



Mount Polley Mining Corporation

an Imperial Metals company

Pre-breach sewage disposal at the mine site and implications for breach discharge

MPMC has received enquiries about sewage disposal at the mine site. These questions have been specifically in regards to the breach and the potential for bacterial contamination of Quesnel Lake. MPMC has provided [information](#) to address these enquiries.

Prior to the tailings storage facility (TSF) breach on August 4, 2014, MPMC was handling their sewage in accordance with Ministry of Environment Permit PE-11678, last amended in June 2013. This permit authorized the discharge of sewage into a septic tank and then the TSF. The sewage volume was small in comparison to the tailings volume.

Exposure to UV light from the sun, natural die-off of sewage-related bacteria after an extended period of time outside of the digestive system and the low concentration of sewage in the TSF would make it unlikely that bacteria such as *Escherichia coli* (*E. coli*) would survive. To verify this expectation, MPMC's environmental group took some samples of the TSF supernatant in 2010, 2011, 2012, and twice in 2013. These samples showed concentrations of *E. coli* as follows:

11/4/2010	<1 MPN/100mL
4/6/2011	<1 MPN/100mL
2/8/2012	<1 MPN/100mL
8/8/2013	1 MPN/100mL
11/5/2013	1 MPN/100mL

Samples of *E. coli* collected in Quesnel Lake have generally been in the range of 1 to 2 MPN/100 mL. Such results are common in surface waters and, based on our testing of TSF supernatant, the discharge of tailings water during the breach would not result in the observed *E. coli* readings in Quesnel Lake.

MPMC continues to monitor water quality in Quesnel Lake for substances related to the TSF breach, such as turbidity and metals. However, because *E. coli* readings are not related to the TSF breach, we are no longer monitoring for *E. coli*. This view is shared by the Ministry of Environment who have also removed *E. coli* from their TSF breach related monitoring programs.

Residents with questions about *E. coli* are encouraged to contact Interior Health.

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