

Ministry of Energy and Mines Mining and Mineral Division PO Box 9320, Stn. Prov. Govt. Victoria, BC V8W 9N3 Chief Inspector of Mines

Attention: Mr. Al Hoffman P.Eng: Chief Inspector of Mines

## <u>RE: Tailings Dam Independent Review of Dam Safety and Consequence Classification</u> <u>Giant Nickel Property</u>

Mr. Hoffman,

On August 18, 2014, in response the Mount Polly tailings dam failure of 04 August 2014, the Chief Inspector of Mines of the Ministry of Energy and Mines (MEM) of British Columbia sent out an Order (the "Order") that requires all mining companies to conduct a Dam Safety Inspection (a "DSI") and an Independent Third Party Review of the DSI (a "Third Party Review") for every tailings storage facility (a "TSF"), whether active or closed, at permitted mines in British Columbia by 01 December 2014. Under the Order, a third-party review of the stated Dam Classification, as determined from the Canadian Dam Association (CDA) 2013 Dam Safety Guidelines, must be completed and the TSF assigned a High, Very High or Extreme Classification must have a current Emergency Preparedness and Response Plan (EPRP) available, including a dam break inundation study.

Section 4 of the Order requires that the Mine Manger of the TSF provide the Chief Inspector of Mines of the MEM, with a letter that summarizes any recommendations made in the DSI or the Independent Third-Party Review and outline the commitments and provide a schedule for completing the commitments.

This letter is to satisfy section 4 of the Order for the closed Giant Nickel TSF.

The Giant Nickel Mine site is located approximately 8 km north of Hope, B.C. and about 2 km west of the Trans-Canada Highway. The mine and tailings facility ceased operations in 1974. The tailings facility consists of two impoundment areas, an Upper Tailings Pond constructed initially, and a Lower Tailings Pond constructed during expansion of the facility. A till capping layer was placed on the tailings surface in 1995. The capped tailings surface and embankments have since been allowed to re-vegetate naturally. (Knight Piesold 2014)

A DSI was completed on the closed Giant Nickel TSF on September 8, 2014, by Knight Piesold and a Third Party Review was completed November 25, by Golder Associates, as required by the British Columbia Ministry of Mines directive dated August 18, 2014

The TSF was given a consequence classification of "VERY HIGH" as determined from the Canadian Dam Association (CDA) 2013 Dam Safety Guidelines. As stated in section 6 of the Order "All tailings dams that have a failure consequence of high, very high, or extreme, must have an Emergency Preparedness and Response Plan and a Dam Break Inundation Study". Golder Associates completed the Dam Break Inundation Study November 26 and the Emergency Preparedness and Response Plan (EPRP) has been completed, tested and a gap assessment preformed as required in section 9 of the Orders. A separate letter identifying the gaps and lessons learned will be submitted with the rest of the documents for the Giant Nickel TSF. Recommendations made by Knight Piesold and Golder Associates, for the Giant Nickel TSF are outlined below.

- 1. Periodic clearing of vegetation and debris from the channel spillway.
- 2. Removal of debris at the inlet area of the concrete decant structure
- 3. Re-grade the southern end of the Upper Tailings Pond to eliminate ponded water and direct surface drainage away from the toe of the embankment(Knight Piesold 2014)
- 4. Conduct a Dam Safety Review in 2015
- 5. At the time of Dam Safety Review, evaluate climate data and conduct a water balance study
- 6. Removal of trees from both the upper and lower dam to allow for inspections of the toe
- 7. Re-anchor culvert located on the downstream slope of the tailings embankment

	Table 1		
<b>Recommendation No.</b>	Description	<b>Implementation Date</b>	Frequency
#1	Clearing of vegetation and debris from the channel spillway	Annually	Ongoing
#2	Removal of debris at the inlet area of the concrete decant structure	Annually	Ongoing
#3	Re-grade the southern end of the Upper Tailings Pond	Fall 2015	
#4	Conduct a Dam Safety Review in 2015	Summer 2015	To be determined
#5	Evaluate climate data and conduct a water balance study	Summer 2015	To be determined
#6	Removal of trees from both the upper and lower dam	Evaluate Spring 2015	
#7	Re-anchor culvert	Spring 2015	As required

Table 1 sets forth the schedule for completion of the recommended actions

I trust the information provided fulfills the requirements outlined in the Order. Should you or your staff have any questions or concerns with regards to information provided please do not hesitate to contact me directly at 604-515-5227 or by email at rharmati@barrick.com

Sincerely,

Robbin Harmati BC Properties Closure Manager Eskay Creek Mine Barrick Gold Inc.