



# Mount Polley Mining Corporation

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Ministry of Environment  
Mining Operations Environmental Protection  
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## WEEKLY POST-TSF BREACH REPORT – WEEK OF MAY 6 – 12, 2015

### Water Management

|                               |                                                                                                                                                                                                                                                                                                                                               |
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| <b>Polley Lake Dewatering</b> | Polley Lake water elevation = 922.60 m (May 12 <sup>th</sup> )<br>The weir valve that allows outflow from Polley Lake into Hazeltine Creek was closed periodically this week to accommodate downstream construction.                                                                                                                          |
| <b>TSF Water Management</b>   | All water from the TSF water collection system continues to be transferred to the Springer Pit via the Central Collection Sump. No releases of water to the environment occurred this week. Please refer to previous weekly reports, such as the December 31 <sup>st</sup> , 2014 report, for an overview map of the water management system. |

### Government, First Nations and Stakeholder Engagement

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| <b>Publications</b>                                             | 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> ). <ul style="list-style-type: none"> <li>The <a href="#">Photo Gallery</a> was updated this week.</li> <li>A Community Update Bulletin was prepared for publication next week.</li> </ul>                                                                                                                                                                                                |
| <b>Engagement Activities and Communications with Regulators</b> | Activities relating to government, First Nations, and stakeholder communication and engagement this week included: <ul style="list-style-type: none"> <li>The weekly Ministry of Environment (MoE) update call on May 6<sup>th</sup>.</li> <li>A tour of Hazeltine Creek rehabilitation work with the Lieutenant Governor of Alaska and local First Nations representatives on May 6<sup>th</sup>.</li> <li>A meeting with First Nations and stakeholder representatives on May 8<sup>th</sup> to discuss site water management and discharge options.</li> <li>A meeting with MoE regarding Pollution Abatement Order updates on May 12<sup>th</sup>.</li> </ul> |

## Sediment and Erosion Control Measures

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| <b>Silt Curtain</b>                      | The turbidity barrier (silt curtain) installed in Quesnel Lake near the outlet of the constructed Edney (Hazeltine) Creek channel, downstream from the Lower Hazeltine Creek sedimentation ponds, is in good condition.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>General</b>                           | <p>Environmental monitors are monitoring sediment and erosion control and rehabilitation work in Upper, Middle, and Lower Hazeltine Creek. This monitoring is being conducted by MPMC staff.</p> <p>15,874 tonnes of angular rock were hauled to the Hazeltine Creek area this week for use in rehabilitation work. 490 tonnes of material were excavated and moved within Hazeltine Creek during the channel re-shaping process.</p> <p>Rock liner material being used is low sulphur rock from the Cariboo Pit and a sampling program is in place to verify the chemistry of the rock. A sampling program to verify chemistry of creek subgrade material after tailings have been removed is also in place.</p> |
| <b>Hazeltine Creek Reconstruction</b>    | Construction of the mean annual flood channel and floodplain grading were completed this week. The creek is now flowing in the armoured channel for the full length of Hazeltine Creek, with the exception of the canyon sections, which primarily have a bedrock substrate.                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Lower Hazeltine Creek Reclamation</b> | <p>Land reclamation work on disturbed areas adjacent to Lower Hazeltine Creek, including roadsides and construction laydowns, is ongoing. Work includes re-contouring, surface roughening, application of woodchips, and spreading coarse woody debris. 2,060 tonnes of woodchips were moved and spread this week.</p> <p>A crew from the Soda Creek First Nation and a crew from a local silviculture contractor continued to plant live willow stakes and wattles and seed native red fescue species this week. A shipment of ~10,000 native deciduous trees and shrubs was also planted in lower Hazeltine Creek this week.</p>                                                                                |

## TSF Construction

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|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TSF Construction</b> | <p>The amendment to permit M-200 approving repair of the TSF breach to manage 2015 freshet was received from the Ministry of Mines on December 17<sup>th</sup>, 2014. An update on work being completed under this approval is as follows:</p> <ul style="list-style-type: none"> <li>• Foundation preparation and material placement for Perimeter Embankment buttressing is ongoing.</li> <li>• Upstream Fill material placement for the cut-off wall is ongoing.</li> </ul> <p>Project components that have been completed under this approval are detailed in the May 7<sup>th</sup> 2015 and March 26<sup>th</sup>, 2015 reports.</p> |
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## Water Quality Monitoring Program

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        |                  |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|
| <b>Water Quality Monitoring Sites</b> | The current water quality monitoring program is outlined in the table below. This week, the sampling frequency at stations HAC-05, HAC-08, HAC-10, and EDC-01 were reduced to monthly, as per the monitoring plan submitted to, and approved by, MoE. All monitoring was completed as scheduled this week.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                  |
|                                       | <b>Area</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Monitoring Type</b> | <b>Frequency</b> |
|                                       | Polley Lake                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Samples                | Monthly          |
|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Profiles               | Bi-monthly       |
|                                       | Hazeltine Creek                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Samples                | Weekly           |
|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        | Monthly          |
|                                       | Edney Creek                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Samples                | Weekly           |
|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        | Monthly          |
|                                       | Quesnel Lake                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Profiles               | Weekly           |
|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Profiles               | Bi-monthly       |
|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Profiles               | Monthly          |
|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Samples                | Weekly           |
|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Samples                | Monthly          |
|                                       | Quesnel River                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Samples                | Weekly           |
|                                       | Please refer to previous weekly reports, such as the May 7 <sup>th</sup> , 2014 report, for a map of these sampling locations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |                  |
| <b>Continuous Monitoring</b>          | The monitoring program also includes a sonde (datalogger) that is deployed in the Quesnel River at monitoring station QUR-1. The sonde measures field parameters (turbidity, pH, specific conductance, dissolved oxygen, and temperature) every 15 minutes. A second sonde, which measures the same parameters at the same frequency, is deployed at the outlet of the Lower Hazeltine Creek sedimentation ponds.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |                  |
| <b>Results</b>                        | <p>Figure 1 shows a time series graph for this week of daily field turbidity readings for Upper Hazeltine Creek (at the Gavin Lake bridge, station HAC-05), Lower Hazeltine Creek (upstream and downstream of the sedimentation ponds, stations HAC-09 and HAC-01b), and Edney Creek (upstream and downstream of the confluence with Hazeltine Creek, stations EDC-01 and EDC-02). Figure 2 shows turbidity levels at these same sites over a longer time period to provide context for this week's data.</p> <p>Figure 3 shows a turbidity and temperature profile from May 6<sup>th</sup> at site QUL-18 in Quesnel Lake (at the deepest point of the West Basin, downstream of the Hazeltine Creek mouth).</p> <p>Figure 4 shows a time series graph of turbidity at site QUR-1. Turbidity data are from laboratory analysis completed by ALS Environmental.</p> |                        |                  |

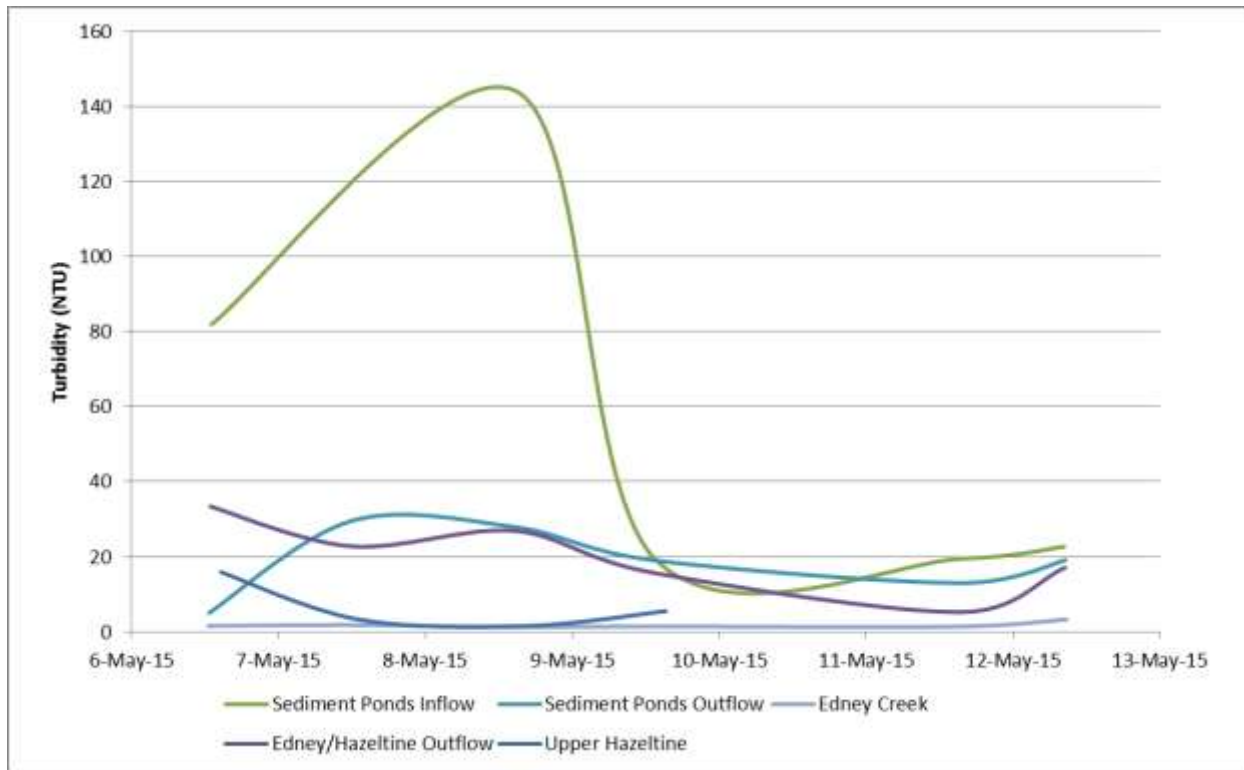


Figure 1. Time series graph for May 6<sup>th</sup> - 12<sup>th</sup> showing turbidity levels at monitoring locations in Hazeltine and Edney Creeks

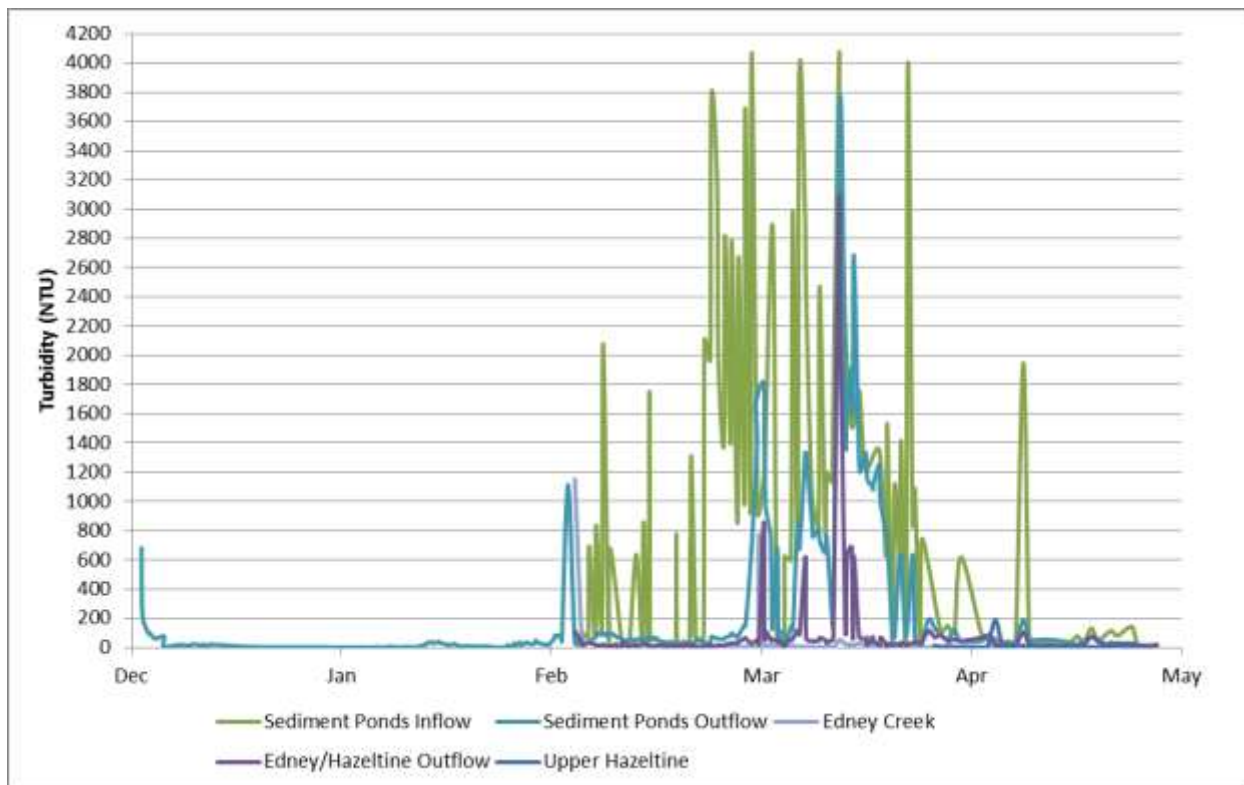


Figure 2. Time series graph for December 12<sup>th</sup>, 2014 to May 12<sup>th</sup>, 2015 showing turbidity levels at monitoring locations in Hazeltine and Edney Creeks

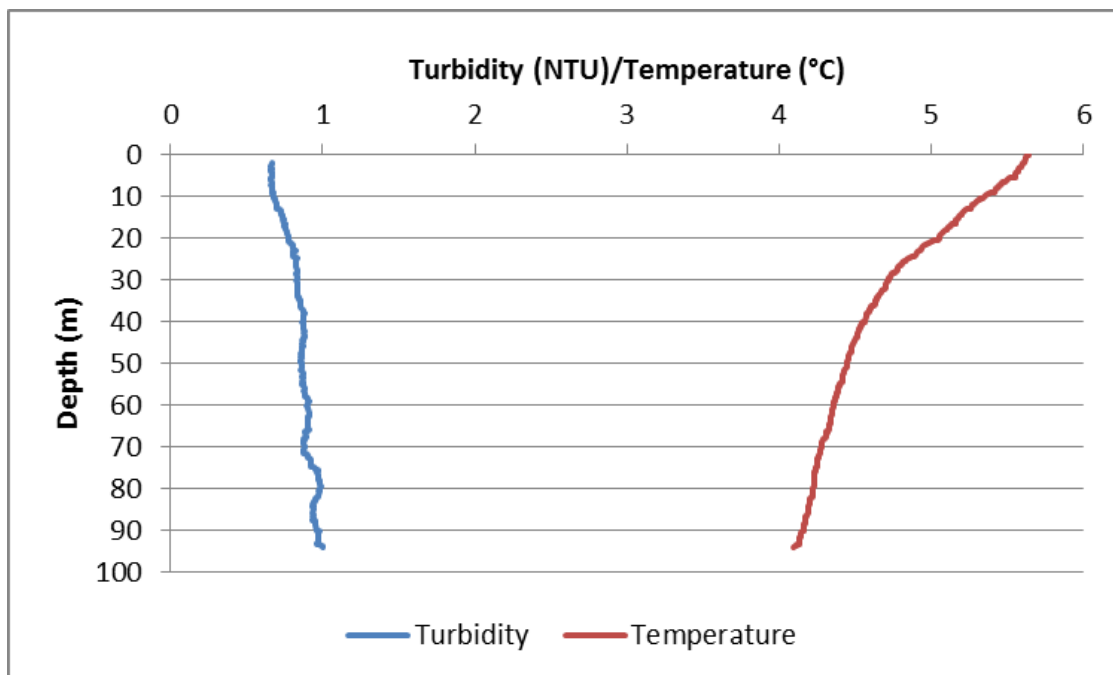


Figure 3. Turbidity and temperature profiles at station QUL-18 from May 6<sup>th</sup>

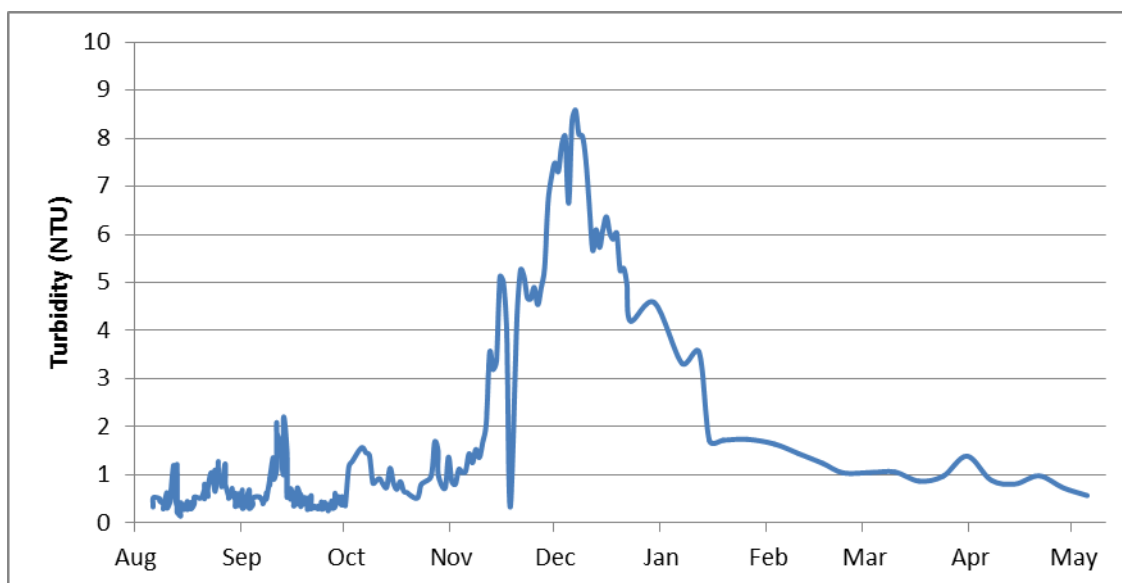


Figure 4. Turbidity time series at station QUR-1 (August 6<sup>th</sup>, 2014 – May 5<sup>th</sup>, 2015)