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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

September 27, 2005

William Von Till
Senior Project Manger/Hydrogeologist
Office of Nuclear Material Safety and Safeguards
United States Nuclear Regulatory Commission
Mail Stop: T-8F42
Washington, DC 20555-0001

Re: Approval of proposed ground water concentrations for the Homestake Mining Company Site (CERCLIS ID NMD0078600935), Milan, NM.

Dear Mr. Von Till:

The Environmental Protection Agency (EPA) is approving the proposed background concentrations for the Homestake Mining Company Superfund Site, Milan, NM. The proposed standards are listed in the New Mexico Environment Department's acceptance of these standards in a letter dated August 18, 2005. The new standards will be used as the criteria for site clean up.

We thank you for your continued cooperation in addressing the cleanup at this site. If you have any questions please contact me at 214-665-3126.

Sincerely,

Sai Appaji /e/ 9/27/05

Sai Appaji, Remedial Project Manager
Environmental Protection Agency
Region 6

copies: Dana Bahar, SOS Program Manager
Kevin Myers, MECS
Robin Brown, SOS
Jerry Schoeppner, MECS

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT

COPY



IN THE MATTER OF THE APPLICATION
OF HOMESTAKE MINING COMPANY
FOR THE RENEWAL AND MODIFICATION OF
GROUNDWATER DISCHARGE PERMIT DP-200

No. GWB 14-05 (P)

HEARING OFFICER'S REPORT

INTRODUCTION

Homestake Mining Company ("Homestake" or "HMC") seeks to renew and modify its discharge permit for discharges associated with the treatment of contaminated ground water at the Grants Mill Reclamation Site (Site) located five miles north of Milan in Cibola County, New Mexico.

Water contaminants associated with discharges at the Site include nitrate, selenium, uranium, combined radium-226 plus radium-228, chloride, sulfate, total dissolved solids, and molybdenum. Alluvial ground water below the tailings impoundments ranges from approximately 25-50 feet below ground surface.

The Nuclear Regulatory Commission (NRC) has primary jurisdiction over ground water remediation at the Site by virtue of the Atomic Energy Act of 1954 and the Uranium Mill Tailings Radiation Control Act of 1978.

Through the discharge permitting process under the New Mexico Water Quality Act and Water Quality Control Regulations, the Bureau seeks to assure that remediation also meets state requirements for the protection of ground water.

43. Generally the New Mexico Office of the State Engineer is the proper regulatory authority with respect to water quantity, water rights and dam safety while the role of the Department is to permit the discharges associated with the ongoing ground water remediation and work cooperatively with other jurisdictional agencies in the regulation of Homestake site. NMED Exhibit 6, p. 2; Tr. Vol. pp. 395-397, LL 17-22.

44. The NRC has primary oversight of the ground water remediation process pursuant to Homestake's NRC license and associated Corrective Action Program (CAP). HMC Ex. 2; NMED Ex. 6, p. 2; Vollbrecht Tr. 2, pp. 392-93; Robinson Tr. 2, p. 627.

45. Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, and applicable parts of Title 10 of the Code of Federal Regulations, Homestake is conducting remediation of the Site pursuant to its NRC license, SUA-1471. HMC Ex. 2.

46. NRC license SUA-1471 establishes ground water protection standards for each designated aquifer/zone as described in Ground Water Hydrology for Support of Background Concentration of the Grants Reclamation Site (Hydro-Engineering, December 2001) and Background Water Quality Evaluation of Chinle Aquifers (Homestake Mining Company and Hydro-Engineering, October 2003).

47. The NRC, the EPA and the New Mexico Environment Department each participated in the process of evaluating data to establish site restoration standards and concurred with its outcome. HMC Ex. 2, §35B; NMED Ex. 7, HMC Ex. 1, Table 1.

48. Local community members participated in the NRC proceeding setting the standards. NMED Ex. 5, AR 185, 186, 187, 189, 195; Federal Register, Vo. 71, No. 120, pp. 35956-57.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

GROUND WATER

December 20, 2007

DEC 26 2007

Mr. Milton Head
Bluewater Valley Downstream Alliance
P.O. Box 2038
Milan, NM 87021

BUREAU

Re: Request for Rationale for approving revised ground water protection standards for the Chinle Aquifers at the Homestake Mining Superfund Site.

Dear Mr. Head:

This is in response to your November 26, 2007, letter to the United States Environmental Protection Agency (EPA) requesting a copy of documentation pertaining to the rationale and reasoning used to justify using alluvial background data for establishing alternate concentration limits (ACLs) for the Chinle aquifers at the Homestake Mining Company (Homestake) Superfund Site.

First, I would like to clarify that the EPA, the United States Nuclear Regulatory Commission (NRC) and the New Mexico Environment Department (NMED) have not approved ACLs for any aquifers that have been affected by contamination from the Homestake site. The EPA, NRC and the NMED did approve revised Ground Water Protection Standards (GWPSs) for selenium, uranium and molybdenum.

The distinction between ACLs and GWPSs is quite significant. ACLs are considered for approval only at sites where cleanup goals (i.e., GWPSs) are not technically achievable. At Homestake remediation is still on-going and no proposal to consider ACLs has been made at this point. GWPSs, in contrast, reflect the background concentrations of contaminants in aquifers that are affected by off-site derived contamination. The revised GWPSs at Homestake for selenium and uranium are higher than the EPA's Maximum Contaminant Level (MCL) and are based on these background levels. Molybdenum does not have an MCL. The EPA defines background as constituents or locations that are not influenced by the releases from a site, and is usually described as naturally occurring or anthropogenic. Generally, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as Superfund), cleanup levels are not set at concentrations below natural background levels. The revision of GWPSs for the Homestake site acknowledges differences in specific contaminant background concentrations among the affected aquifers, which was not reflected in the original GWPSs for this site.

The EPA supported the revised GWPSs for the Homestake site for the Chinle aquifers based on its review of documents on the statistical evaluation of well data in the Chinle aquifers submitted by Homestake, as well as in consultations with the NMED and the NRC. The statistical methodology used by Homestake to calculate the background levels is consistent with EPA guidance documents. The EPA has not created a separate document that explains the rationale for approval of these revised GWPSs. Recently, NMED has said that it will ask the regulatory agencies to reexamine some of the standards that have been approved for the Chinle aquifers. Note that NMED has indicated that these changes, if adopted, would not bring these standards to the MCL values.

In regard to your concern about contamination in the San Andres aquifer, the EPA shares your concern. The EPA is currently working with NMED and the NRC to develop a strategy to assess contamination that has been observed in this aquifer.

The EPA will continue to monitor the site and if new information comes to light that questions the selection of the wells or data used for determining background levels in any of the aquifers, additional reviews will be performed in conjunction with the NRC and NMED.

If you have additional questions, you can write to me at the address above or call me at (214) 665-3126.

Sincerely yours,



Sai Appaji
Remedial Project Manager
United States Environmental Protection Agency,
Region 6

cc: Dana Bahar, NMED
David L. Mayerson, NMED
Jerry Schoeppner, NMED
John Buckley, NRC
William Von Till, NRC