



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 2, 2018

Ms. Candace Head-Dylla,  
Bluewater Valley Downstream Alliance  
P.O. Box 2038  
Milan, NM 87020

SUBJECT: LTR-17-0466 – RESPONSE TO LETTER REGARDING GROUNDWATER  
CONCERNS AT THE HOMESTAKE MINING COMPANY GRANTS SITE

Dear Ms. Head-Dylla:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter to Chairman Kristine L. Svinicki and other Federal agencies, dated December 4, 2017.<sup>1</sup> In your letter, you describe a number of significant concerns related to the decommissioning activities at the Homestake Mining Company of California's (Homestake, the licensee) former uranium mill site located near Grants, New Mexico (Grants site). Homestake is conducting its present decommissioning activities in accordance with requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 40, Domestic Licensing of Source Material. The Grants site is also listed on the U.S. Environmental Protection Agency's (EPA) National Priorities List in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act.

I first wanted to thank you for taking the time to express your concerns and appreciate your understandable frustration with the pace of remediation at the Grants site.

As a regulator, the NRC is responsible for ensuring that the licensee is providing for the disposal, long-term stabilization, and control of uranium mill tailings in a safe and environmentally sound manner, and for minimizing or eliminating radiation health hazards to the public. The licensee's required decommissioning activities are described in detail in its license and decommissioning plan. The NRC inspects the licensee against these requirements and, as described below, has taken and will continue to take appropriate enforcement action if those requirements are not met.

Following an inspection of Homestake's activities at the Grants site, the NRC issued several violations, dated October 4, 2016.<sup>2</sup> Based upon these violations, the NRC issued a Confirmatory Order to Homestake on March 28, 2017.<sup>3</sup> The purpose of this Confirmatory Order was to ensure that Homestake will:

- Cease discharging irrigation water with effluents containing byproduct material to land application areas;
- Cease operation of the re-injection system in the manner described in apparent Violation 1, contained in the NRC's October 4, 2016, letter;

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<sup>1</sup> Agencywide Documents Access and Management System (ADAMS) Accession No. ML17347A766.

<sup>2</sup> ADAMS Accession No. ML16251A526.

<sup>3</sup> ADAMS Accession No. ML17060A752.

- Complete a self-assessment of all activities to determine whether the activities are authorized and being conducted in compliance with NRC requirements;
- Submit a revised groundwater corrective action plan to the NRC;
- Conduct training for employees engaged in licensed activities; and,
- Adjust operations to better ensure compliance with the Groundwater Protection Standards (GWPS) as required by its license.

I would also like to provide some additional information with respect to a few specific concerns you identify in your letter.

You state that Homestake has asked to change the monitoring station where the radon background measurement is taken. Please note that by letter dated June 16, 2016,<sup>4</sup> Homestake withdrew this request. In your letter, you also state that the New Mexico Environmental Department (NMED) and the NRC allowed Homestake to use contaminated water to irrigate land in the community. Please note that the NRC issued an apparent violation to Homestake on October 4, 2016, regarding the use of contaminated water at the land application areas.

In addition, you indicate that NMED, in conjunction with the NRC and the EPA, gave Homestake permission to dilute the contamination rather than clean it up and relaxed the standards for contamination at the site. Please note that dilution is not an approved remediation method. Groundwater injection is being used by the licensee to create a hydraulic barrier around the site to reverse the groundwater flow direction toward on-site collection wells near the tailing piles. The hydraulic barrier effectively slows the groundwater plume from further migration off-site.

Regarding your concerns about the potential relaxation of the GWPS, Homestake requested a revision to the GWPS by letter dated December 5, 2005.<sup>5</sup> The NRC staff evaluated this request in light of what appeared to be incomplete information used in the initial establishment of the Homestake GWPS. Based on much more comprehensive data that were available from 1995 through 2004, and as detailed in the NRC's technical evaluation in License Amendment 39, issued July 10, 2006,<sup>6</sup> the GWPS was changed to reflect more current, complete, and accurate data. This change was not a function of the licensee's ability or inability to achieve any standard.

Your letter also references the Department of Energy's (DOE) discussion regarding the San Andres-Glorieta aquifer during a recent public meeting. Specifically, you highlight a discussion indicating that contaminants from mill tailings disposed at the Bluewater site, which is northwest of the Grants site, may have contaminated the San Andres-Glorieta aquifer. In regard to this situation, as stated in a letter dated January 24, 2018,<sup>7</sup> the DOE has committed to:

- Re-evaluate the Rio San Jose alluvial aquifer and the San Andres-Glorieta aquifer, including updating the uranium plume map for the San Andres-Glorieta aquifer with recent groundwater data;
- Hold an interagency public meeting during the summer of 2018 to provide updates on the nature and extent of the plume based on the recent data; and,

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<sup>4</sup> ADAMS Accession No. ML16181A073.

<sup>5</sup> ADAMS Accession No. ML053550352.

<sup>6</sup> ADAMS Accession No. ML061710339.

<sup>7</sup> ADAMS Accession No. ML18026A625.

- Provide sampling and analysis support for members of the public who have concerns about their well water quality.

You asked for the NRC's assistance in facilitating four solutions proposed in your letter. As the regulator, the NRC's authority, which is described in the Atomic Energy Act of 1954 and other laws, does not include the actions you request. However, other provisions of State or Federal law may provide for these or other remedies. It is our understanding that the EPA will be responding separately to your letter.

I recognize that the remediation activities at Homestake's Grants site have taken far longer than originally contemplated. However, I want to assure you that the NRC remains committed to ensuring that Homestake meets its obligations under its NRC license, including taking enforcement action when appropriate. Thank you for bringing your concerns to our attention.

In accordance with 10 CFR Section 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of the NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning the content of this letter, please contact the NRC's project manager for Homestake, Mr. Jeffrey Whited, at 301-415-4090 or by e-mail at [jeffrey.whited@nrc.gov](mailto:jeffrey.whited@nrc.gov).

Sincerely,

*/RA/*

Marc L. Dapas, Director  
Office of Nuclear Material Safety  
and Safeguards

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

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**DATED February 2, 2018**

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