



November 28, 2014

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

**Re: 2014 Dam Safety Inspection Report for the Closed Beaverdell Mine**

Under cover of this letter, please find the 2014 Dam Safety Inspection (DSI) reports for the two dormant tailings facilities and dams at the closed Beaverdell Mine and the results of the third-party review. The DSI reports were prepared by the Engineer of Record, Golder Associates, and the DSI was subsequently provided third-party review by Mr. Andy Small, P.Eng. of AMEC Foster Wheeler.

Teck is committed to ensuring the safe operation of its dormant Beaverdell tailings facility and accompanying dam structures. Our closed tailings facility is inspected semi-annually by qualified technical staff. DSIs are conducted on an annual basis. As both dams at Beaverdell are classed as significant, Dam Safety Reviews (DSR) are required every 10 years. Beaverdell's last DSR was completed in 2012.

As outlined in the DSI report and confirmed by the third-party review, no immediate safety or stability concerns were noted for Beaverdell's two tailings storage facilities and dam structures. Further, these documents confirm that our monitoring and surveillance practices meet industry standards. The independent review has also confirmed the current assigned Consequence Classifications for both dams.

All tailings dams with a failure consequence classification of high, very high or extreme require a dam break and inundation study, and an emergency preparedness and response plan (EPRP). Neither of these are required at Beaverdell as both dams are classed as significant.

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 reports. We have carefully reviewed and are taking steps to address each recommendation as required, according to the priorities established by our Engineers of Record, as detailed in Table 2 below.

There were no recommendations resulting from the independent review of the DSI.

At Teck's closed Beaverdell Mine site, 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 facilities. These systems follow industry best 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,

BJD signature For Dave Ryder

Dave Ryder  
Senior Environmental Coordinator, Legacy Properties and  
Mine Manager, Beaverdell Mine

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 Beaverdell Tailings Facility**

Structure	Recommendation	Priority	Planned Action	Timeline for action
Beaverdell Dams	Develop a Maintenance Log	4	Develop maintenance Log.	Q4 2014
	Address exposed tailings at the junction of Cells 1 and 5	4	Reinstate dam crest to direct runoff and seed exposed areas	Q3 2015
	Place riprap on exposed fine material on shoreline of West Kettle River	2	Will place riprap in the affected area	Q3 2015
	Implement buttressing for some sections of the dams	2	Buttressing to be constructed.	Q3 2015