



Homestake Mining Company of California

Thomas Wohlford  
Closure Manager

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Document Control Desk  
U.S. Nuclear Regulatory Commission,  
Washington, DC 20555-0001

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Office of Nuclear Materials Safety and Safeguards  
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Washington, DC 20555-0001

**RE: Homestake Mining Company, Grants Reclamation Project, License Source Materials License SUA-1471, Docket Number 40-8903: Notification of Unplanned Release per 10 CFR 40.60(b)(2) and License Condition 41**

Dear Director:

This letter is to notify you, in conformance with the requirements of 10 CFR Part 40.40(b)(2) and Source Materials License SUA-1471, Condition 41, that on April 25, 2018 Homestake Mining Company (HMC) identified an unplanned release of byproduct material in (Molybdenum in effluent water) to the environment.

On April 25, 2018 Homestake Mining Company (HMC) identified that a composite water quality sample for compliance monitoring point SP-2 collected on March 29, 2018, which represents the composite water quality for the preceding month, was above the license condition 35B site standard for Molybdenum (0.1 mg/L). The measured molybdenum concentration of the sample was reported as 0.236 mg/L and a duplicate analysis reported 0.253 mg/L.

The compliance monitoring point SP-2 represents water quality in the Post-Treatment Tank, which is a holding tank for the effluent from the approved groundwater corrective action program (GW CAP) water treatment system. The Post-Treatment Tank receives treated effluent from the reverse osmosis (RO) water treatment system, the zeolite water treatment system, as well as 300 gallons per minute of clean water from the San Andres-Glorieta aquifer. Water from the Post-Treatment Tank is then re-injected into the groundwater within the NRC license area as part of the approved GW CAP.

Based on its initial review of operating data, HMC currently suspects that one circuit within the

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RO water treatment system (RO3) failed to perform as designed, though the reason for this potential failure has not yet been determined nor this specific cause confirmed. HMC has performed several corrective actions, which include cessation of use of RO3, initiation of RO1 and RO2, initiation of at least weekly monitoring of the RO effluent (monitoring point SP-1) and the Post-Treatment Tank (compliance monitoring point SP-2).

Based on HMC current understanding of the Site operational and environmental monitoring data, HMC believes there are no imminent threats to public health and safety, and there are no radiological exposures or conditions exceeding criteria identified in 10 CFR Part 20, subpart M.

HMC will develop and submit a follow up report as required by 10 CFR 40.60 for your review and we are available to discuss this issue with you at your convenience.

If you have any questions or comments regarding this matter, please contact me via e-mail at [twohlford@homestakeminingcooca.com](mailto:twohlford@homestakeminingcooca.com) or at the Grants office at 505.290.2187.

Respectfully,



**Thomas Wohlford**

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