AGNICO EAGLE

MEADOWBANK DIVISION

Monitoring Program Summary Report

June 2015

Type A Water License 2AM-MEA0815

Table of Contents

SECTION 1 • BACKGROUND

As required under Part I, Item 25 of Type A Water License 2AM-MEA0815, this report documents the water management and monitoring activities at the mine site for the month. This includes water usage, Vault Attenuation Pond discharge water quality, East Dike Seepage discharge water quality, RSF Seepage, Assay Road Seepage and sewage treatment plant discharge water quality (which is directed to the onsite storm water management pond).

In addition, a summary of spills/actions for the month are reported.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Freshwater usage for June 2015 is summarized in Table 2.1 below. The total freshwater consumption for the month was 64,165 m^3. It should be noted that in June, no water was taken from the unnamed lake to supply the Emulsion Plant as the pump in the lake needs to be repaired and has not functioned since January. The water is supplied through the Meadowbank freshwater supply and is trucked to the emulsion plant. Approximately 212 m^3 is the June consumption for the Emulsion Plant. The total amount of reclaim water used in the mill for June was 238,425 m^3. Reclaim water is supplied by the TSF South Cell.

Table 2-1: Freshwater Usage (m^3)

	June
Freshwater Storage Tank	64,165
Emulsion Plant	0
Water Truck	0
Total	**64,165**
Year to date total	**550,273**

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In June a total of 10,832 m^3 was pumped back to the North Cell TSF from the ST-16 sump. Total year to date is 12,457m^3.

As per the Freshet Action Plan, AEM continued the visual inspections at the RSF and NP-2 Lake. Monitoring restarted as per the Water License and the KIA requests. AEM is conducting daily visual inspections of the areas. To date, the water level in ST-16 area was very low preventing any possible seepage through the till plug.

2.3 ASSAY ROAD SEEPAGE

In June, water in the interception trench and the original containment berm and sumps was pumped back to the mill. The total volume pumped was 10,803m^3. Total year to date pumped from MW-203, the interception trench and containment is 13,508m^3. As open water was observed, the sample monitoring program started as per the Freshet Action Plan. AEM is also conducting daily visual inspections of these areas.

2.4 NP1 TSS ISSUE

On June 7, 2015, while conducting regular inspections as per the Freshet Action Plan, AEM staff observed elevated TSS in the water running under Vault Road (culvert) toward Lake NP-

1. Please refer to the report "*Elevated TSS in the water running under Vault Road (culvert) toward Lake NP-1*" submitted to the authorities (KIA, AANDC, DFO) on June 9 (Appendix A) for a complete description and actions taken to mitigate the impact to this non-fish bearing NP-1 pond. An update report with latest results and actions was submitted on July 13 to the previously mentioned authorities (Appendix B). It should be noted that this is not non-conformity with the Water License.

2.5 SEWAGE TREATMENT PLANTS

One (1) effluent wastewater sample was taken from the onsite sewage treatment plant (STP's) in June.

The Seprotech STP results are shown in Table 2.5.1 below; the LJ-Mix STP results are shown in Table 2.5.2. The results of the discharge indicate the system is working well. The effluent is discharged to the stormwater management pond and is pumped to the TSF (2x/year). This water becomes part of the reclaim pond. There is no discharge to the receiving environment.

Table 2.5.1: Seprotech Effluent Results

Parameters	Units	June 1, 2015
Ammonia	mg N/L	0.01
Ammonia-Nitrogen	mg N/L	5.85
Total Kjeldahl Nitrogen	mg N/L	8.72
BOD-5	mg/L	16
COD	mg/L	63
Total Suspended Solids	mg/L	45
Nitrate	mg N/L	14
Nitrite	mg N/L	0.61
pH*	Units	6.20
Fecal Coliform	UFC/100 mL	111
Total Coliform	UFC/100 mL	700

Table 2.5.2: LJ-Mix Effluent Results

Parameters	Units	June 1, 2015
Ammonia	mg N/L	<0.01
Ammonia-Nitrogen	mg N/L	6.18
Total Kjeldahl Nitrogen	mg N/L	8.70
BOD-5	mg/L	10
COD	mg/L	62
Total Suspended Solids	mg/L	19
Nitrate	mg N/L	19
Nitrite	mg N/L	0.28
pH*	Units	5.7
Fecal Coliform	UFC/100 mL	108
Total Coliform	UFC/100 mL	2200

*Parameter measured by STP operators

2.6 VAULT ATTENUATION POND EFFLUENT

There was no Vault Attenuation Pond discharge during the month.

2.7 EAST DIKE SEEPAGE EFFLUENT

East Dike Discharge was stopped on June 16 following a visual turbidity increase due to the freshet. During the month, a total of 7,521 m^3 was discharged thru the diffusor into Second Portage Lake. Total year to date discharge is 80,269 m^3. Monitoring results are shown in Table 2.7.1 below.

TSS results did not exceed the maximum average concentration (15 mg/L) and maximum allowable grab sample concentration (30 mg/L) permitted by the Water License, Part F, Item 4. To avoid any non-conformity and as per the NWB Modification Letter Approval, the East Dike Seepage non-contact water was discharged to the South Cell Reclaim Pond. This will remain the case until the TSS returns to an acceptable limit. AEM expects that as soon as the freshet is complete, the turbidity level will decrease and the discharge to Second Portage Lake will resume.

Table 2.7.1: East Dike Seepage Discharge Results

Parameters	Units	1-June-15	9-June-15	Average Concentration
Total Suspended Solids	mg/L	4	20	12

2.8 NON CONTACT WATER

Portage Area East diversion ditch (ST-5) results are shown in Table 2.8.1 below and Portage Area West diversion ditch (ST-6) results are shown in Table 2.8.2. TSS results didn't exceed the maximum average concentration (15 mg/L) and maximum allowable grab sample concentration (30 mg/L) permitted by the Water License, Part F, Item 4.

Table 2.8.1: Portage Area East Diversion Ditch (ST-5) Results

Parameters	Units	9-June-15
Total Suspended Solids	mg/l	7

Table 2.8.2: Portage Area West Diversion Ditch (ST-6) Results

Parameters	Units	9-June-15
Total Suspended Solids	mg/l	5

SECTION 3 • SPILL MANAGEMENT

AEM has developed a thorough internal system of tracking spills on-site. Table 3.1 summarizes the AEM spill reports for the month. Seven (7) spills occurred on site and none was reportable to the GN spill hotline. AEM contained, cleaned up and disposed of the spill material adequately. The majority of the clean-up material was taken to the AEM Landfarm. Absorbent pads are eventually disposed of at the on-site incinerator. Spill clean-up material containing a majority of snow is disposed in the TSF.

Table 3-1: Summary of AEM Internal Spill Reports

Date of Spill	Hazardous Material	Quantity (L/Kg)	Location	Cause of spill	Clean-up action taken	Reported to Spill Hot Line
2015/06/07	Hydraulic Oil	20L	"D" Dump	Mechanical failure	Spill collected using spill pads. All contaminated material disposed adequately.	No
2015/06/08	Hydraulic Oil	40L	Pit E3	Dump cylinder failed on Bac 13.	Placed absorbent pads on the ground and pails under leak to collect oil. All contaminated material disposed adequately.	No
2015/06/10	Hydraulic Oil	10L	Pit D Dump	While lifting disabled RH-120 to load onto tow sleigh the bucket closed and approximately 10 liters of hydraulic oil spill on the ground.	Used absorbent pads to contain and recovered spilled oil, disposed used pads into a sealed drum. All contaminated material disposed adequately.	No
2015/06/11	Waste Oil	20L	HAZMAT transit	Probably coming from sea can stack at Hazmat wall.	Sea can were removed from area. Soil was collected and brought to yellow-roll-off.	No
2015/06/25	Contaminated water	80L	HAZMAT transit	Punctured tote with forth.	Turned the tote around to stop the leak and put the tote inside a berm to have the material melt and pump into another tote.	No
2015/06/26	Contaminated water	60L	HAZMAT transit	Punctured tote with forth.	Turned the tote around to stop the leak and put the tote inside a berm to have the material melt and pump into another tote.	No
2015/06/28	Contaminated water	80L	HAZMAT transit	Loader backed up into a drum.	Put some gravel and scrap it up.	No

Appendix A
Elevated TSS toward Lake NP-1 Report

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Agnico Eagle Mines Ltd Meadowbank Division
Environment Department

SUBJECT: Elevated TSS in the water running under Vault Road (culvert) toward Lake NP-1

On June 7th, 2015, while conducting regular inspections as per the Freshet Action Plan, AEM staff observed elevated TSS in the water running under Vault Road (culvert) toward Lake NP-1. At this time it was observed that there was a very small flow coming from Lake NP-2 toward the Vault Road culvert leading to NP-1. The flow exiting and around the culvert and leading to NP-1 was much greater. This indicated that the flow was largely localized due to a large accumulation of snow in this area, significant snowmelt occurring due to spring freshet and recent heavy rain. NP-1 is a shallow pond - ~ 3.8 m at deepest and was noted as being non-fish bearing in the EIS for the Meadowbank Project. On June 8th after some additional melting of ice and snow it was clear that water with elevated TSS was flowing past a turbidity barrier that was in place from last year, onto the lake ice. The excess water and TSS was confirmed to be coming from snowmelt and rain in the area transporting fine material from the road through the course rock of the road and discharging on the NP-1 (east) side of the road and culvert (see Photo 1 and map below). There is a deposition of very fine mud material (from the road) along the shoreline. Evidently, meltwater is transporting this onto the lake ice. As stated, a turbidity barrier was in place and another one has been deployed as a secondary measure (see Photo 2 below). As a precautionary measure, an additional barrier will be placed at the outlet of NP-1 as there is a flow (across tundra) toward Dogleg Lake. Samples will be taken of the NP-1 pond water and submitted to our offsite accredited laboratory.

Further remedial measures will include removing the fine material on the road and replacing with course rock which will eliminate the source of fines. Other measures may include using our sewage vacuum truck to remove some of the mud but this type of activity could lead to additional loading as any mechanized work in the area could actually release more sediments. This work is scheduled for June 9th and 10th. Once freshet has subsided an assessment will be made on the deposition of the fine road material along the shoreline.

Photo 1: Water with elevated TSS flowing into NP1

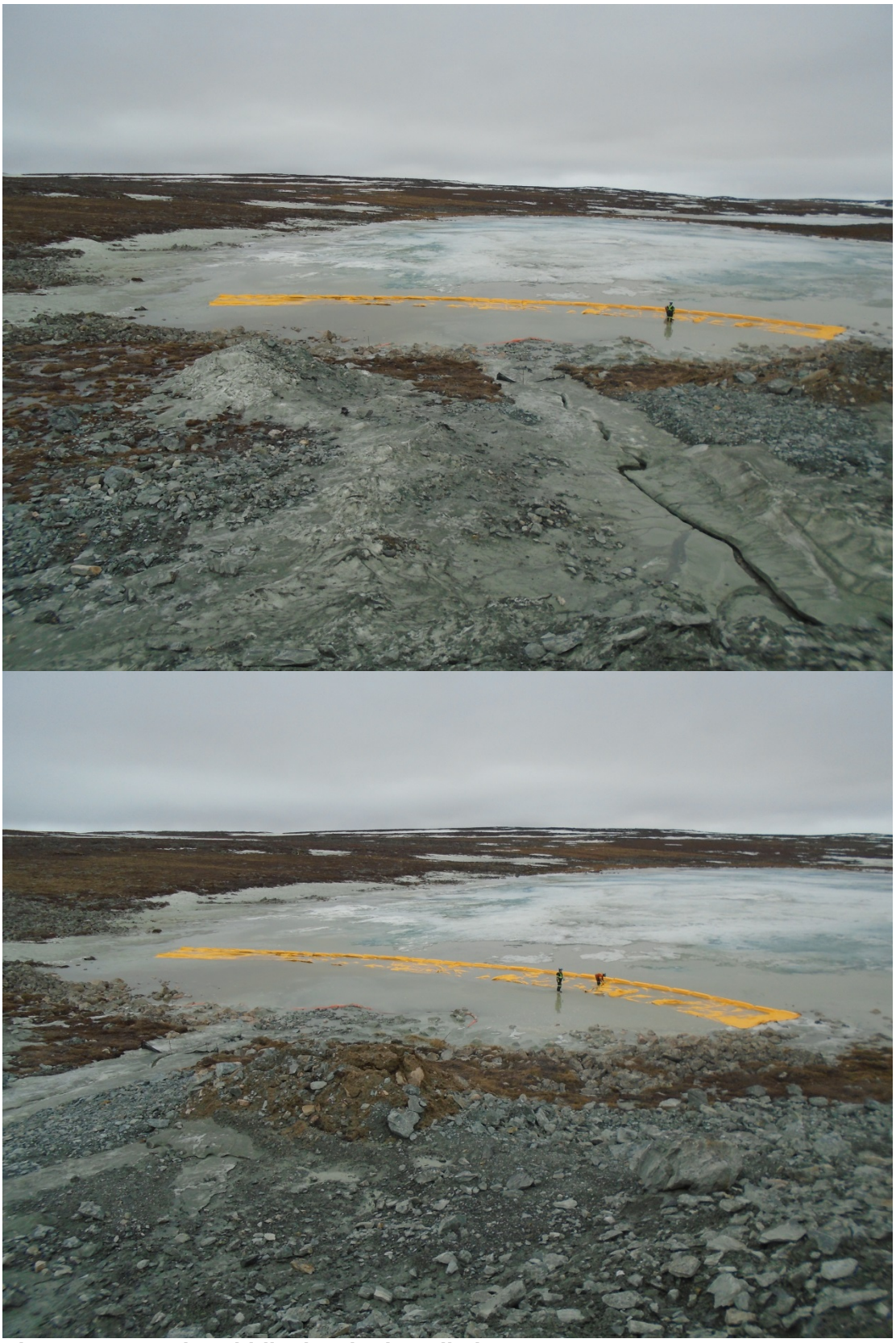

Photo 2: Second Turbidity barrier installation

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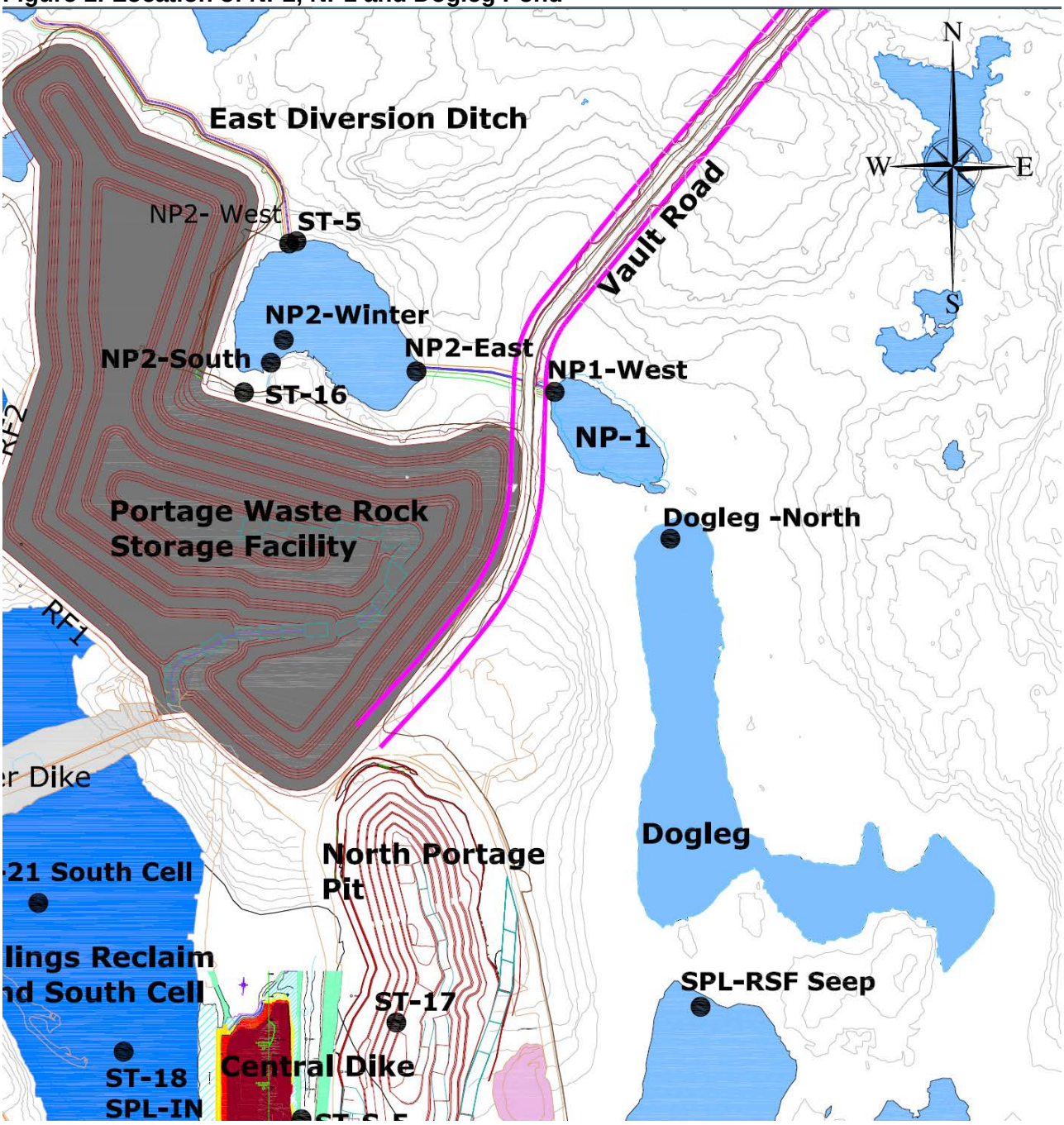
Figure 1: Location of NP2, NP1 and Dogleg Pond



Appendix B
Response to KIA inspection report – Follow up report

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July 13th, 2015

Jeff Hart
Water & Marine Environment Specialist
Kivalliq Inuit Association
Baker Lake, Nunavut
Phone: 867-793-4498
landsbaker@kivalliqinuit.ca

Re: Response to KIA inspection report dated June 11th, 2015

M. Hart,

Thank you for your inspection report dated June 11th, 2015 and received on June 15th, 2015.

Please note the attached report, as requested, in response to your inspection.

Should you have any questions please do not hesitate to contact me.

Regards,

Agnico Eagle Mines Limited – Meadowbank Division

Kevin Buck
Kevin.buck@agnicoeagle.com
819-759-3555 x6838
Superintendent Nunavut

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Incident Description

On June 7th, 2015, while conducting regular inspections as per the Freshet Action Plan, AEM staff observed elevated TSS in the water running under Vault Road (culvert) toward Lake NP-1. On June 8th after some additional melting of ice and snow it was clear that water with elevated TSS was flowing past a turbidity and silt barrier that was in place from last year, onto the lake ice. The excess water and TSS was confirmed to be coming from snowmelt and rain in the area which transported fine material from the road through the course rock of the road discharging on the NP-1 (east) side of the road and culvert. On June 9th, 2015 AEM notified regulators, namely KIA, AANDC and DFO, of the incident. Following this notification, KIA conducted an onsite inspection of the area on June 11th. The KIA inspection report, which was received on June 15th, requested AEM to provide a full report of the situation.

As stated previously a turbidity barrier (orange barrier # 1) was left in place from last year at the inlet of NP-1. A second turbidity barrier (yellow barrier #2) was installed just outside of the first barrier in the early morning of June 8th (see Photo 2). Two additional barriers were also installed as a precautionary measure at the outlet of NP-1 (barrier #3) and at the inlet of Dogleg Lake (barrier #4) (see Photos 3 and 4). These were installed on June 9th and 10th respectively. Cloudy water was not observed at Dogleg Lake. Following the installation of the barriers, samples were taken on June 10th at NP1-Culvert, NP1-West (outside barrier #2), NP1-South and Dogleg (outside barrier #4) (Figure 1 below) and sent to our accredited laboratory for TSS analysis (Table 1). AEM also took a weekly sample at NP1-West and NP1-South. These were analysed at the Meadowbank onsite assay lab (unaccredited) and used as indicator samples. All results show levels of TSS at or below our regulatory discharge (NWB, MMER) limit of 30 mg/l. On June 22nd, AEM took another set of samples which were analysed at our accredited laboratory, Multilab. The results are located in Table 1 below. As of June 22nd, the water coming from NP-1 (Lake NP-2) culvert into NP-1 Lake was visually clear (Photo 5). AEM will continue to monitor and sample locations in NP-1 and Dogleg as per the regular Freshet Action Plan Monitoring (see Schedule 1 below which is the ST-16 RSF Seepage monitoring program). Currently the watercourses referenced in this report are visually clear thus no additional TSS sampling is necessary. It should be noted that the incident was for a short duration and that Lake NP-1 is not a fish bearing lake (FEIS).

Source

After an investigation – June 8th to 12th, it was determined that the major source of the TSS was the Vault road above the culverts. During the winter, snow had been ploughed near and around this area. The thawing of this snow caused excess water and fine

sediment runoff which percolated through the road surface and flowed out through the course rocks surrounding the culverts. The road surface was constructed with soft NPAG aggregate (soapstone) which was crushed to a very fine material by truck traffic.

Mitigation

On June 13th, AEM proceeded to raise the Vault road near NP-1 culverts (Photo 1). A different source of aggregate – NPAG from Vault was used (harder material) which will prevent an accumulation of fine material and will allow for water to runoff instead of accumulating or percolating through the road.

In addition, the turbidity barriers will remain in place for the duration of the freshet period.

For the next winter season there will be no additional snow from ploughing placed in this area.

Conclusion

- The incident was of a short duration and AEM concentrated initial efforts on installing several turbidity barriers to prevent any impacts to downstream lakes. NP-1 was noted to be non-fish bearing according to the FEIS submitted to NIRB as part of the assessment process. These efforts were effective based on sample results noted in Table 1. There was no exceedance of the MMER TSS limit of 30 mg/l.
- The turbidity barriers prevented migration of TSS to Dogleg Lake which is fish bearing.
- The raise of the Vault Road and procedures to be put in place for the next winter season that prevent additional ploughed snow to be stored in this area will most likely prevent a re-occurrence of this nature.

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Table 1- NP-1 monitoring station result

Station	NP-1 Culvert		NP-1 West Outside berm		NP-1 South		Dogleg Lake outside berm	
Date	TSS (mg/L) Multilab	TSS (mg/L) Assay Lab	TSS (mg/L) Multilab	TSS (mg/L) Assay Lab	TSS (mg/L) Multilab	TSS (mg/L) Assay Lab	TSS (mg/L) Multilab	TSS (mg/L) Assay Lab
10/06/2015	30	24	16	12.5	13	9.5	9	5
13/06/2015				7.5				
14/06/2015						6		
18/06/2015				5.1				
19/06/2015						8.4		
22/06/2015	4	0	18	7.6			3	1.2
02/07/2015				5				
07/07/2015		0.7		0.7				

Figure 1: NP-1 station monitoring

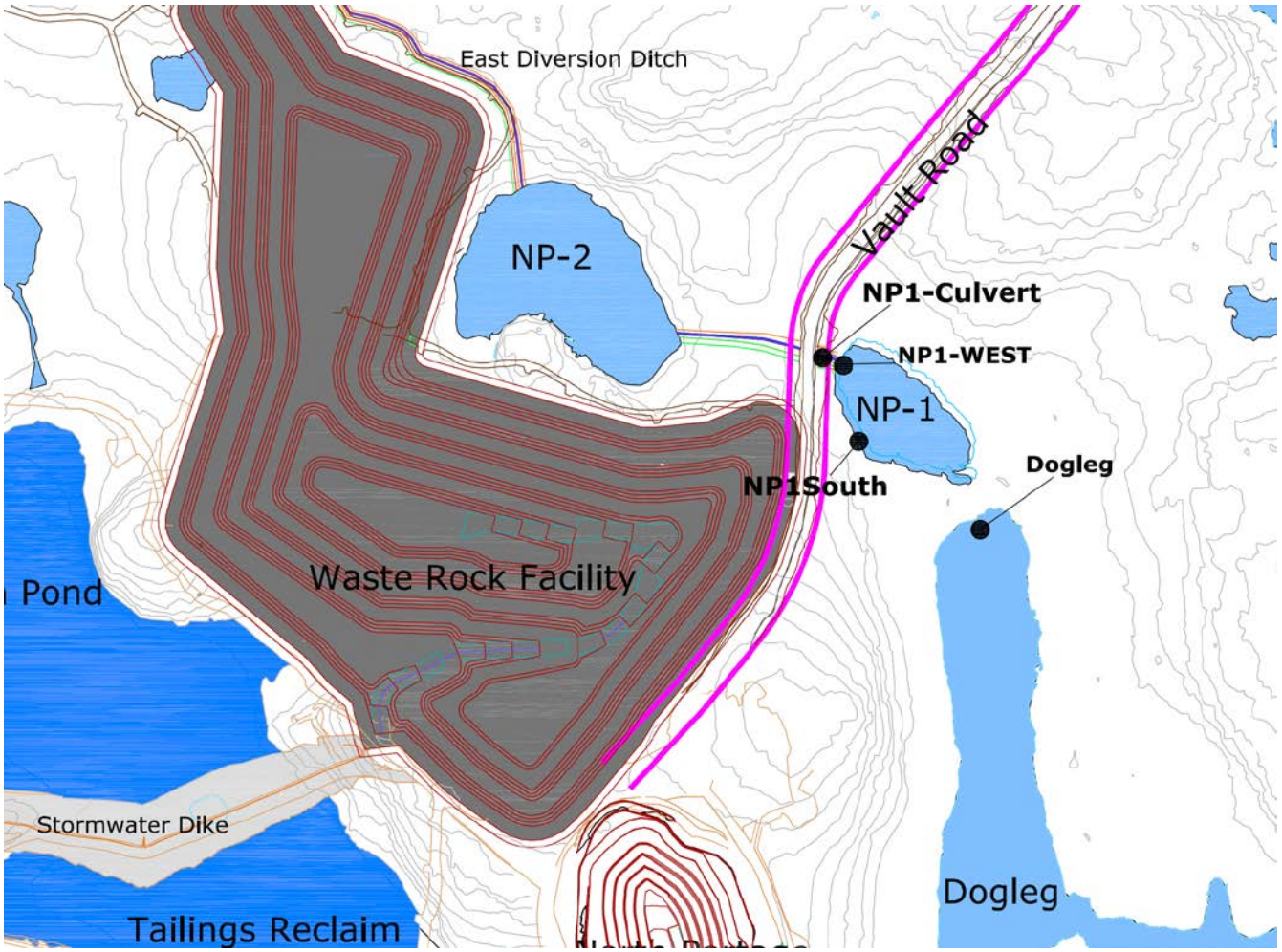

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Photo 1: Vault Road Repair

Photo 2: Turbidity barrier at the inlet of NP-1 Lake

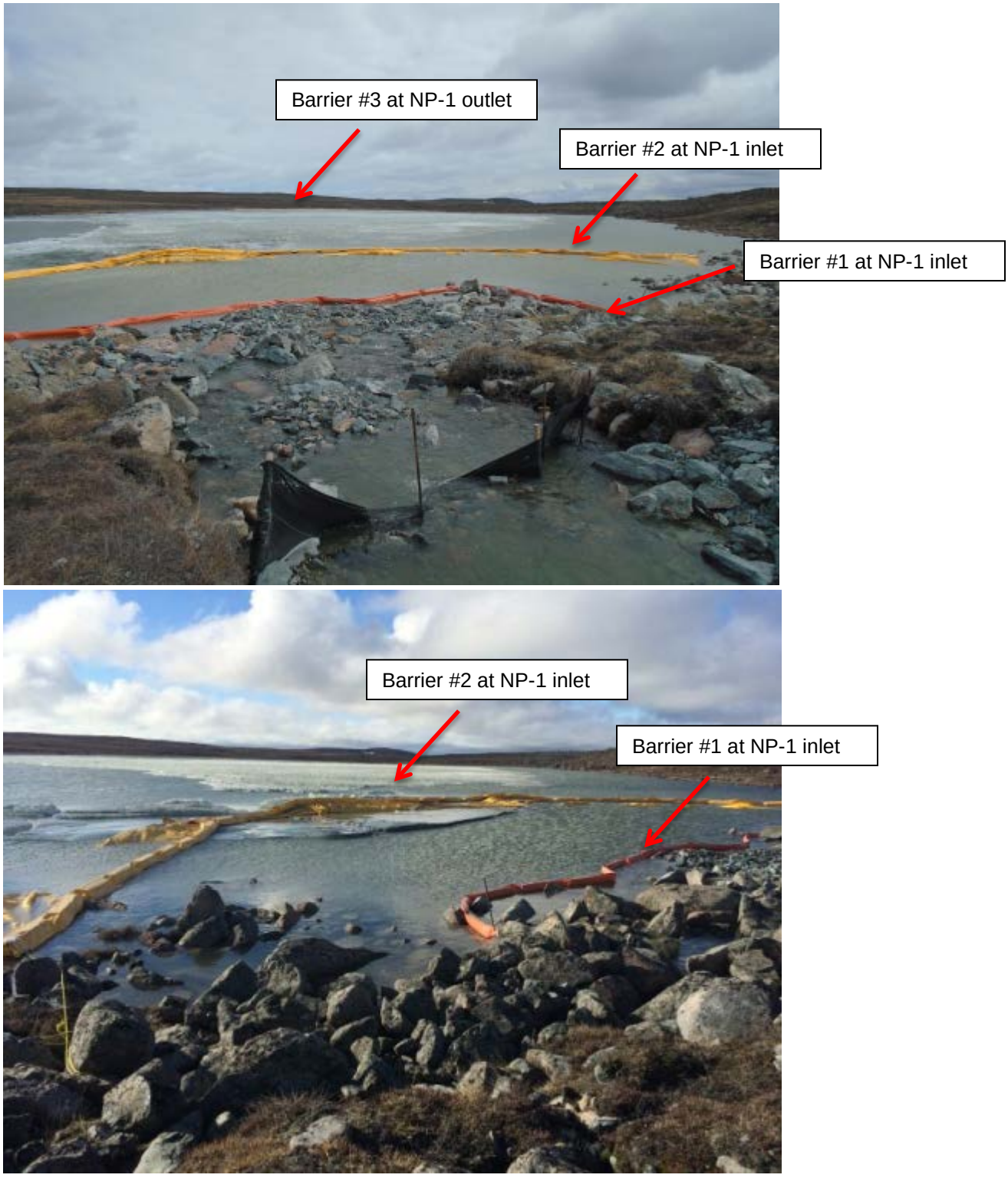
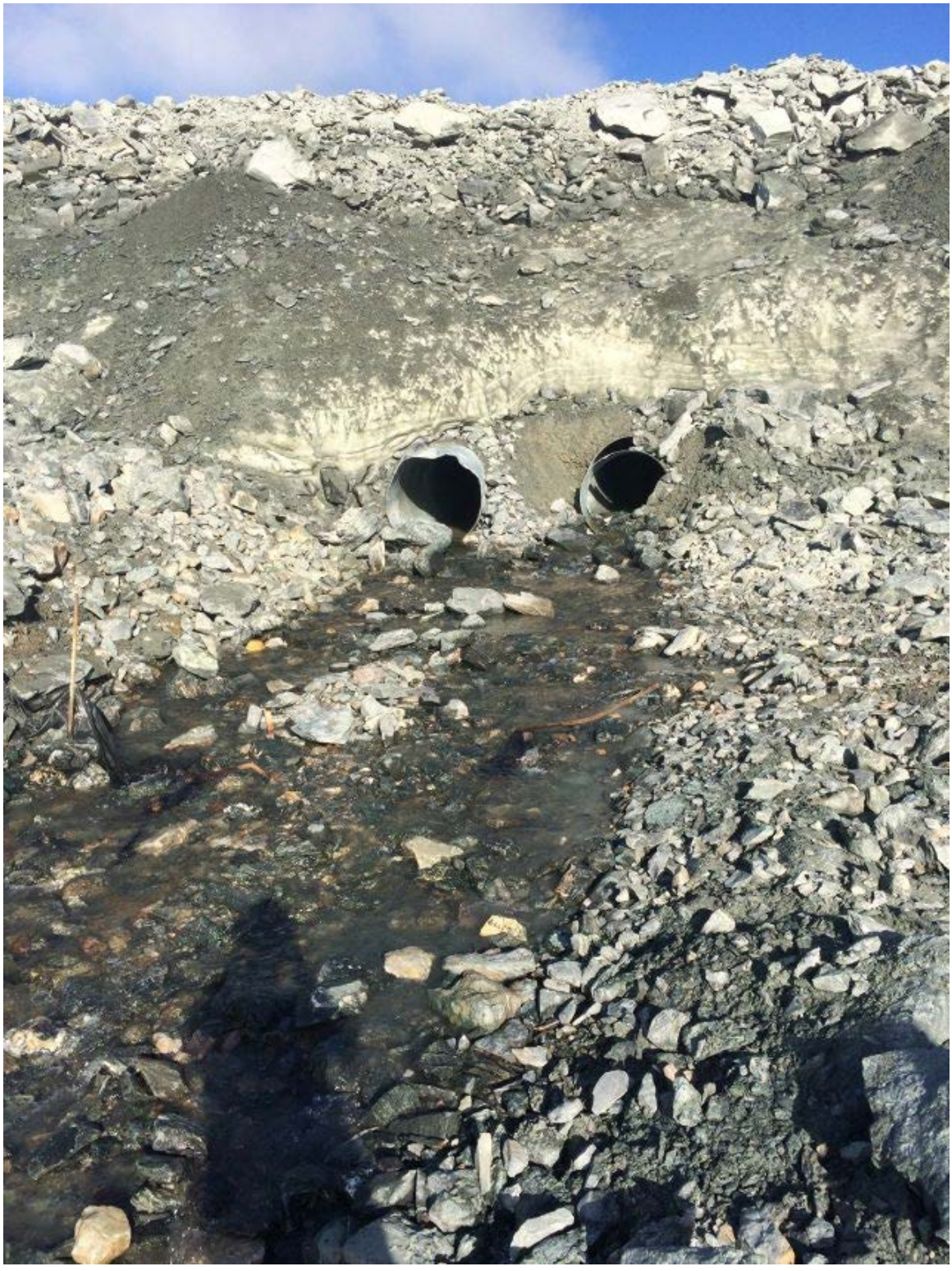


Photo 3: Turbidity barrier #3 at the outlet of NP-1 Lake

Photo 4: Turbidity barrier #4 at the inlet of Dogleg

Photo 5: Water at NP-1-Culvert flowing into NP-1 Lake on June 22, 2015



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Schedule 1: ST-16 Seepage Monitoring Program

ST-16 Seepage Monitoring Program (May/early June - as soon as water present until freeze up)			
Parameters	**Laboratory**	**Station**	**Frequency**
pH, Conductivity, Turbidity, Colour, Hardness, Bromide, Thiosulfate, Fluoride, Thiocyanate, Alkalinity, Ammonia-nitrogen, Total Ammonia, Nitrite, Nitrate, TDS, Chloride, Sulfate, Ortho-Phosphate, TOC, TSS, Dissolved Oxygen (DO), Total Kjeldahl Nitrogen (TKN), Mg, K, Dissolved and total metal: Al, Ag, As, Sb, Ba, Be, B, Cd, Cu, Cr, Co, Fe, Pb, Li, Mn, Hg, Mo, Ni, Se, Sr, Tl, Sn, Ti, U, V, Zn, and Chlorophyll A (Lake site), CN tot / CN Wad, Total P	Multilab	ST-16 NP-2 South NP-2 West NP-2 East ***NP-1*** ***Dogleg*** SPL	Monthly
CN Free	SGS	ST-16 NP-2 South NP-2 West NP-2 East ***NP-1*** ***Dogleg*** SPL	Monthly
CN Wad	Assay Lab	ST-16 NP-2 South	2x/week initially and 1x/week after 1 month