



Date: September 30, 2015

To: Rickard Olsson, Environmental Coordinator
Boliden Limited, Premier Gold Mine

Cc: Diane Howe, Deputy Chief Inspector, Reclamation and Permitting, MEM
Heather Narynski, A/ Manager, Geotechnical Engineering, MEM

Re: **Review of Letter of Assurance Submission from June 30, 2015**

The Ministry of Energy and Mines (MEM) has engaged a consulting firm to evaluate the consistency and compliance of your letter of assurance in response to the Chief Inspector's orders issued on February 3, 2015. This review has determined that your submission satisfies the requirements of the order.

Below is a summary of the assessment made by your Qualified Professional Engineer (QPE) with associated plans/schedule to address the gaps identified:

Status of Foundation Condition

"The available foundation geology data at the Premier TSF area did not indicate the presence of any glacio-lacustrine silt and clay layers similar to those found at Mount Polley. The surface topography in the TSF area is generally bedrock controlled and is exposed over extensive areas. Where present, the surficial alluvial deposits were relatively thin and contained silty sand and gravel."

Status of Water Balance Adequacy

"The Premier Gold project (PGP) TSF does not hold any surplus mine water and the water balance under its current conditions meets the expected performance requirement for average years and wet years. Under present conditions, the recommended beach width will not be maintained on the event of significant flood conditions. Under high pond water levels, seepage through the dam embankment may result in reduced stability of the dam."

The QPE has stated that:

- *"PGP plans to place a low-permeability liner over the upstream face of the TSF dam by late 2016, to improve the stability of the dam during extreme flood events. This design is ongoing."*

Status of Filter Adequacy

"No filter performance criteria were established during design of the Stage I, II and III Main Dam raises. A review of available grain size data from construction reports indicates that the Main Dam zones, particularly the seam zone and Mile 18 filter zone, are not filter compatible to prevent piping of tailings through the dam. A filter compatible berm was constructed in 2005 at the downstream toe to prevent piping of tailings through the toe berm. Seepage discharge at the toe berm has been free of fines, indicating that the filter is working as intended."

MEM supports the proposed plan of action. Please ensure that all work as outlined above is completed within the specified timeframe. MEM will be following-up by January 15, 2017 to obtain a status update with respect to the work completed and commitments made.

The orders issued on February 3, 2015 have been requested to provide assurance the conditions at the Mount Polley dam do not exist in other facilities. Please ensure that you are meeting your other ongoing requirements to ensure Tailings Storage Facility safety with respect to the following:

- Satisfying any outstanding orders from previous Ministry inspection reports.
- Satisfying any outstanding recommendations from previous Dam Safety Inspections (DSI) or Dam Safety Reviews (DSR).

It is expected that you will ensure dam safety management is continuously reviewed, improved and refined throughout the life of mine.

Thank you for your submission to the orders of February 3, 2015.

Sincerely,

A handwritten signature in black ink, appearing to read 'Al Hoffman', written over a horizontal line.

Al Hoffman, P. Eng.
Chief Inspector of Mines
Ministry of Energy and Mines