



# Mount Polley Mining Corporation

an Imperial Metals company

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## Mount Polley Mine Water Management Planning

Mount Polley mine has a surplus water balance, which means the amount of water entering the mine site as rain or snow exceeds the amount of water used in processing (when the mine is operating) or water that leaves the site by evaporation. In the first stage of its development (1997 – 2001) the Mount Polley mine recycled water from the tailings storage facility for re-use in the milling process. During this period the mine did not require discharge of water to continue operating. The mine was temporarily shut down 2001 and when the mine re-opened in 2005, a surplus of water was present and a permit amendment was sought to enable discharge of the surplus water into Hazeltine Creek. The permit amendment, issued approximately 5 years after the application was submitted, imposed a number of limits including the following volume limits:

- maximum annual discharge of 1.4 million cubic metres per year, and
- the permitted discharge amount was not to exceed 35% of the daily flow of Hazeltine Creek.

The mine area has expanded during its mine life, and the amount of water falling on the site is now 5.9 million cubic metres on an average year and up to 9.3 million cubic metres during a 1-in-200 wet year weather event. This amount of water must be handled, treated, and then disposed offsite to maintain a neutral water balance. Clearly, the previously permitted surplus water discharge volumes are not sufficient. At present, all mine-influenced water is being intercepted and stored in the Springer pit (Figure 1) which has a finite volume, and Mount Polley estimates that if nothing is done, water from the Springer pit will begin to seep into the ground in early 2016 based on normal climatic conditions.



**Figure 1. Springer pit is receiving all mine contact water at present but it will eventually fill up.**

As many community members are aware, Mount Polley has applied for a restricted operating permit to process 4.0 million tonnes of ore and deposit the tailings into the Springer pit, while a long-term solution to tailings storage for the mine is determined. This limited mining activity will allow Mount Polley to retain employees and would assist with costs of rehabilitation and restoration.

However, **regardless of whether or not the Mount Polley mine operates again**, the estimated 5.9 million cubic metres per year (based on average site conditions) must be managed in a responsible manner and all options that are available for this volume will involve discharge of treated water to a water body.

The approach proposed takes a long-term perspective to arrive at an effective, long-term water management plan for the mine site that will protect human health and the environment. It also recognizes that in the context of urgency, short-term measures may be necessary and a contingency plan is under development. However, such measures that would be carried out in the short-term should fit within the context of a long-term vision for how Mount Polley will manage, treat, and dispose of mine water through mine closure.

Mount Polley acknowledges that area residents and First Nations are likely to be concerned with the idea of a discharge to any surface water, regardless of the fact that a discharge is an inevitable reality.

We are committed to communicating our circumstances and how we will approach water management planning. This topic will be covered at our next community meeting, and this notice is intended to provide information in the interim. The development of Mount Polley's water management plan (Figure 2) is expected to take place over the coming months. We will continue to regularly provide communications to keep the community apprised.



Figure 2. Mount Polley's Approach to Long Term Water Management Planning