



June 30, 2014

Al Hoffman,  
Chief Inspector of Mines  
Ministry of Energy and Mines

**Re: Bullmoose Mine Response to Memorandum of February 3, 2015 from Ministry of Energy and Mines**

Under cover of this letter, please find condition assessments for the tailing facility at the closed Bullmoose Coal Mine, as per the request outlined in the memorandum from the Ministry of Energy and Mines (MEM), dated February 3, 2015. The condition assessments were performed by the Engineer of Record, Rick Friedel, P.Eng., of Klohn Crippen Berger.

Teck is committed to ensuring the safe operation of this tailing facility and all other dam structures. As such, the condition assessments consisted of a thorough review by the Engineer of Record of existing design and as-built information, including close scrutiny and re-evaluation of historical subsurface investigation information in light of the knowledge gained from the Mount Polley failure. The review specifically evaluated the potential failure modes requested by MEM based on the recommendation in the Mount Polley Panel report:

- 1) Risk of undrained shear failure of silt and clay foundations
- 2) Water balance adequacy
- 3) Filter adequacy

The results from the condition assessment, provided in the attached sealed letters, verify that the Bullmoose Tailing Dam (BTD) facility is performing according to design, and based on ongoing monitoring, instrumentation, surveillance and investigation activities are considered to be appropriately protected against the above referenced potential failure modes.

Review of the site investigation data, construction records and post-closure performance data does not indicate any significant data gaps in the foundation characterization that justify further assessment of the BTD foundation. The foundation characterization did not indicate the presence of a silt/clay layer that could behave in an undrained manner similar to the glacio-lacustrine deposits at Mount Polley. The BTD does not hold any surplus mine water and the water balance for current condition of the BTD meets the expected performance requirement for average years and wet years. In the event of an extreme flood, the open channel spillway will provide additional outflow capacity to release additional inflow. There are gaps in the available grainsize records for the BTD but no further assessment is required to evaluate the filter adequacy for BTD.

No immediate safety or stability concerns have been noted for the closed Bullmoose Mine tailings storage facility and accompanying dam structure, as demonstrated in the 2014 DSI report.

We have carefully reviewed the KCB report and there are no further actions required related to potential information gaps, according to the recommendations by our Engineer of Record.

At the Bullmoose Coal Mine, and across all of Teck, we are focused on meeting the highest standards of safety for communities, employees and the environment. Completing these condition assessments in light of lessons learned regarding tailings dam safety complements the existing systems and procedures we have in place for the safe operation and monitoring of our tailing facilities.

Please do not hesitate to contact me if you have any further questions regarding the operation, maintenance and monitoring of our tailings facilities.

Sincerely,



Bruce Donald  
Mine Manager, Bullmoose Mine

cc: Diane Howe, Ministry of Energy and Mines  
Heather Narynski, Ministry of Energy and Mines  
Chris Anderson, Teck  
Jeff Hanman, Teck