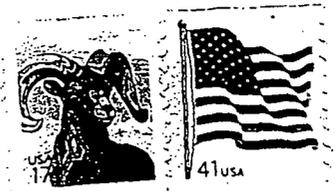
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