October 3, 2011

Mr. Samuel Coleman, Director
Superfund Division
EPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

SUBJECT: RESPONSE TO U.S. ENVIRONMENTAL PROTECTION AGENCY LETTER DATED JULY 8, 2011

Dear Mr. Coleman:

On a June 8, 2011 telephone conference, you and I discussed the roles and responsibilities of the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Environmental Protection Agency Region VI (EPA) in ongoing remediation activities at the Homestake Mining Company (HMC) site near Grants, New Mexico. The purpose of the call was to find a way to resolve apparent conflicts between NRC and EPA regarding the measures necessary to demonstrate that the current restoration activities being undertaken by HMC are sufficient and that the end result of those activities will be protective of public health and safety and the environment. During our discussion you stated that EPA's unilateral actions were warranted to address deficiencies in NRC regulated remediation activities at the site. In a subsequent letter dated July 8, 2011, you further stated that NRC activities may not comply with Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) requirements, and indicated that you are notifying NRC of these deficiencies in accordance with Section IV.3 of the 1993 Memorandum of Understanding between NRC and EPA concerning the Homestake Uranium Mill (MOU). Clearly, our June 8 telephone conference and other NRC-initiated activities have been unsuccessful in resolving the differences between our two agencies. I find this unfortunate because continued disagreement will only lead to a negative impact on both on the progress that can be made in remediating the HMC site and in public confidence in that remediation. In this response to your July 8 letter, we address the specifics of your letter and again propose ways to find a productive path forward.

At the outset, let me say that NRC has considered the comments provided and we disagree with EPA's conclusions regarding HMC's compliance with health and safety standards and the suggestion that NRC is doing the minimum with respect to public interaction. Although we provide detailed responses to the specific concerns raised in your letter in the enclosure, I do want to respond to your statement that NRC has "stymied" EPA's attempts to obtain information from NRC and from HMC. On the contrary, all NRC information that is not security related or proprietary is available not only to EPA, but to anyone involved or interested in the HMC site via NRC's Agency-wide Document Access and Management System (ADAMS). In fact, to further the flow of information between EPA, NRC, and the New Mexico Environment Department (NMED), in 2008 NRC took the lead in establishing the "core-team"

composed of NRC, EPA, and NMED management and technical staff to address issues related to HMC, and established the Executive Steering Committee to resolve regulatory differences of opinion. Although that effort has faltered recently, in all previous interactions between NRC and EPA Senior Management, concerns about accessing information were never raised as an issue. Because the NRC promotes openness as a core value, I find this comment particularly troubling.

I also want to address the MOU between our two agencies. EPA's Record of Decision for the HMC site (EPA/ROD/R06-89/050) stipulated that the NRC and the EPA would sign a formal agreement outlining each agency's regulatory responsibilities at the site. It is clear from the historical record that EPA believed that implementation of the MOU would be sufficient for EPA to remove the HMC site from the National Priorities List. In December 1993, the MOU was signed by NRC and EPA, and it designated the NRC as the lead federal agency for all remedial and reclamation activities at the site. Under the MOU, EPA and NRC agreed that the requirements of 10 CFR Part 40, Appendix A, are the Federal environmental and public health requirements applicable or relevant and appropriate to the HMC site. It was also agreed that conformance with 10 CFR Part 40, Appendix A, will generally assure conformance with CERCLA requirements. Based on your recent letter, it appears that EPA now does not agree that NRC's requirements are sufficient and believes that imposing additional requirements based on your CERCLA authority is necessary. I am confused by this as it seems to contravene what EPA agreed to in the MOU and imposes additional requirements on HMC that will not provide a health and safety benefit.

The NRC is still interested in finding a way that allows for a coordinated regulatory effort between NRC, EPA and NMED that promotes timely remediation of the HMC site and builds public confidence in the outcome. Consequently, we propose an Executive Steering Committee meeting to discuss the following topics:

1. The viability of the current MOU between NRC and EPA;
2. Is NRC's role as lead regulator responsible for remediation activities at the site still appropriate given EPA's concerns or should other models where EPA becomes the lead regulator be considered;
3. What specific actions being undertaken at HMC are inconsistent with 10 CFR Part 40, Appendix A, or EPA/ROD/R06-89/050;
4. What remedial actions must be taken to assure that the HMC site can be removed from the NPL in accordance with EPA procedures OSWER Directive 9320.2-22, dated May 2011.

I will be in New Mexico to meet with Mr. Dave Martin, Secretary of the Environment on October 19, 2011. We have agreed to hold an Executive Steering Committee meeting with Mr. Martin on October 19, 2011, commencing at 10 a.m. at the State offices, in Santa Fe, New Mexico.

I believe that you agree that timely and effective remediation of the HMC site should be the goal for all regulatory agencies involved. I look forward to meeting with you and Mr. Martin to discuss these issues. If you have comments or questions regarding this letter, please contact me at 301-416-6673.

Sincerely,

**/RA/**

Larry W. Camper, Director
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

Docket No.: 40-8903
License No.: SUA-1471

Enclosure: As Stated

cc: Homestake Service List

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## U.S. Environmental Protection Agency Examples of Deficiencies

1. Exceedance of the standard published in U.S. Nuclear Regulatory Commission (NRC) regulations

The annual air monitoring reports in 2006 – 2007 do not indicate that the NRC standards found in 10 CFR Part 20, Appendix B, Table 2 have been exceeded for radon releases from Homesteak Mining Company (HMC) operations. HMC has remained in compliance with the annual total effective dose equivalent (TEDE) of 0.1 rem (1 mSv), which pertains to individual members of the public as stated in 10 CFR Part 20.1301. NRC regulations allow the licensee to demonstrate compliance with public dose limits by calculations or measurements showing that the individual likely to receive the maximum dose from the facility does not exceed the public dose limit, or by comparing the concentrations at the site perimeter to those specified in Table 2 of Appendix B to 10 CFR Part 20. HMC has elected to show that the individual likely to receive the maximum dose from the facility does not exceed the dose limit to individual members of the public. The exposure at monitoring stations nearest to the residences (HMC-4 and HMC-5) is considered and the station with the highest exposure is used for calculating the TEDE to the maximum exposed individual.

The use of this radon data to predict the dose to the nearest resident is considered to be a conservative approach and the exposure at the residences should be less than that at the site perimeter. The NRC value in Table 2 for radon-222 with daughters present assumes continuous exposure to 1 E -10 µCi/mL (0.1pCi/L) in full equilibrium with the short-lived daughter products. The use of this effluent concentration value may not be appropriate in all circumstances since radon may not always be in full equilibrium with daughter products. HMC has elected to use 20 percent radon daughter equilibrium in their public dose calculations. HMC has also used an occupancy factor of 0.75 in its calculation of the dose to the nearest resident. Therefore, 10 CFR Part 20 standards have not been exceeded and HMC continues to comply with the NRC regulations.

2. Noncompliance with U.S. Environmental Protection Agency's (EPA's) UMTRCA regulations

Regulations found in 40 CFR 192, Subparts A-C were developed specifically for the cleanup of uranium mill tailings at 24 sites designated under Section 102(a)(1) of UMTRCA (Title I sites) to Title I and are applicable requirements only for the Title I sites. Also, 40 CFR 192.02(b)(2) is a design criteria for radon barriers and is only applicable to Title I sites that have a final radon barrier in place. NRC notes that HMC is a Title II site, and as such, the previously cited regulations are not applicable.

Currently, HMC is in the closure period of their license and only has an interim radon barrier in place. The final radon barrier and associated erosion protection (final cover) have been designed to conform to the standard found in 10 CFR Part 40, Appendix A, Criterion 6(2) that are equivalent to or more stringent than requirements found in 40 CFR Part 192, Subparts D and E. The final cover will be completed once groundwater remediation is complete and settlement of the tailings has curtailed. Therefore, the cited UMTRCA regulations have not been exceeded since they are not applicable to Title II sites and do not pertain to sites without a final cover in place.

Enclosure

3. Noncompliance with potential ARARs (40 CFR Part 61, Subpart B, specifically 40 CFR 61.22)

Appendix A of EPA/ROD/R06-89/050 identifies the ARARs for remedial action at the site. The following ARARs are identified: (1) EPA Guideline of 4 pCi/l (indoor radon); (2) 10 CFR Part 20; (3) 10 CFR Part 40, Appendix A; (4) 40 CFR Part 192; and (5) State of New Mexico ARARs (4 pCi/l for indoor radon, and 10 CFR Part 20 airborne concentration limits).The EPA assertion that any remedial action is deficient because of noncompliance with a "potential ARAR" seems unjustified. Compliance should be measured against a regulatory standard, not a "potential" ARAR. The NRC staff has discussed this use of arbitrary ARARs with your staff on several occasions. NRC believes that 40 CFR 61.22 is not applicable to the HMC site since it applies to limiting emission of radon-222 to the ambient environment from an <u>underground uranium mine</u>.

With regard to radon air emissions, HMC is required to comply with a TEDE of 100 mrem/yr established by 10 CFR 20.1301(a)(1). HMC has demonstrated compliance with this regulatory limit in the Semi-Annual Environmental Monitoring Reports.

Given that HMC is currently in compliance with all NRC public dose limits and EPA established ARARs, NRC does not believe that EPA has provided reasonable justification that HMC remedial actions are currently deficient.

4. Exceedance of the NCP Risk Range

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) provides EPA's acceptable cancer risk range of $1x10^{-4}$ to $1x10^{-6}$. EPA guidance states that the risk range should be used to establish final cleanup levels for CERCLA sites. Therefore, EPA's cancer risk range is not the appropriate standard to be applied to the HMC site during remediation.

Although NRC does not believe that exceeding the risk range during remediation of the HMC site is a result of deficient remedial actions, we are not opposed to EPA's evaluation of the health risk from radon during the remediation period. In fact, NRC and EPA staffs have had numerous technical discussions regarding the scope of EPA's Risk Assessment (RA), and the Radon Sampling Strategy for the HMC site. NRC cooperated with EPA to develop a technically defensible RA scope acceptable to EPA, NRC, and New Mexico Environment Department (NMED). Unfortunately, EPA revised the agreed upon RA scope without NRC technical review. Technical shortcomings in the current RA scope, Radon Sampling Strategy, and Radon Sampling Plan will likely result in technically indefensible results. NRC will provide technical assistance to EPA, if requested, to create a defensible RA.

5. Administrative Record for Rulemaking (40 CFR 300.425(e)(4))

NRC finds EPA's assertion that "NRC has declined (without explanation) to pursue any of the recommendations in the RSE report" to be unfounded and without merit. NRC staff actively participated in EPA's Remedial System Evaluation (RSE) process from the beginning. Staff provided technical comments on the RSE scope, RSE Draft Report, and RSE Final Report. In April 2011, NRC, EPA, and NMED met in Albuquerque, NM, to discuss the RSE Final Report recommendations. At that meeting EPA was reminded that NRC's regulatory process would not

allow NRC to order HMC to implement the RSE recommendations unless EPA demonstrated that the current remedial actions are deficient or unsatisfactory. The agencies agreed that the current remedial actions are achieving results and the RSE recommendations would only serve to make the current remedial actions more efficient. In fact, the RSE report states that the current remediation systems have been making significant progress in improving groundwater quality at the site. Furthermore, EPA states in its March 24, 2011, letter to NRC that the "RSE observations and recommendations are not intended to imply a deficiency in the remedial work conducted by site managers but are offered as constructive suggestions."

Although NRC agrees that some of the RSE recommendations may result in remedial process efficiencies, the RSE report does not provide the information necessary to show that implementation of the recommendations will increase efficiency, effectiveness, and/or protectiveness of the current remedial strategy. As acknowledged in your letter, NRC is currently reviewing a revised CAP, submitted by HMC in January 2006. HMC has expressed a willingness to evaluate a number of the RSE recommendations to determine if remedial process efficiencies can be gained. NRC will work with HMC to incorporate any necessary revisions into the CAP as stated in NRC's letter dated April 21, 2011.

Since EPA stated in its letter to NRC dated March 24, 2011 that ongoing remedial actions are not deficient, NRC is not clear whether there are any remedial action deficiencies for the NRC to address.

6. Community Relations

NRC agrees that public involvement in the regulatory process is very important. NRC's regulatory process requires public involvement at many stages throughout the licensing process. NRC's licensing process is open and transparent. All incoming and outgoing documents are placed in NRC's Agency-wide Documents Access and Management System (ADAMS) and are available for public review.

NRC applauds EPA's efforts to keep the public informed. The public has requested that NRC, EPA, and NMED provide a coordinated approach to regulating the remedial actions at the HMC site. During the past year the agencies made significant progress in coordinating our community outreach activities. To my knowledge, NRC, EPA and NMED were all participants in several meetings with the public during the past year. NRC staff participated in person when time and travel budget allowed, but at other times were required to participate via conference call.

NRC appreciates EPA's effort to publish the Homestake Mining Company Superfund Site Activities Update Report (HMC fact sheet and Q&A). Preparation of the report required considerable time and effort by all three regulatory agencies. It is unfortunate that EPA published and distributed a draft version of the fact sheet that contained inaccuracies instead of the final copy agreed to by all of the involved State and Federal regulatory agencies.

Homestake Distribution List

cc:

Sai Appaji
USEPA Region 6
1445 Ross Ave, Ste 1200
Mail Code: 6SF-LT
Dallas, TX 75202-2733

Jerry Schoeppner
Mining Environmental Compliance Section
Ground Water Quality Bureau
Harold Runnels Building Room N2250
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502

Dana Bahar
New Mexico Environment Department
Harold Runnels Building Room N2300
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502

Angelo Ortelli
Superfund Oversight Section
Ground Water Quality Bureau
Harold Runnels Building Room N2250
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502

Water Quality Specialist
Pueblo of Acoma
Office of the Governor
P.O. Box 309
Acoma, NM 87034

Candace Head-Dylla, President
Bluewater Valley Downstream Alliance
P.O. Box 2038
Milan, NM 87021

Multicultural Alliance for a Safe
Environmental (MASE)
P.O. Box 4254
Albuquerque, NM 87196