

## **Mount Polley Mining Corporation**

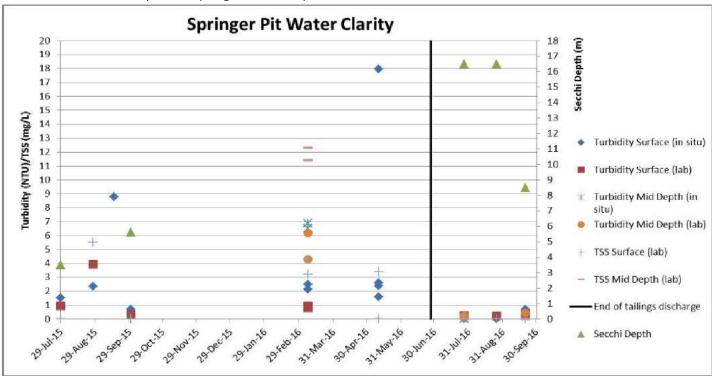
an Imperial Metals company Box 12 Likely, BC V0L 1N0 T 250.790.2215 F 250.790.2613

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Water clarity is a physical parameter describing the transparency of water. The clarity depends on how deep sunlight penetrates the water column. Multiple environmental factors can contribute to water quality, including wind and rainfall, which can mobilize soil particles and cause turbidity in water. Turbidity is a measurement of the cloudiness of a fluid, based on the amount of light scattered by particles; it is most often reported in Nephelometric Turbidity Unit (NTU). Secchi depth is another method to judge water clarity. It involves lowering a black and white disk into the water and recording the depth (usually in metres) at which it is no longer visible. Another indicator of water clarity is the total suspended solids (TSS) concentration. TSS is a specific measurement of the mass of particles (larger than two microns) contained in a volume of water, and is usually reported in milligrams per liter (mg/L).

MPMC measures turbidity, TSS and secchi depth to determine water clarity in all monitored bodies of water, including the Springer Pit. Since July 2015, Mount Polley Mining Corporation (MPMC) has stored site contact water and tailings from the mill process in the Springer Pit. In June 2016, the inflow of tailings ceased and improvements in the water clarity have been observed.

During the tailings discharge, the constant water flow kept the particles in suspension instead of allowing them to settle, resulting in higher turbidity, increased TSS and shallower secchi depths as shown in Figure 1 below. In the two sampling events after the tailings inflow stopped (marked by the black vertical line in Figure 1), turbidity and TSS decreased while the secchi disk measurement increased. The drop in the secchi depth and the slight increase in turbidity and TSS readings in September reflected the recent heavy rains that occurred in the area. However, the trend demonstrates that the overall water clarity in the Springer Pit has improved.



Ongoing monitoring of these parameters and others is part of the MPMC permit structure. The data collected from various sites is submitted to the provincial government and published in various reports on a regular basis.

Please visit the Imperial Metals website for more information about MPMC's reports and ongoing projects: <a href="https://www.imperialmetals.com/our-operations/mount-polley-mine/mount-polley-updates/information">https://www.imperialmetals.com/our-operations/mount-polley-mine/mount-polley-updates/information</a>

## And now, for **FUN FACTS**:

- Did you know that MPMC will be planting approximately **119 250** sitka alder, prickly rose, black twinberry and red osier dogwood seedlings starting October 4<sup>th</sup>? This is in addition to the approximately 123 000 planted since 2015.
- It is part of the ongoing restoration project around Hazeltine Creek; this fall's planting schedule will be focused around upper Hazeltine Creek by the Polley Lake outlet and lower Hazeltine Creek by the Quesnel Lake shoreline.
- You can participate in a secchi dip-in in your area. <a href="http://www.secchidipin.org/">http://www.secchidipin.org/</a>

## **Attention Likely and area residents**

We have observed ATV tracks in and around the newly reclaimed areas around Hazeltine Creek. While it is encouraging that people are taking an interest in the ongoing rehabilitation work, we would respectfully encourage everyone to stay clear of the areas that have been recently re-vegetated.

Thank you for your cooperation.

<u>References:</u> Fondriest Environmental, Inc. "Turbidity, Total Suspended Solids and Water Clarity." Fundamentals of Environmental Measurements. 13 Jun. 2014. Web. < http://www.fondriest.com/environmental-measurements/parameters/water-quality/turbidity-total-suspended-solids-water-clarity/>.