



27 December 2019

Ms. Ashlynn Winton  
Mining Environmental Compliance Section  
Ground Water Quality Bureau  
New Mexico Environment Department  
P.O. Box 5469  
Santa Fe, NM 87502

**RE: Homestake Mining Company, Grants Reclamation Project, License Source Materials License SUA-1471, Docket Number 40-8903; NMED Discharge Permit DP-200: 7-Day Notification of Unauthorized Discharge from Injection Wellfield**

Dear Ms. Winton:

This letter will serve as the seven-day report as required by 20.6.2.1203.A (3) NMAC in the Homestake Mining Company (HMC) Discharge Permit (DP-200). The letter confirms the details of the unauthorized release of non-impacted water from the HMC Injection Wellfield as notified verbally on 12/23/2019 via phone call(s).

During the night of December 20/21, the HMC-Grants site experienced temperatures in the single digits. That night a flowmeter associated with the injection water for the 'Y' field froze and broke. HMC received a report of the spill prior to making our daily rounds in the area. Investigation discovered the broken flowmeter as the source of the injection water discharging onto the ground. The R,Y,Q injection line was isolated above the flowmeter and the broken flowmeter has been replaced. The entire wellfield, both collection and injection systems, and the zeolite system were shutdown pending complete inspection.

Estimate of spill area, volume, and water quality are as follows;

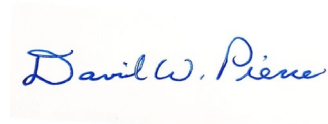
- Surface Area (SA)
  - HMC property
    - 15,000 ft<sup>2</sup>
  - Public/Private property
    - 5,250 ft<sup>2</sup>
- Total SA => 20,250 ft<sup>2</sup>
- Volume of Water; Method #1 (assuming a depth of 0.33ft)
  - $(20,250 \text{ ft}^2 \times 0.33 \text{ ft}) \times 7.48 \text{ gal/ft}^3 \Rightarrow 49,985 \text{ gals}$
  - $49,985 \text{ gals} \times 1.5 \Rightarrow 74,980 \text{ gals}$ 
    - An estimation factor of 1.5 was applied to account for water taken by the ground. 50% above calculated the volume of water on the surface.
- Volume of Water; Method #2
  - $100\text{gpm} \times 60\text{min} \times 12 \text{ hr.} \Rightarrow 72,000 \text{ gals}$ 
    - The values of 100gpm and 12hr. were assumptions made by Field Technician when assessing the spill.

RE: -Seven Day Notification of Unauthorized Discharge from Broken Injection Water Line

- Water Quality;
  - December's composite SP2 sample for injection water, which was involved in the spill, is at 0.02 mg/l for U vs. the Site Standard of 0.16 mg/l.

If you have any questions or comments regarding this matter, please contact me via e-mail at [dpierce@homestakeminingcoca.com](mailto:dpierce@homestakeminingcoca.com) or at the Grants office at 505.238.9701.

Respectfully,



**David W. Pierce**

Closure Manager  
Homestake Mining Company of California  
Office: 505.287.4456 x34 | Cell: 505.238.9701

Copy To:

R. Linton, NRC, Rockville, Maryland (electronic copy)  
Mark Purcell, EPA, Dallas, Texas (electronic copy)  
M. McCarthy, Barrick, Salt Lake City, Utah (electronic copy)  
C. Burton, Barrick, Henderson, Nevada (electronic copy)  
R. Whicker, ERG, Albuquerque, New Mexico (electronic copy)