



# Mount Polley Mining Corporation

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**November 12, 2015**

Ministry of Environment  
 Mining Operations Environmental Protection  
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 Nanaimo, BC  
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## WEEKLY UPDATE REPORT – NOVEMBER 4 TO 10, 2015

### Government, First Nations and Stakeholder Engagement

<p><b>Publications and Website Updates</b></p>	<p>Mount Polley will continue to present interpreted environmental monitoring results and updates on remediation work on the <a href="#">Mount Polley Updates</a> page of the Imperial Metals website (<a href="http://www.imperialmetals.com">www.imperialmetals.com</a>). Last week's update report to the BC Ministry of Environment (MoE) was posted this week.</p> <p>The closure of the Likely-Horsefly Forest Service Road (Ditch Road) has been extended to November 20<sup>th</sup>. This update was sent out to Mount Polley's email list of community contacts and to the MoE Environmental Working Group.</p>
<p><b>Engagement Activities and Communications with Regulators</b></p>	<p>Activities relating to government, First Nations, and stakeholder communication and engagement this week included:</p> <ul style="list-style-type: none"> <li>• The MoE weekly update call on November 4<sup>th</sup>.</li> <li>• MOE sampling in Hazeltine Creek on November 9<sup>th</sup></li> <li>• An information bulletin on water clarity in Quesnel Lake was posted on the Imperial Metals website on November 10<sup>th</sup>.</li> </ul>
<p><b>Silt Curtain</b></p>	<p>The turbidity barrier (silt curtain) installed in Quesnel Lake near the outlet of the constructed Edney Creek channel was scheduled to be removed this week however it was stuck on some rocks and a new approach is being planned.</p>
<p><b>Monitoring</b></p>	<p>MPMC staff members conduct environmental monitoring when work in the Hazeltine Creek riparian zone is occurring.</p>

## Rehabilitation Work

<b>Hazeltine Creek Rehabilitation</b>	<p>Hazeltine Creek rehabilitation work carried out this week included:</p> <ul style="list-style-type: none"> <li>No removal of tailings from the upper floodplain adjacent to Hazeltine Creek was conducted this week.</li> <li>Removal of dead trees in areas adjacent to Hazeltine Creek has been discontinued until freeze up occurs.</li> <li>Tree falling along the alignment for the new Horsefly-Likely Forest Service Road (Ditch Road) bridge was completed.</li> <li>Hazeltine Creek continues to flow through outfall pipes into Quesnel Lake (see below for monitoring information).</li> <li>A crew from a Xat'sūll (Soda Creek Indian Band) began working on the grass seeding program for the creek.</li> </ul>
<b>Polley Lake</b>	<p>Polley Lake water elevation = 919.97 m (November 9<sup>th</sup>) The Polley Lake weir valve is now open 17 turns.</p>
<b>Water Management</b>	<p>No releases of water to the environment occurred this week. Please refer to the <a href="#">May 28<sup>th</sup>, 2015 weekly report</a> for an overview map of the TSF water management system.</p>
<b>Springer Pit</b>	<p>The total volume of tailings deposited in the Springer Pit as of November 9<sup>th</sup> is 992,014 tonnes (718,850 m<sup>3</sup> including water retained in tailings). Water Elevations (November 9<sup>th</sup>):</p> <ul style="list-style-type: none"> <li>Springer Pit = 1023.52m (+1.5m from last week)</li> <li>Groundwater well GW12-2a = 1014.31m (+0.20m from last week)</li> <li>Groundwater well GW12-2b = 1014.52m (+0.18m from last week)</li> <li>Groundwater well GW15-1a = 1023.79m (+0.84m from last week)</li> <li>Groundwater well GW15-1b = 1023.75m (+0.92m from last week)</li> <li>Groundwater well GW15-2a = 1023.68m (+0.61m from last week)</li> <li>Groundwater well GW15-2b = 1024.27m (+0.65m from last week)</li> </ul> <p>A map of the groundwater well locations is included as Figure 1 of the <a href="#">July 23<sup>rd</sup> weekly report</a>. Note that the suffix "a" indicates the deep well in the pair, and the suffix "b" indicates the shallow well in the pair.</p> <p>Monthly water quality results for parameters of interest from the Springer Pit supernatant and adjacent groundwater wells will be included in this report as they become available.</p>
<b>Discharge System</b>	<p>Work related to installation of infrastructure for the proposed short-term water discharge plan was carried out this week including:</p> <ul style="list-style-type: none"> <li>Armouring of the West Ditch to reduce entrainment of suspended solids in water that will be routed to the water treatment plant (WTP) is complete. Areas requiring further armouring identified in the third party engineering inspection continue to be addressed. Upgrades to culverts at a road crossing were completed.</li> <li>Armouring of the ditch from the Central Collection Sump to the Perimeter Embankment Till Borrow Pit (where the WTP is located) is complete.</li> <li>The commissioning of the WTP is complete.</li> <li>Work installing WTP supporting structures and equipment completed.</li> </ul>

## Environmental Monitoring Program

<p><b>Water Quality Monitoring Program</b></p>	<p>The current water quality monitoring program is outlined in the table below. All sampling was completed as scheduled this week., Changes made to the monitoring program last week include the addition of HAC-12 at the top of the outfall pipeline and the removal of HAC-01c as Hazeltine Creek is no longer flowing in the channel.</p> <ul style="list-style-type: none"> <li>Weekly sampling at stations QUL-57, 58 and 59 in the Initial Dilution Zone (IDZ) above the diffusers was completed however the results indicate that Hazeltine Creek water does not change the water quality in Quesnel Lake. MPMC will only conduct weekly sampling at these sites when the discharge of effluent is permitted. Only a profile will be completed below the diffuser outlet.</li> </ul> <table border="1" data-bbox="386 583 1425 1060"> <thead> <tr> <th>Area</th> <th>Monitoring Type</th> <th>Frequency</th> <th>Stations</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Polley Lake</td> <td>Samples</td> <td>Monthly</td> <td>P1, P2</td> </tr> <tr> <td>Profiles</td> <td>Bi-monthly</td> <td>P1, P2</td> </tr> <tr> <td rowspan="2">Hazeltine Creek</td> <td rowspan="2">Samples</td> <td>Weekly</td> <td>HAC-12</td> </tr> <tr> <td>Monthly</td> <td>HAC-05, HAC-08, HAC-10</td> </tr> <tr> <td>Edney Creek</td> <td>Samples</td> <td>Weekly</td> <td>EDC-01</td> </tr> <tr> <td rowspan="5">Quesnel Lake</td> <td>Profiles</td> <td>Weekly</td> <td>QUL-54a, QUL-55a, QUL-56a</td> </tr> <tr> <td>Profiles</td> <td>Bi-monthly</td> <td>QUL-21a, QUL-18, QUL-66a, QUL-2a, QUL-79</td> </tr> <tr> <td>Profiles</td> <td>Monthly</td> <td>QUL-40a, QUL-120a</td> </tr> <tr> <td>Samples</td> <td>Weekly</td> <td>QUL-58</td> </tr> <tr> <td>Samples</td> <td>Monthly</td> <td>QUL-2a, QUL-18, QUL-40a, QUL-120a</td> </tr> <tr> <td rowspan="2">Quesnel River</td> <td>Samples</td> <td>Bi-monthly</td> <td>QUR-1</td> </tr> <tr> <td>Field Parameters</td> <td>Continuous</td> <td>QUR-1</td> </tr> </tbody> </table> <p>Please refer to previous weekly reports, such as the <a href="#">May 7<sup>th</sup>, 2015</a> report, for a map of these sampling locations.</p>	Area	Monitoring Type	Frequency	Stations	Polley Lake	Samples	Monthly	P1, P2	Profiles	Bi-monthly	P1, P2	Hazeltine Creek	Samples	Weekly	HAC-12	Monthly	HAC-05, HAC-08, HAC-10	Edney Creek	Samples	Weekly	EDC-01	Quesnel Lake	Profiles	Weekly	QUL-54a, QUL-55a, QUL-56a	Profiles	Bi-monthly	QUL-21a, QUL-18, QUL-66a, QUL-2a, QUL-79	Profiles	Monthly	QUL-40a, QUL-120a	Samples	Weekly	QUL-58	Samples	Monthly	QUL-2a, QUL-18, QUL-40a, QUL-120a	Quesnel River	Samples	Bi-monthly	QUR-1	Field Parameters	Continuous	QUR-1
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<p><b>Water Quality Monitoring Results</b></p>	<p>Figure 1 has been updated from previous reports to display current turbidity readings at upper and lower Hazeltine.</p> <p>Figure 2 shows a time series graph of turbidity readings at site QUR-1 in the upper Quesnel River. Turbidity data are from laboratory analysis completed by ALS Environmental. This chart will be updated every second week, as per the monitoring frequency of this station in the sampling program.</p>																																												
<p><b>Other Monitoring</b></p>	<p>Ministry of Environment was on site November 9<sup>th</sup> to collect samples in Hazeltine Creek.</p>																																												

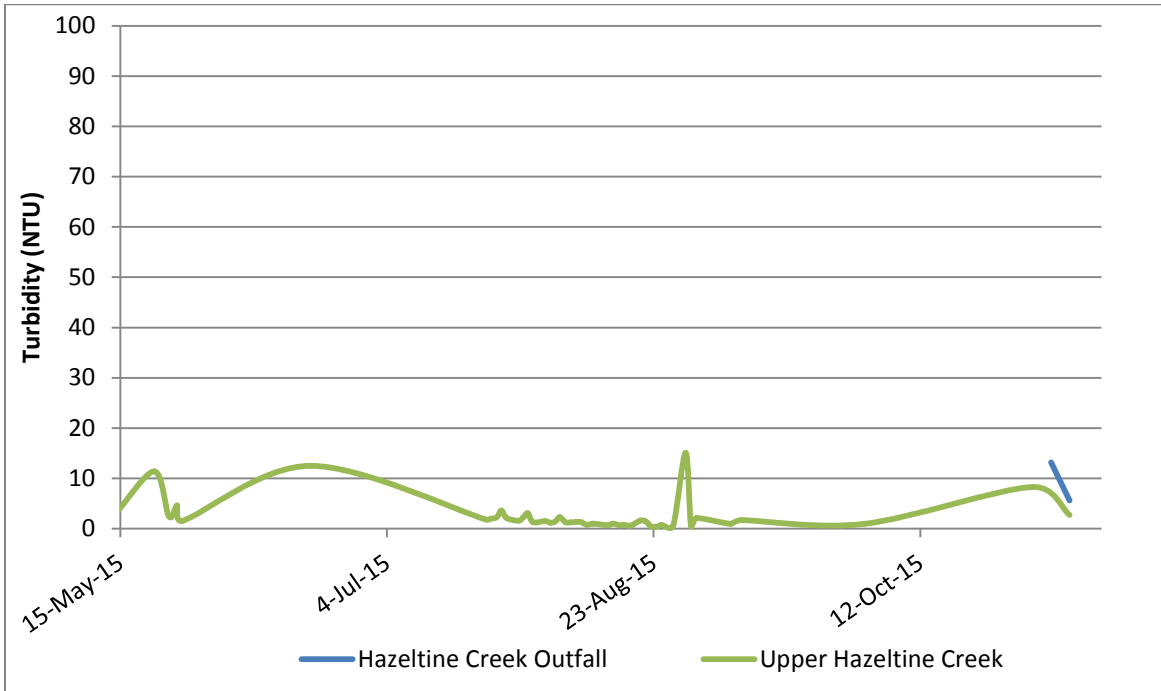


Figure 1. Time series graph for May 15<sup>th</sup> – November 9<sup>th</sup> showing turbidity levels at monitoring locations in upper and lower Hazelatine Creek.

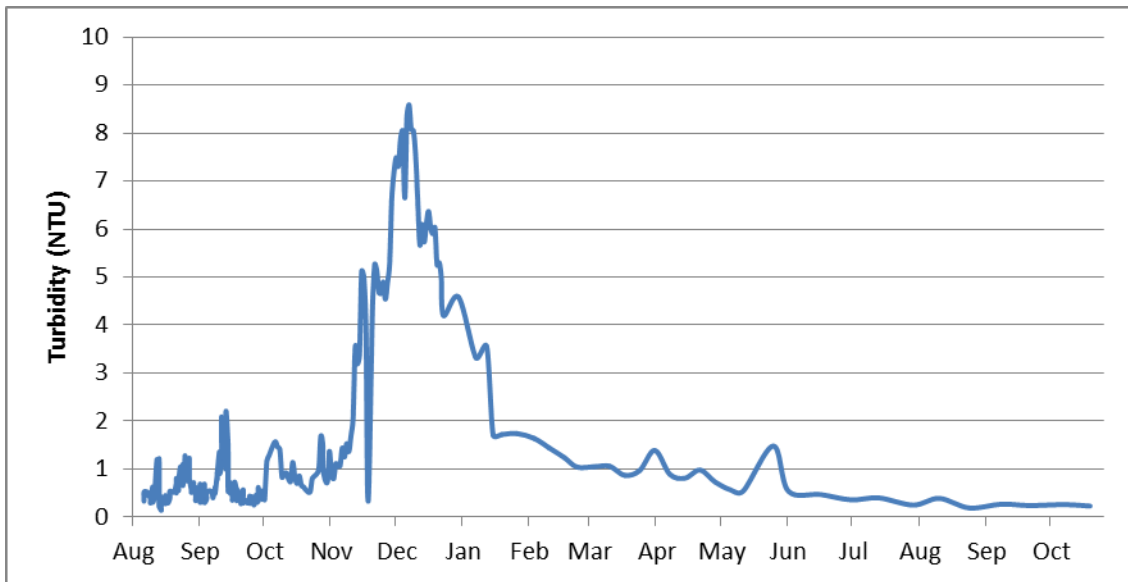


Figure 2. Turbidity time series at station QUR-1 (August 6<sup>th</sup>, 2014 – October 19<sup>th</sup>, 2015) Data from logger downloaded November 3<sup>rd</sup> indicated that the equipment was not measuring. This logger will be downloaded again on November 12<sup>th</sup>.