

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION  
P.O. Box 968, Santa Fe, New Mexico 87504-0968  
(505) 984-0020

Russell F. Rhoades, MPH, Director

TONEY ANAYA  
GOVERNOR

ROBERT McNEILL  
SECRETARY

ROBERT L. LOVATO, M.A.P.A.  
DEPUTY SECRETARY

JOSEPH F. JOHNSON  
DEPUTY SECRETARY

May 20, 1983

M E M O R A N D U M

TO: ROY MCKEAG

FROM: *MS* GERRY STEWART, ACTING BUREAU CHIEF AND CHIEF,  
URANIUM LICENSING SECTION

SUBJECT: SECRETARY McNEILL'S MEMO MAY 16, 1983, CONCERNING  
HOMESTAKE MINING COMPANY TAILINGS PILE

The following comments relative to Mr. McNeill's memo are supplied in response to your request:

1. The Homestake Mining Company uranium mill at Milan, New Mexico has been operational since 1957. Since New Mexico became an Agreement State in 1974 the facility has been formally inspected for compliance with New Mexico's Radiation Protection Regulations on an annual basis until 1980 when the inspection frequency was increased to twice a year. The inspections were accomplished by members of the Radiation Protection Bureau's staff including personnel from the Uranium Licensing Section and the Surveillance and Field Operations Section. The facility has been found to be in compliance with the Radiation Protection Regulations.
2. The health concerns expressed by the residents near the tailings pile have been directed toward groundwater (drinking water standards) which are lower than the radiation protection standards. An injection system drawing water from a deeper aquifer and injecting the water into the shallow aquifer is mitigating this problem. Incidentally, the mill was operating several years before the subdivisions were developed and the homeowners were aware that a uranium mill was operating at that location. The Division used all means available to discourage further development in that area after 1974.
3. Changing regulatory requirements during 1977-1981 necessitated a new environmental report for renewal of Homestake's Radioactive Material License for their uranium mill. The environmental report is under detailed technical analysis at the present time. No current radiological assessment has been accomplished by the Surveillance and Field Operations Section, however, an assessment is underway. Data submitted by Homestake

9712160084 830520  
PDR ADOCK 04008903  
C PDR

OPPORTUNITY EMPLOYER

from their monitoring system is contained in the environmental report. Discrepancies appear to exist between Mr. Millard's data and Homestake's data. I have requested Homestake to review their monitoring data. I have been denied access to Mr. Millard's data and how it was calculated. Mr. Millard advised me that it was very complicated and since I was not a health physicist I would not understand it and that he would provide me with simplified example calculations and brief me on how it is done. I provided a memo to Mr. Topp on this matter. Regulation and control of a licensee is a Division responsibility and not the sole purview of a single individual.

4. In addition to inspections and compliance monitoring a general area monitoring program has been underway for several years and is being expanded. Initial efforts were directed toward radon measurements around licensed facilities and in the general population area within the Grants Mineral Belt. This monitoring effort was augmented by studies done by EPA - Las Vegas, NRC, Batelle, and others. Our monitoring capability was expanded through a grant from NRC to purchase additional sampling equipment which was installed during 1982-83. The data acquired from using this equipment coupled with Air Quality Section air monitoring data is needed to evaluate the impact from the Homestake Mill. It is essential that an on-going data assessment be accomplished to determine trends and also if any regulatory action is necessary to protect public health and safety and the environment.
5. NM Radiation Protection Regulation 4-160E provides that the Division may limit quantities of radioactive materials released in air and water during a specified period of time,
  - a. if it appears that the daily intake of radioactive material from air, food or water,
  - b. by a suitable sample of an exposed population group (there is no defined standard),
  - c. averaged over a period not exceeding one year,
  - d. would otherwise exceed the daily intake resulting from continuous exposure to air or water containing one-third the concentration of radioactive material specified in Part 4, Appendix A, Table II (these values are identical to NRC 10CFR20 standards and are above background).

Considerable effort will be necessary to establish the justification for the factor of 3 reduction in standards with data collected for a full year. However, even with six months of data sufficient trends could be identified to initiate action for additional control of

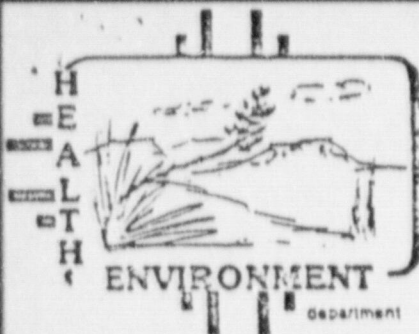


radionuclides if the data is sufficiently above the standards and agreement can be reached on the "suitable sample of the exposed population group". Licensee control action based on radon measurements is further complicated by the provision of footnote 3 to Appendix A, Part 4, NMRPR, which permits alternative use of working levels for radon and its daughters. In order to use working levels, radon decay equilibrium values may have to be determined if it is marginal if the standards are being exceeded (both inside and outside residences).

A more critical aspect for control of radionuclides is that the sum of the ratios of each radionuclide concentration to its maximum permissible concentration (i.e. each fraction of the MPC) should not exceed unity (Note to Appendix A, Part 4, NMRPR). Our concern in this area is that Thorium 230 has a very restrictive MPC for air and even a small fraction of its MPC is of concern. Thus availability of data is necessary. If any adverse verifiable trends have been determined, it is imperative that this information be released immediately for corrective action, if needed.

6. I have requested Dr. Ted Brough, Milan Field Office, to supply dates of inspection and comments concerning Homestake inspection deficiencies.
7. I consider the concept of Secretary McNeill's memo to be a proper course of action provided we do not restrict input. Any information the Uranium Licensing Section has in its file on Homestake is available for anyone and the Uranium Licensing Section offers to assist in any way it can on this effort.

JS/mc



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION  
P.O. Box 968, Santa Fe, New Mexico 87504-0968  
(505) 984-0020

Russell F. Rhoades, MPH, Director  
RADIATION PROTECTION BUREAU

TONEY ANAYA  
GOVERNOR

ROBERT McNEILL  
SECRETARY

ROBERT L. LOVATO, M.A.P.A.  
DEPUTY SECRETARY

JOSEPH F. JOHNSON  
DEPUTY SECRETARY

M E M O R A N D U M

TO: ULS Files  
FROM: Jerry Stewart *JWS*  
DATE: May 6, 1983  
SUBJECT: Environmental Monitoring Data Around Homestake

On April 26, 1983 I observed air monitoring data on a Homestake aerial photo which I had been searching for and unable to locate. The Thorium-230 values were a factor of 100 to 1000 higher than had been reported by Homestake in their Environmental Report for license renewal. On April 27, 1983 during a site visit I advised Homestake to review their data and calculations for any potential errors. On May 3, 1983 I requested a copy of the EID data ~~from~~ Jere Millard, Chief of the Surveillance and Field Operations Section, Radiation Protection Bureau. The data had been collected by EID and paid for by EID and is part of the EID public files. Mr. Millard denied me access to and copies of the data. Instead he offered to supply a simple sample calculation for the high and low values of the data that I might be able to understand since I was not a health physicist and he thought the calculations and conversions were quite complicated. In addition he offered to Al Topp to write a memo of questions related to the published Homestake data and brief me on his sample calculations.

I am unaware of any policy or procedure when the data obtained by the State and the files of that data cannot be available to State employees and the public unless the Director determines that company private data can be withheld if the company requests this and the Director agrees.

If Mr. Millard's data is valid then the license renewal for Homestake must be immediately reviewed for its operational impact on public health and safety and the environment. Mr. Millard is not fulfilling his responsibility towards the people of New Mexico by denial of access to data that could have serious consequences for people of this State by a state licensee. If Mr. Millard's data is substantiated then regulatory action against Homestake could be initiated and should be done as soon as possible.



STATE OF NEW MEXICO  
GOVERNOR'S CABINET  
SANTA FE  
87503

TONEY ANAYA  
GOVERNOR

ROBERT McNEILL  
SECRETARY  
FOR HEALTH & ENVIRONMENT

May 16, 1983

MEMORANDUM

To: Russell Rhoades, EID Director ✓  
Michael J. Burkhardt, HSD Director  
Robert Lovato, Deputy Secretary for Health and Environment

From: Robert McNeill, Secretary for Health and Environment *RM*

Subject: Homestake-UNC Tailings Pile - Public Health Impact

I am concerned that the public health impact of the Homestake-UNC Tailings pile has not been adequately addressed to date. I am further concerned that little effort seems to have been directed towards the health concerns expressed for the past several years by residents near the tailings pile.

Accordingly, I am assigning Dr. Jonathan Mann to lead a Departmental Working Group on the Homestake-UNC Tailings Pile with the following specific goals:

1. To assess the public health impact of the tailings pile, based on currently available information;
2. To determine additional data needs in order to reasonably assess the public health impact;
3. To explore relevant health concerns and issues among nearby residents
4. To prepare a summary incorporating the current assessment of public health risk and plans for future data collection.
5. To keep me personally informed about the progress and results of this work.

In order for Dr. Mann and the Epidemiology Office to carry out this task, I am asking the assistance of EID and HSD. Within the next week, Dr. Mann will contact you regarding your Divisional involvement in this Working Group.

Thank you in advance for your cooperation.

cc: Governor Toney Anaya  
Secretary Denise Fort  
Ms. Sally Rodgers  
Tom Udall, Esquire