Mount Polley Mining Corporation
an Imperial Metals company
Box 12, Likely, BC V0L 1N0
T 250.790.2215

COMMUNITY UPDATE

INSIDE THIS ISSUE

MPMC EVENTS

Quarter 2, 2020

April 1:
Public Liaison Committee (PLC) Meeting via conference call

June 16:
Implementation Committee (IC) Meeting via conference call

Quarter 3, 2020

July 8:
Public Liaison Committee Meeting via Conference call

August 26:
Community Meeting to be held outdoors in the Lower Hazeltine Creek area (poster with more info to come soon)

TBA
Implementation Committee Meeting—Date to still to be Determined

Mount Polley Mine: Care and Maintenance a Year Later

- The environmental monitoring programs continue and are on track
- Closure research projects continue as planned
- Remediation of Hazeltine Creek continues at Lower Hazeltine, projected to be complete in 2020
- Workforce consists of ten people plus the 4 in the environmental department
- Water Management throughout the mine site continues with some Freshet challenges in the Spring
- Exploration Geological Mapping of new areas on mine site

Mount Polley employees continue to take additional precautions to minimize the risks of COVID19 transmission and illness as recommended by the Provincial Health Officer. All personnel continue to report to work.

Returning employees (from days off) and site visitors continue to be required to fill out a COVID-19 Questionnaire before entering the site and will be turned away if showing symptoms of illness.

MPMC Water Treatment Plant (WTP) Update

In Quarter 2, the total treated water discharged to Quesnel Lake was 878,637 m^3

Water Quality samples were collected weekly at the Water Treatment Plant (WTP) at the influent (E19) and effluent (HAD-3) sites until April 15th when results for HAD-3 came back with totalcopper concentration within 80% of the permit limit. This elevated total copper concentration initiated the trigger response plan outlined in MPMC's Annual Discharge Plan (ADP).

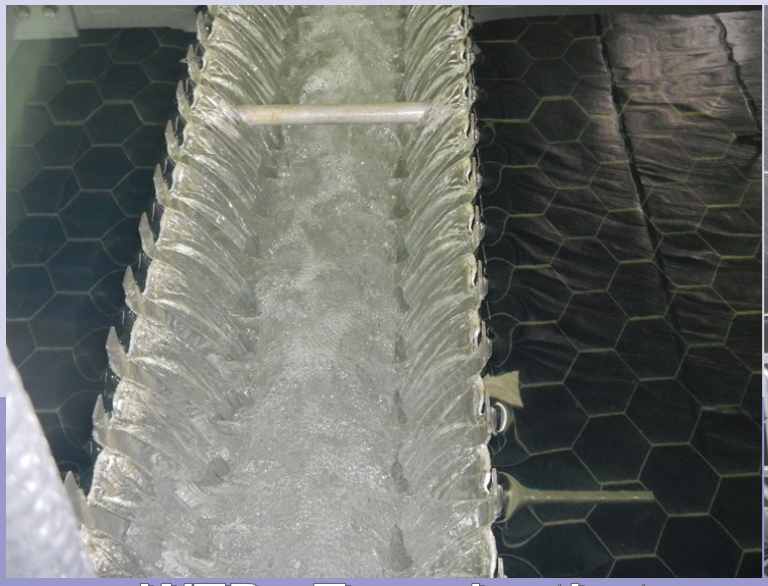

Water Treatment Plant - May 2020

The trigger response plan involves reducing throughput in the WTP, initiating a data review and collecting additional samples. Samples collected on April 14 and April 20 yielded results that exceeded the permit limit for total copper and as a result, the WTP was shutdown.

The WTP was started in recirculation mode from April 25 to May 9 while Golder Associates completed a field trial which involved Trimercapto-s-triazine (TMT) addition to potentially reduce soluble copper concentrations in discharge water. The TMT reagent was successful in reducing soluble copper levels however a byproduct of very small copper precipitate particles were created in the process. The WTP was unable to treat the byproduct sufficiently to meet Total Copper permit criteria. TMT trial was unsuccessful due to the permit criteria exceedance in Total Copper.

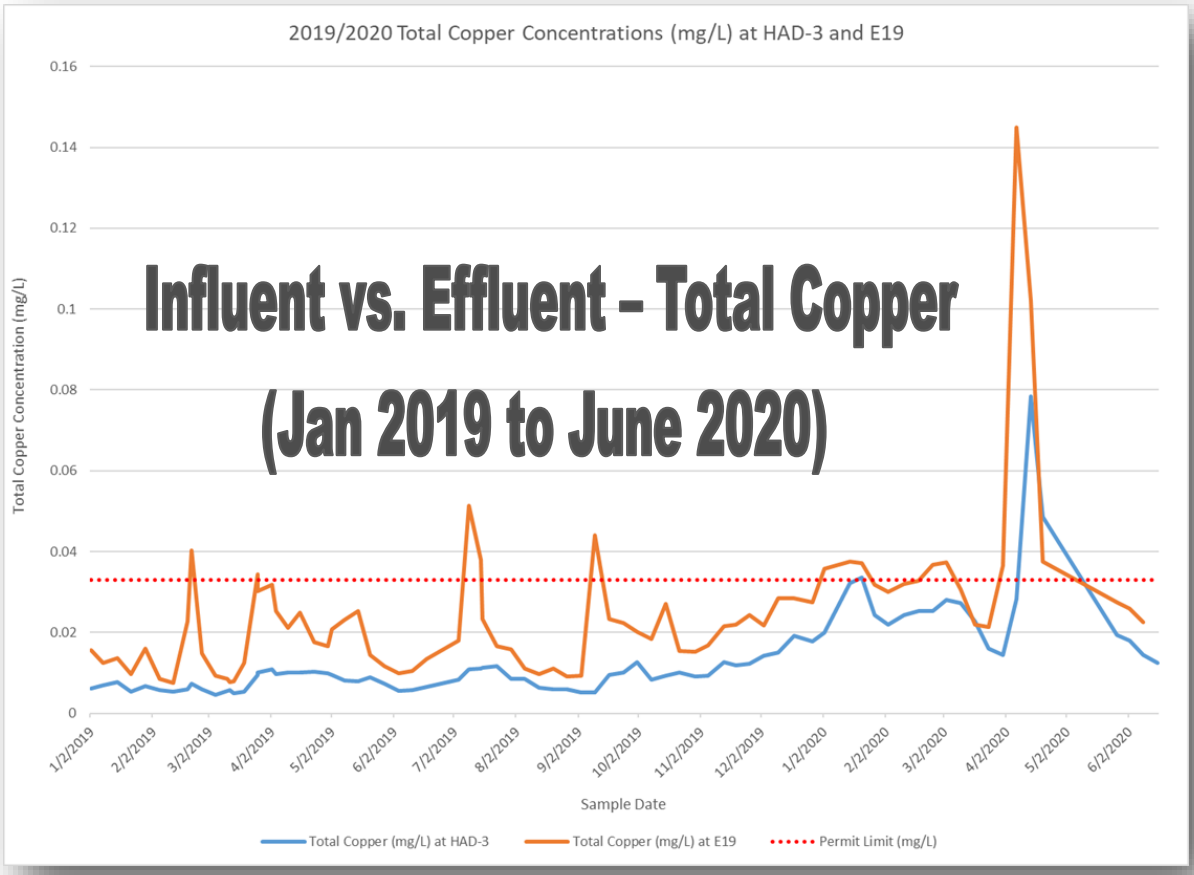
Once the high levels of runoff reduced and the TSS levels in the runoff water dropped the WTP was started in recirculation mode on May 27 and samples were collected. Sample results were below the permit limits and trigger limits in the Annual Discharge Plan (ADP) and as a result, the WTP resumed normal operation on June 2. MPMC staff confirmed the cause of the elevated copper concentrations at the WTP, and discovered the main sources were the North East Zone (NEZ) Seep and the South East Rock Drainage Site (SERDS) Ditch as the heavy runoff flushed solids out of the rock storage areas.

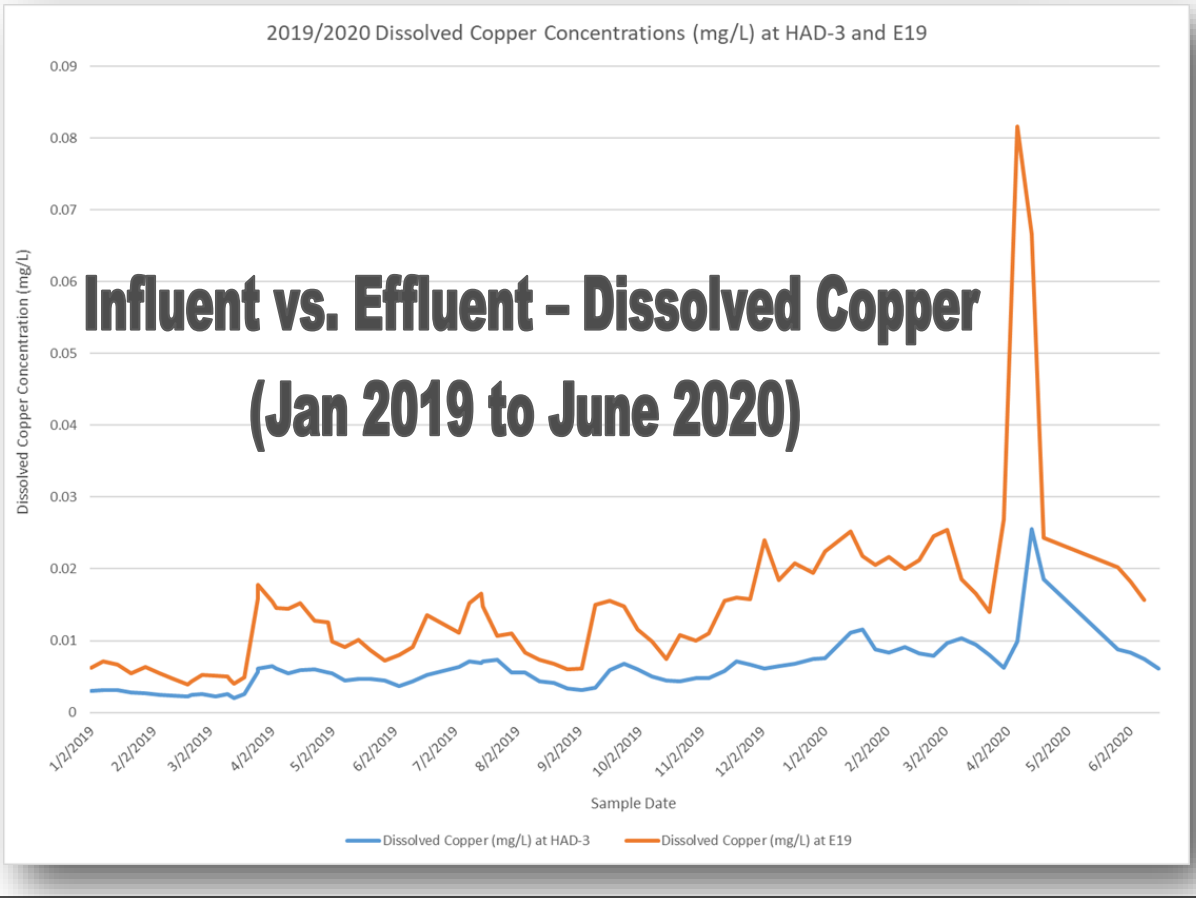
During the treatment process in the WTP, sand and flocculant are used to filter out the solids in the water. The flocculant addition must be carefully managed or the flocculant itself can add to the TSS levels in the effluent.

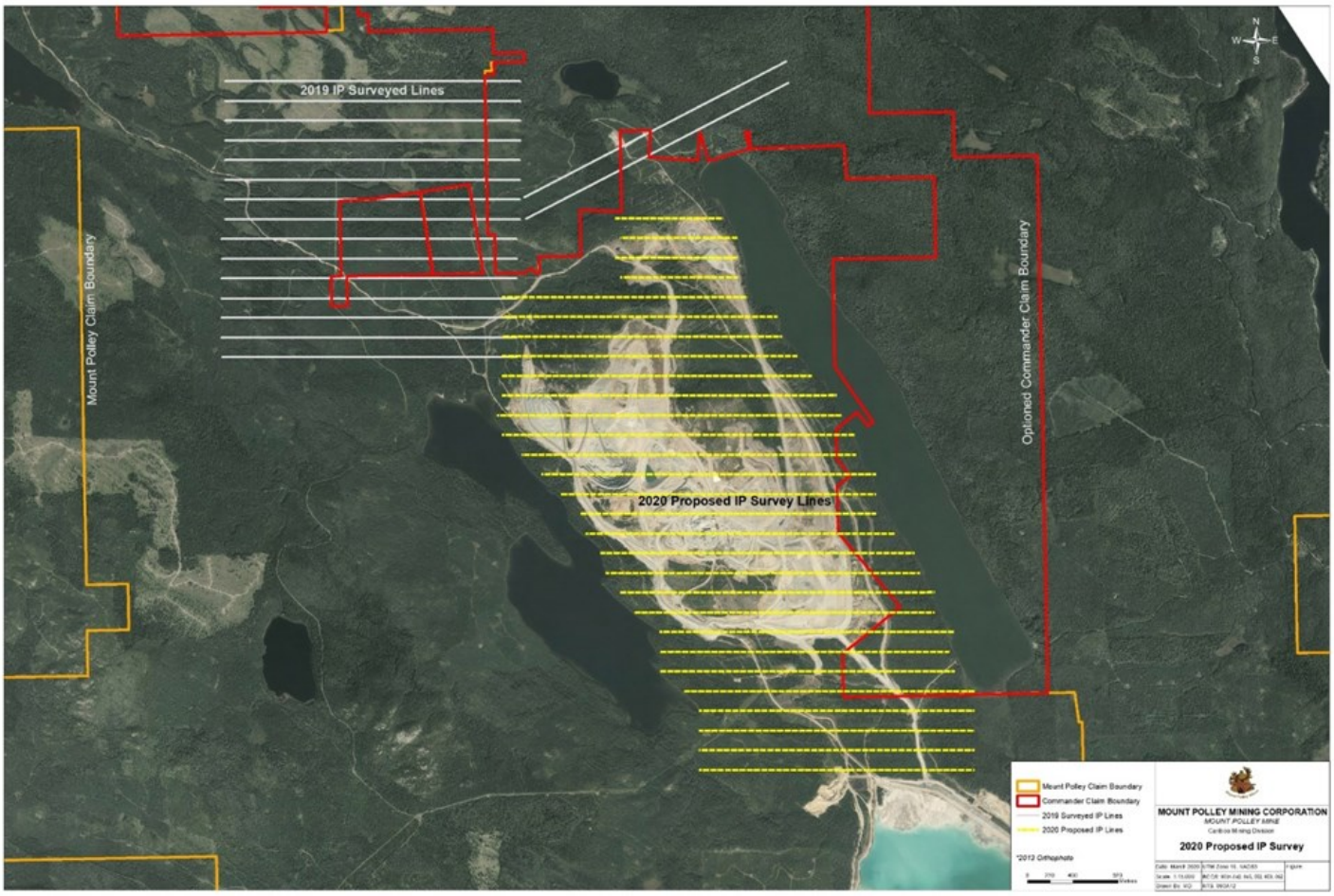

WTP - Troughs that begin discharge of effluent

WTP - HMI (Human Machine Interface) monitors treatment system of plant

MPMC Water Treatment Plant (WTP) Update—Graphs







MORE EXPLORATION AT MOUNT POLLEY MINE

- Notice of Work applications for the new Mineral Claims have been filed.
- A Deemed Authorization Permit on Mine Permit Area has been submitted for expansion around the Cariboo and Springer Pits.
- Geological mapping of “New” areas, ground truthing of the exploration drill targets, planning of the easiest, non-invasive access to diamond drill sites and diamond drilling will be conducted.
- Diamond drill prioritized targets, MMI and Geophysical targets.
- Complete 3-D-IP over the mine site known mineralization for new exploration and create fingerprint of known mineralized bodies.
- White shows the survey area done last year, yellow are surveys completed this spring.
- A number of diamond drill holes are planned.

Unauthorized Discharge During Spring Freshet

A rapid melting event occurred this spring, it was the coldest March on MPMC's records and there was no significant melting in the winter months. This year also yielded the second largest snow pack since MPMC began keeping records in 1999. The largest snow pack was recorded in 2014.

The largest issue initially was that the water management infrastructure was keeping up with the water with the exception of the Perimeter Embankment Till Borrow Pond (PETBP); as a result, MPMC made the decision to allow the Northwest (NW) and Mine Drainage Creek (MDC) sumps to overflow in order to save the PETBP. The PETBP does not have an emergency spillway and would have overflowed into Hazeltine Creek which was viewed as an environmentally sensitive scenario. Water flowed through a forested area to Bootjack Lake from the NW and MDC sumps when they overflowed. The Bootjack Creek Sump is located directly adjacent to Bootjack Creek. A pump failure caused water to overflow and the replacement pump was insufficient to keep up with the flows. Water flowed into Bootjack Creek. Outcomes- The water quality was reasonably favorable in all scenarios. There were exceedances of BC Water Quality Guidelines (BCWQGs) in dissolved aluminum and copper. It was found that the dissolved aluminum exceedances were existing. All events were unlikely to have any adverse effects as there were favorable water quality results and there was very little erosion and physical disturbance. Communication with Ministry of Environmental & Climate Strategy (ENV) is ongoing. MPMC continues to work with ENV and our consultants on the site water management plan.

Edney Creek at Lower Hazeltine Creek into Quesnel Lake

Edney Creek at Lower Hazeltine Creek into Quesnel Lake

Quesnel Lake beach—water extremely high!

Quesnel Lake beach—water extremely high!

Environmental Monitoring Update

Environmental team: Matt O'Leary, Gabriel Holmes, Nina Solomon, Kala Ivens, Amanda Nicholson, Alicia Lalonde (DWB Consultant), Don Parsons (Corporate Office)

Quarter 2 monitoring activities completed:

- Weekly WTP water quality sampling including monthly/quarterly toxicity sampling (excluding April 16 to June 2 due to total copper exceedances and the associated investigation)
- Monthly water quality sampling at Hazeltine Creek
- Monthly & Quarterly water quality sampling of surface & mine affected waters including groundwater & mine seepage & flow readings
- Polley Lake, Bootjack Lake, & Quesnel Lake water quality sampling
- All critical ditches, sumps, ponds and pipeline inspections monthly
- Monthly/quarterly Waste Inspections
- Spring Sump & Ditch Inspections
- Investigation and sampling of unauthorized discharges and exceedances
- Surveys and studies: spawning surveys in Hazeltine & Edney Creeks, nesting surveys, vegetation, fish tissue & Zooplankton in Bootjack, Polley & Quesnel Lakes studies, constructed wetland treatment system study, saturated rock fill study, Trimercapto-s-triazine (TMT) study at Water Treatment Plant
- Reports—monthly, quarterly , investigations
- Monitoring planning as per the CEMP (Comprehensive Environmental Management Plan) and 11678 Permit

Remediation Work Update

- No remediation work during Quarter 2
- Lower Hazeltine & Edney Creek construction to begin early July
- The final designs of lower Hazeltine Creek and Edney Creek has been approved.
- Most work scheduled for 2020 will be downstream of the Ditch Road
- Development of 2022 Water Management Plan with assistance from Golder Associates

Challenges in Quarter 2

- Record breaking snowmelt which resulted in unauthorized discharge, temporary increased water levels in the TSF and sumps, and copper/phosphorus exceedances (have been reported, investigated, resolved)
- Monitoring equipment malfunctions (now repaired)

The monitoring schedule is centered on the Environmental Management Act (EMA) Permit and the most recent approved Comprehensive Environmental Management Plan (CEMP) requirements.

If you have any questions pertaining the Community Update, please email Gabriel Holmes at gabriel.holmes@mountpolley.com

Visit the Mount Polley Remediation Facebook **page;** Mount Polley Remediation **webpages on Imperial's website** https://www.imperialmetals.com/our-operations/mount-polley-mine/remediation-q-and-a) **For information on MPMC remediation activities.**