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July 16th, 2015

Ministry of Environment
Mining Operations Environmental Protection
2080 Labieux Rd.
Nanaimo, BC
V9T 6J9

WEEKLY POST-TSF BREACH REPORT – JULY 8TH – 14TH, 2015

Water Management

Polley Lake	Polley Lake water elevation = 922.43m (July 14th) The Polley Lake weir valve remained open this week to allow approximately 0.2 m^3/s of outflow from Polley Lake into Hazeltine Creek.
Springer Pit	Permit amendments from the Ministry of Environment (MoE) and Ministry and Energy and Mines (MEM) were received on July 9th to return to restricted mining and milling operations with tailings deposition into the Springer Pit. Volume of tailings deposited = $0m^3$ Water Elevations (July 14th): • Springer Pit water elevation = 1016.39m • Groundwater well GW12-2a = 1013.04m (+0.02m from last week) • Groundwater well GW12-2b = 1013.10m (+0.03m from last week) • Groundwater well GW15-1a = 1017.71m (+0.04m from last week) • Groundwater well GW15-1b = 1017.60m (+0.04m from last week) • Groundwater well GW15-2a = 1021.81m (-0.07m from last week) • Groundwater well GW15-2b = 1022.05m (-0.08m from last week) A map of the groundwater well locations is presented below as Figure 1. Note that the suffix "a" indicates the deep well in the pair, and the suffix "b" indicates the shallow well in the pair. Water quality sample results for parameters of interest for GW12-2a and GW12-2b are provided in Table 1 below. Monthly water quality results for all Springer Pit wells will be included in this report as they become available.
TSF Water Collection	All water from the Tailings Storage Facility (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 the May 28th, 2015 weekly report for an overview map of the TSF water management system.

Table 1. Water quality results for key parameters from groundwater well GW12-2

Sample ID	GW12-2A	GW12-2B
Date Sampled	04-JUN-15	04-JUN-15
Physical Tests		
Conductivity (µS/cm)	213	461
Hardness (as CaCO3) (mg/L)	45.7	244
pH (pH)	8.02	8.25
Anions and Nutrients		
Nitrate (as N) (mg/L)	<0.0050	2.49
Sulfate (SO4) (mg/L)	49.7	39.5
Dissolved Metals		
Aluminum (Al)-Dissolved (mg/L)	0.0073	<0.0030
Arsenic (As)-Dissolved (mg/L)	0.00234	0.00064
Cadmium (Cd)-Dissolved (mg/L)	0.0000064	0.0000114
Copper (Cu)-Dissolved (mg/L)	<0.00050	0.00052
Iron (Fe)-Dissolved (mg/L)	<0.030	<0.030
Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050
Molybdenum (Mo)-Dissolved (mg/L)	0.0395	0.0238
Selenium (Se)-Dissolved (mg/L)	0.000203	0.00415

Government, First Nations and Stakeholder Engagement

Publications and Website Updates	Mount Polley will continue to present interpreted environmental monitoring results and updates on remediation work on the Mount Polley Updates page of the Imperial Metals website (www.imperialmetals.com). No updates were posted this week. A reminder that the Post-Event Environmental Impact Assessment Report Key Findings summary and technical appendices were posted on June 18th.
Engagement Activities and Communications with Regulators	Activities relating to government, First Nations, and stakeholder communication and engagement this week included: • The weekly MoE update call on July 8th. • Preliminary discussions with MoE on July 8th regarding the monitoring program for the proposed short-term discharge. • A meeting with MoE and MEM on July 10th to discuss next steps in the permitting process for the proposed short-term discharge. • Participation in the MoE Environmental Working Group meeting on July 10th.

TSF Construction

Construction Update	The amendment to permit M-200 approving repair of the TSF breach to manage 2015 freshet was received from MEM on December 17th, 2014. Buttress placement for the Perimeter Embankment is ongoing; all other work associated with the 2015 Freshet Management Embankment construction is complete.

Sediment and Erosion Control Measures

Silt Curtain	The turbidity barrier (silt curtain) installed in Quesnel Lake near the outlet of the constructed Edney (Hazeltine) Creek channel is in good condition.
Monitoring	Environmental monitors are monitoring ongoing sediment and erosion control and rehabilitation work. This monitoring is being conducted by Mount Polley Mining Corporation (MPMC) staff.
Hazeltine Creek Rehabilitation	This week, re-contouring and application of woody debris and organics continued on the disturbed areas between the Hazeltine Creek floodplain and the forest edge for erosion control and reclamation purposes. Work was carried out in Reach 3 on the east side of the channel between the 4,200m and 5,000m marks of the creek (Polley Lake = 0m). The first phase of re-contouring on the west side of Hazeltine Creek in Reach 3 is complete. Additional ongoing work associated with the Hazeltine Creek rehabilitation project this week included: • Cleaning of the fish exclusion fences. • Falling of danger trees in Reach 3 to allow re-contouring work to proceed.
Edney Creek	Preparations were made this week for construction of the new Edney Creek channel outlet and additional fish habitat features to commence on July 15th (start of the reduced risk fisheries window) including: • Staging of equipment. • Installation of fish fences in Edney Creek. • Digging of test holes in the proposed channel alignment.

Water Quality Monitoring Program

Water Quality Monitoring Program

The current water quality monitoring program is outlined in the table below. No changes to the monitoring program occurred this week. All monitoring was completed as scheduled this week.

Area	Monitoring Type	Frequency	Stations
Polley Lake	Samples	Monthly	P1, P2
	Profiles	Bi-monthly	P1, P2
Hazeltine Creek	Samples	Weekly	HAC-01b
		Monthly	HAC-05, HAC-08, HAC-10
	Field Parameters	Continuous	HAC-01b
Edney Creek	Samples	Weekly	EDC-02
		Monthly	EDC-01
Quesnel Lake	Profiles	Weekly	QUL-54, QUL-55, QUL-56
	Profiles	Bi-monthly	QUL-21a, QUL-18, QUL-66a, QUL-2a, QUL-79
	Profiles	Monthly	QUL-40a, QUL-120a
	Samples	Weekly	QUL-55
	Samples	Monthly	QUL-2a, QUL-18, QUL-40a, QUL-120a
Quesnel River	Samples	Bi-monthly	QUR-1
	Field Parameters	Continuous	QUR-1

Please refer to previous weekly reports, such as the May 7th, 2015 report, for a map of these sampling locations.

Results

Turbidity in Quesnel Lake resulting from the TSF dam failure has, based on our monitoring data, now attenuated to a value that may represent summer background. In addition, settled sediments are not expected to re-suspend with subsequent lake overturn, based on advice Tetra Tech EBA. Based on this information, MPMC does not expect sediments on the bottom of Quesnel Lake to contribute to lake turbidity.

Figure 2 shows a time series graph for this week of daily field turbidity readings in Lower Hazeltine Creek upstream and downstream of the sedimentation ponds (stations HAC-09 and HAC-01b, respectively), and in Edney Creek downstream of the confluence with Hazeltine Creek (station EDC-02). Figure 3 shows turbidity levels at these sites over a longer time period to provide context for this week's data.

Figure 4 shows a turbidity and temperature profile from July 14th at site QUL-55 (a near field site at the mouth of Hazeltine Creek).

Figure 5 shows a time series graph of turbidity at site QUR-1. 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 site in the sampling program.


SPRINGER PIT
GW15-1
GW15-2
GW12-2
BOOTJACK LAKE
MOUNT POLLEY MINING CORPORATION
Figure 1. Locations of Springer Pit Groundwater Monitoring Wells
N
0 30 60 120 180 240
Meters
Drawn by: KM
Date: 15/07/2015

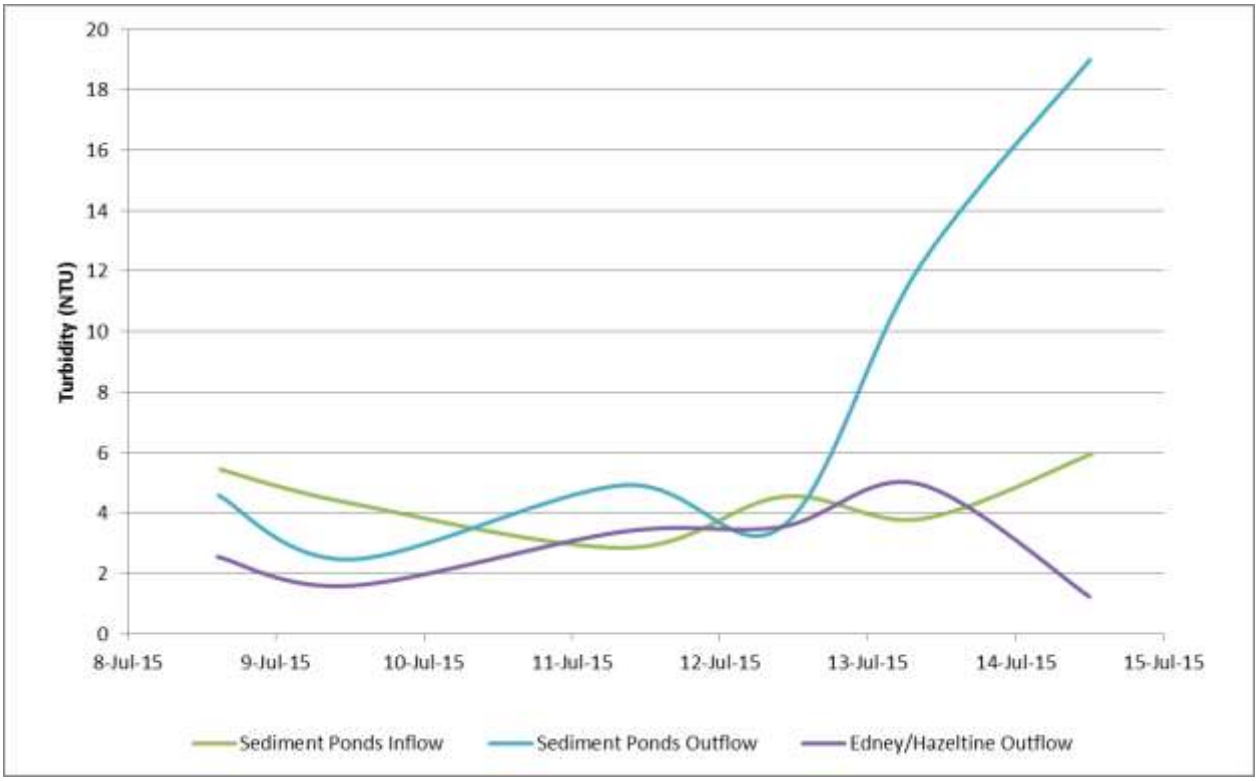

Figure 2. Time series graph for July 7th – 14th showing turbidity levels at monitoring locations in Hazeltine and Edney Creeks

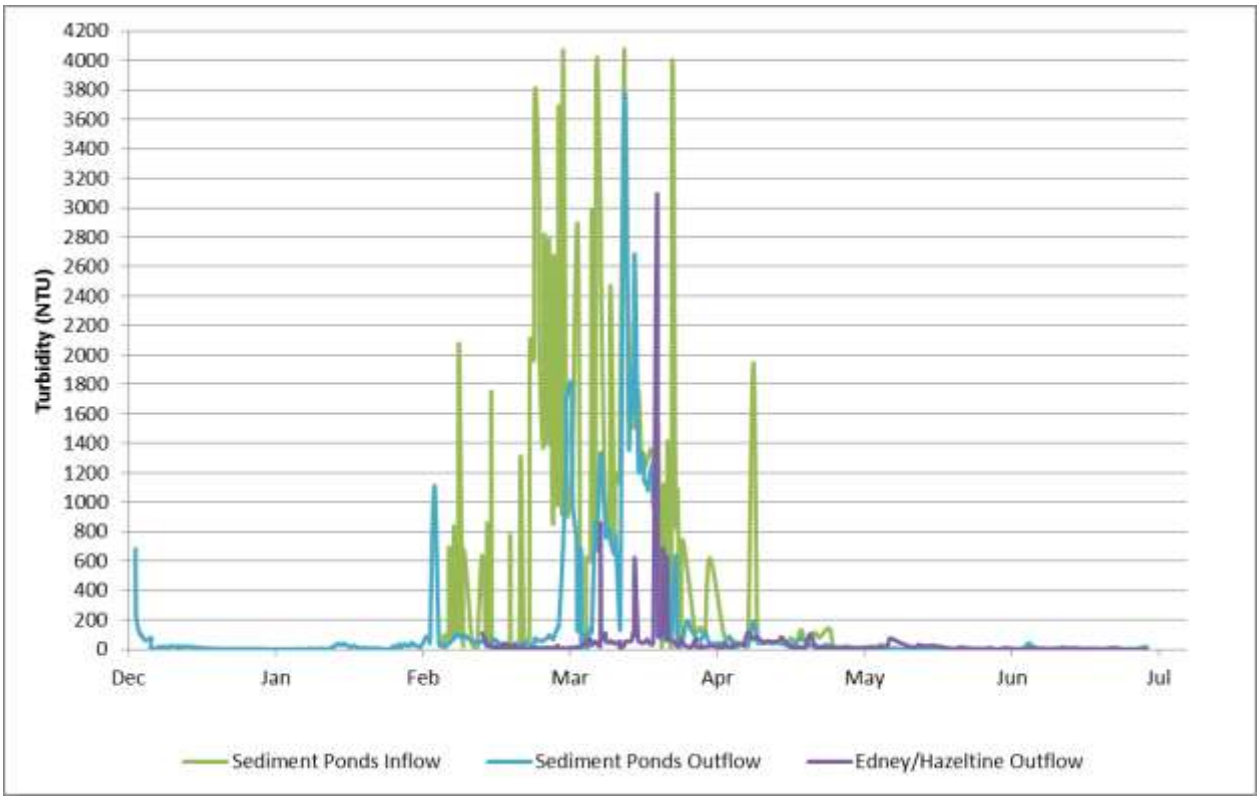

Figure 3. Time series graph for December 12th, 2014 – July 14th, 2015 showing turbidity levels at monitoring locations in Hazeltine Creek

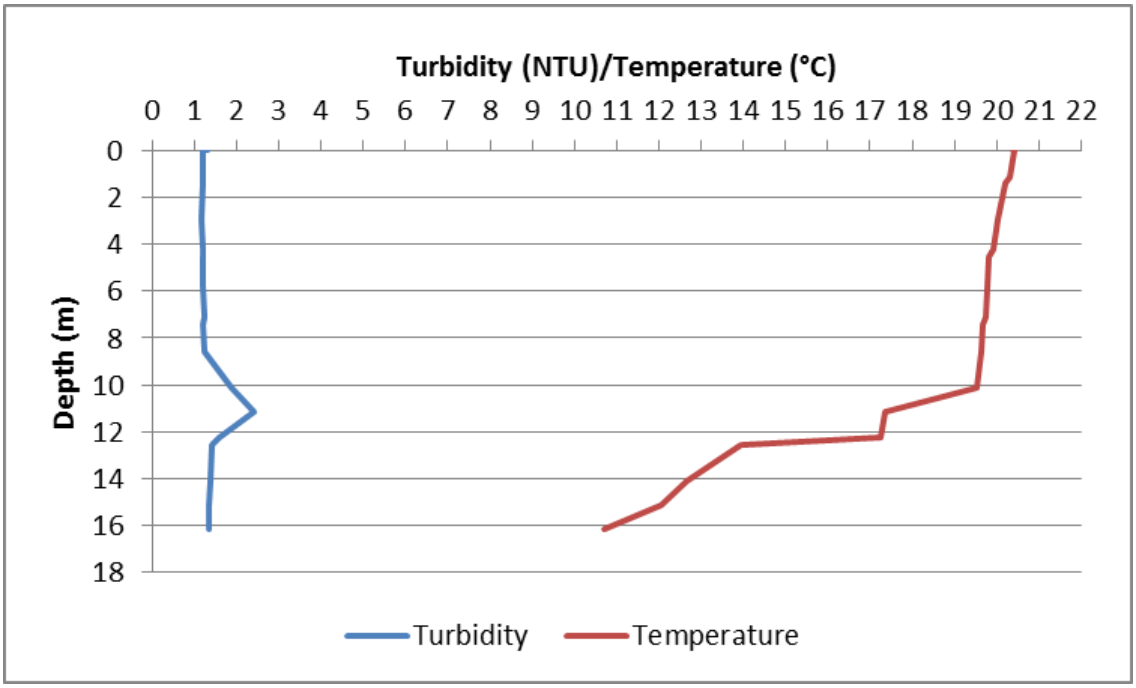

Figure 4. Turbidity and temperature profiles at station QUL-55 on July 14th

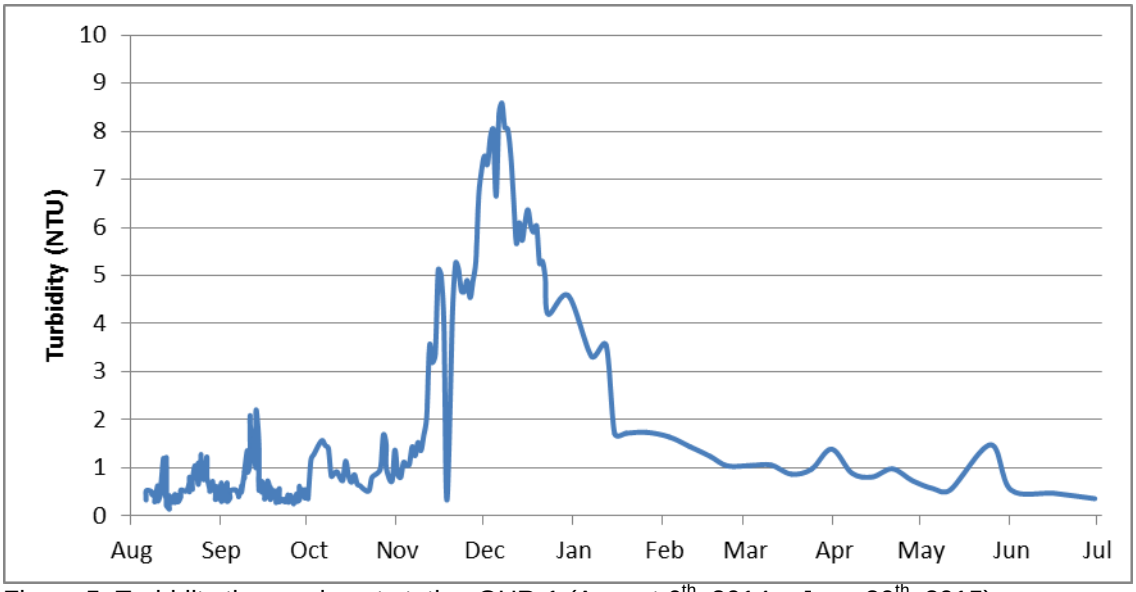

Figure 5. Turbidity time series at station QUR-1 (August 6th, 2014 – June 30th, 2015)