HOMESTAKE
Grants Project

Homestake Mining Company of California

Jesse R. Toepfer
Closure Manager

10 July 2014

ATTN: Document Control Desk
Director, Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission,
Washington, DC 20555–0001

ATTN: Mr. Jack Parrott, Sr. Project Manager
Reactor Decommissioning Branch (Mailstop T-8F5)
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Program
U.S. Nuclear Regulatory Commission
Washington, DC 20555–0001

RE: Response to NRC Questions Regarding 2013 Annual Report

Mr. Parrott:

During a phone call that took place on Tuesday, 10 June 2014, you indicated that NRC had some questions regarding Homestake's 2013 Annual Monitoring Report / Performance Review. Specifically, your questions involved two washout areas on the Large Tailings Pile (LTP), which were cited in the Engineer of Record's Inspection Report (Appendix D of the 2013 Annual Report). During our phone call, you inquired as to whether or not we believed any spill(s) or release of tailings material occurred as a result of the washouts. This letter is intended to answer the questions you posited during the 10 June phone call.

There were two washout areas noted in the aforementioned report. After our phone call, I discussed the matter with the Engineer of Record, and he drafted the enclosed letter. Insofar as the north-slope washout is concerned: As discussed in Appendix D of the 2013 Annual Report, the Engineer of Record *"should be notified immediately if seepage from the slopes or if surface slumps or other deformations in the slopes are observed. Such action was taken by Homestake when the north-slope washout was observed in December 2013."*

Please be advised that Homestake informed the Engineer of Record of the depression (i.e., deformation in the north-slope) immediately. Upon personal inspection of the north-slope washout area, no tailings material was observed anywhere outside of the cavity. Tailings material has a distinct physical appearance (i.e., very fine material which is grey to dark grey in color), and it highly contrasts with the brown and tan, sandy cover material. That is to say, had any tailings material seeped out of the cavity, it would seem reasonable that it would have been visible on the outer slopes of the LTP. However, due to the fact that no tailings material or residue was observed on the outer slopes of the LTP, it appears that storm water runoff had cut into the cover material and sank into the tailings, but did not accumulate, rise up, and overflow above the point of entry (i.e., the cavity's opening).

In conclusion, as the Radiation Safety Officer for the Grants site, I did not see any compelling reason at the time, nor do I now, to believe that any spill or release of tailings material occurred. In the event that I had, the NRC would have been notified in accordance with HMC's Radioactive Materials License, Condition 41.

As further mentioned in Appendix D, Homestake plans to backfill the cavity with Controlled Low Strength Materials to restore the shape and function of the LTP's outer slopes.

Should you have any questions, please feel free to call me directly at 505.290.3067.

Respectfully,

Jesse R. Toepfer
Closure Manager
HOMESTAKE MINING COMPANY OF CALIFORNIA

CC: Mr. Bill Ferdinand, Barrick – Salt Lake City, Utah
Mr. Patrick Malone, Barrick – Salt Lake City, Utah

MEMORANDUM

To: Jesse Toepfer

From: Alan Kuhn

Date June 30, 2014

Subject: LTP South Outslope Washout - Effect of Tailing Containment

In response to your request for additional information on the washout in the south outslope of the large tailing pile (LTP), this memo expands on information included in my memo of 6/27/2014 and my Annual Inspection Report of 2010 and of 2012.

As explained in the 6/27/14 memo, one of the CMP drains on the south slope broke apart, releasing water directly onto the rock cover near the top of the outslope. The water released from the CMP discharged downward onto the surface of the rock cover, then flowed in a relatively concentrated stream at velocities that exceeded the erosional resistance of the rock cover.

This brief discharge scoured (washed out) the bedding and some of the clay cover over an area under the CMP about 2-3 feet wide, up to 2 feet deep, and about 30 feet long. The lower half of the cover, at least 2.0 feet thick, remained in place, and no tailings were exposed or eroded by this discharge of rainwater. The eroded rock bedding and cover soil were washed downslope and deposited as infilling in the rock cover downslope. The rock riprap in the scoured area was not washed downslope; it was undermined and settled into the space vacated by the eroded bedding and cover soil.

After replacement of the old CMP drains with new HDPE pipes, no more similar incidents have been reported.