

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>Nickel Plate 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 Nickel Plate TSF.

The Nickel Plate Mine is a closed gold mine owned by Barrick Gold Inc. The mine is located 3 kilometres northeast of Hedley, B.C. at the southern end of the Thompson Plateau, in south-central British Columbia

The tailings facility was originally designed by Robinson Dames and Moore and SRK-Robinson. The first stage of construction was completed in 1986 with two centerline raises and one upstream raise completed 1n 1992.

The Dam is a zoned construction with a chimney drain foundation. The final raises after 1992 were designed by Knight Piesold.(Golder Associates 2014) The Mine ceased operation in 1996 and the TSF was reclaimed.

A DSI was completed on the closed Nickel Plate TSF on September 11, 2014, by Knight Piesold and a Third Party Review was completed October 09, 2014 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 Beak Inundation Study". Golder Associates completed the Dam Break Inundation Study November and the Emergency Preparedness and Response Plan (EPRP) and OMS Manual was 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. Monitoring of the downstream embankment slope and bench area
- 2. Routine clearing of debris from the collection ditches and the spillway channel of the Freshwater Dam (Mascot Pond Dam)
- 3. Piezometers readings require close monitoring during and following the 2015 freshet and action initiated if piezometric levels show a significant or sustained increase.
- 4. Conduct a dam safety assessment in 2015 if piezometer reading remain high.
- 5. At the time of the next Dam Safety Review, evaluate climate data and conduct a water balance study
- 6. Dam Safety Review

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

	Table 1		
Recommendation No.	Description	Implementation Date	Frequency
#1	Monitoring of the downstream embankment slope and bench area		On going
#2	Removal of debris from the collection ditches and spillway channel of the Freshwater Dam		On going
#3	Piezometer readings Monitored	Spring 2015	Ongoing
#4	Dam safety assessment	Spring/Summer 2015	Based on Piezometer results
#5	Climate data review and a water balance will be complete on the next scheduled DSI	Spring/Summer 2015	
#6	Dam Safety Review	Fall 2018	5 year cycle

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 the state of th

Sincerely,

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