



November 28, 2014

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

Re: 2014 Dam Safety Inspection Report for the Closed Bullmoose Mine

Under cover of this letter, please find the 2014 Dam Safety Inspection (DSI) reports for the dormant tailings facility at the closed Bullmoose Mine and the results of the third-party review. The DSI reports were prepared by the Engineer of Record, Klohn Crippen Berger and the DSI was subsequently provided third-party review by Mr. Andy Small, P.Eng. of AMEC.

The closed Bullmoose mine is committed to ensuring the safe operation of its tailings facility and accompanying dam structure. Our closed tailings facility is inspected monthly by experienced technical staff. DSIs are conducted on an annual basis. A detailed Dam Safety Review will be conducted in 2015 and every seven years thereafter.

As outlined in the DSI report and confirmed by the third-party engineer review, no immediate safety or stability concerns were noted for the Bullmoose Mine's tailings storage facility. Further, these documents confirm that our monitoring and surveillance practices meet industry standards for dormant facilities. The independent review has also verified a High Consequence Classification for the dam.

The Bullmoose tailings dam has been evaluated for dam break and inundation, and has an emergency preparedness and response plan (EPRP) in place. The EPRP for the Bullmoose Tailings Dam was subjected to a table-top test on November 25th, 2014. The dam break and inundation study, EPRP and a summary of the EPRP tests have also been submitted to the Chief Inspector of Mines.

No Priority 1 (immediate safety or stability concerns) items were identified by the Engineer of Record. Items marked as Priority 2 were identified as non-urgent, but pertaining to long term dam safety. Priority 3 recommendations were identified as non-urgent and not expected to result in a dam safety issue. Recommendations marked as Priority 4 were identified by the Engineer of Record as opportunities to further meet industry best practices, but timeline for completion is more than one year.

Several recommendations pertaining to maintenance and/or opportunities to further develop leading industry practices were identified in the DSI report. We have carefully reviewed and are taking steps to address each recommendation as required, according to the priorities established by our Engineer of Record, as detailed in Table 2 below.

At the closed Bullmoose Mine, we are focused on meeting the highest standards of safety for communities, employees and the environment. Annual Dam Safety Inspections are one component of the comprehensive systems and procedures we have in place for the safe operation and monitoring of our tailing facility. These systems follow industry practices, including guidance provided by the Canadian Dam Association and the Mining Association of Canada.

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
Manager, Legacy Properties and Bullmoose Mine Manager

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

Recommendations and Action Items

Table 1: General Description of Priority Rankings

Priority	Description
1	A high probability or actual dam safety issue considered immediately dangerous to life, health or the environment, or a significant regulatory concern.
2	If not corrected, could likely result in dam safety issues leading to injury, environmental impact or significant regulatory action; or, a repetitive deficiency that demonstrates a systematic breakdown of procedures.
3	Single occurrences of deficiencies or non-conformances that alone would not be expected to result in dam safety issues.
4	Best Management Practice as a suggestion for continuous improvement towards industry best practices that could further reduce potential risks. This typically includes ongoing construction items within the appropriate construction cycle.

Table 2: Recommendations and Planned Action for Bullmoose Tailings Facility

Structure	Recommendation	Priority	Planned Action	Timeline for action
Bullmoose Tailings Dam	Clear brush and small trees from diversion channel upslope of impoundment.	3	Confirm whether the diversion is still required and/or clear brush if necessary.	December 2015
	Prepare an OMS Manual and EPP for the facility based on MAC 2011 guidelines	2	Currently preparing an OMS manual. The EPRP is now in place	December 2014
	Install signage to identify potential hazards for the public	4	Signage will be installed to warn recreational users of potential hazards	June, 2015
	Complete a design assessment for the spillway to confirm suitability for an IDF.	3	Will undertake a review to confirm the spillway will handle the IDF.	December 2015
	Complete a Dam Safety Review	2	Will complete a DSR in 2015	December 2015

	Install survey monuments & monitor.	3	Will install survey monuments and begin monitoring for movement before August 2015.	August 2015
	Remove vegetation from the spillway inlet area and channel. Any erosion protection works damaged during the maintenance should be reinstated.	3	Vegetation will be removed and erosion protection inspected for damage and addressed if necessary.	December 2015