

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 18, 2025

Mr. Eric Burch, Closure Manager Grants Reclamation Project Homestake Mining Company of California P.O. Box 98/Highway 605 Grants, NM 87020

SUBJECT: HOMESTAKE MINING COMPANY OF CALIFORNIA, GRANTS RECLAMATION

PROJECT, MULTI-AGENCY AUDIT SUMMARY FOR THE GROUNDWATER FLOW AND CONTAMINANT TRANSPORT MODEL, LICENSE NO. SUA-1471,

DOCKET 040-08903

Dear Mr. Burch:

In a letter to the Nuclear Regulatory Commission (NRC) dated June 10, 2024 (ML24164A317), the Homestake Mining Company of California (HMC) requested that the NRC staff conduct an audit of the HMC Grants Reclamation Project (GRP) groundwater flow and contaminant transport model. Additionally, HMC proposed inviting and including representatives from the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the New Mexico Environment Department (NMED) in the audit discussions.

By letter dated October 28, 2024, the NRC staff, in coordination with the DOE, EPA, and NMED¹, agreed to conduct an audit of HMC's groundwater model (ML24176A247). The Agencies developed an audit plan consistent with NRC's Licensing Process 11, Rev. 1 Regulatory Audits (ML25031A057) which included the objectives of the audit. The audit plan also called for a summary report to be prepared at the conclusion of the audit.

As stated in the audit plan, the audit team did not make any licensing or regulatory decisions during this process. Instead, the audit served as an information gathering and technical assessment activity, consistent with the LIC-111 (Sections 4.1 and 4.5). The findings from the audit will assist agencies in understanding the groundwater model and potential concerns. The information gathered is expected to inform future licensing and regulatory actions and agency reviews. However, this audit does not eliminate the possibility of future requests for additional information about the groundwater model during subsequent licensing activities.

A list of attendees is provided in Appendix 1. To support the audit, the agencies² submitted a list of comments based on information provided in HMC's 2022 alternate concentration limit (ACL) license amendment request (LAR) to HMC and its contractor, Papadopulos & Associates. Appendix 2 highlights and summarizes some of these comments, which centered around

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¹ NRC, DOE, EPA, and NMED are collectively referred to in this document as the agencies or audit team.

² Each agency involved in the audit reserves the right to maintain independent conclusions regarding the model's interpretations, results, or implications as they relate to their own regulatory frameworks and responsibilities.

E. Burch 2

potential concerns related to the protection of public health and the environment: (1) characterization and release of the source term, (2) saturation conditions in the alluvial aquifer, and (3) attenuation of contaminants in the alluvial aquifer.

The audit began with a kickoff meeting on December 2, 2024, followed by two hybrid technical meetings held in Albuquerque, NM on February 25-27, 2025, and April 2, 2025. The audit focused on reviewing files and documents related to HMC's groundwater model to identify key issues and potential concerns, discuss potential approaches to meeting appropriate NRC requirements, and align expectations to facilitate the NRC's review in future licensing actions. A list of references reviewed can be found in Appendix 3.

In accordance with 10 CFR 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 NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

If you have any questions regarding this matter, please contact me at 301-415-6755, or via e-mail at George.Alexander@nrc.gov.

Sincerely,

Signed by Alexander, George on 09/18/25

George Alexander, Risk Analyst Risk and Technical Analysis Branch Division of Decommissioning, Uranium Recovery and Waste Programs Office of Nuclear Material Safety and Safeguards

Docket No.: 040-08903 License No.: SUA-1471

Enclosure: As stated

cc: Homestake Listserv

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- J. Graham, DOE, Grand Junction, CO
- S. Appaji, Region VI EPA, Dallas, TX
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Multi-Agency Audit Summary for the HMC Groundwater Flow and Contaminant Transport ModelDOCKET 040-08903 DATE September 18, 2025

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