



MEADOWBANK DIVISION

## **Monitoring Program Summary Report**

**June 2021**

Type A Water License 2AM-MEA1530

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## **SECTION 1 • BACKGROUND**

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On May 13, 2020, Agnico received the minister's approval for the Water License 2AM-MEA1530 Amendment No.4. This amendment was required to authorize changes to the previously-approved uses of water and deposit of wastes needed to reflect the expansion of the Whale Tail Pit Project.

As required under Part I, Item 21 of Type A Water License 2AM-MEA1530 (Amendment No.4), this report documents the water management and monitoring activities at the mine site for the month. This includes water usage, Vault Attenuation Pond and Phaser Attenuation Pond discharge and water quality, East Dike Seepage discharge water quality, RSF Seepage, Central Dike Seepage, Assay Road Seepage, sewage treatment plant discharge water quality (which is directed to the onsite storm water management pond) and an update to the In-Pit disposal.

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

## SECTION 2 • WATER MANAGEMENT

### 2.1 WATER USAGE

Fresh and reclaim water usage for the month is summarized in Table 2.1 below.

**Table 2.1: Freshwater Usage (m<sup>3</sup>)**

Water Location	Source Lake	Jan	Feb	March	April	May	June	Total
Camp	Third Portage Lake	2,639	2,334	2,376	2,297	2,536	2,804	14,986
Mill (freshwater tank)	Third Portage Lake	125,901	87,438	87,445	78,643	98,397	81,913	559,737
Emulsion plant	Unnamed Lake	104	90	127	118	133	64	636
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>128,644</b>	<b>89,862</b>	<b>89,948</b>	<b>81,058</b>	<b>101,066</b>	<b>84,781</b>	<b>575,359</b>
<b>Ore Water (m<sup>3</sup>)</b>	Ore	4,408	3,310	3,684	2,416	3,310	3,561	<b>20,689</b>
<b>Reclaim Water Usage (m<sup>3</sup>)</b>	Tailings Pond	237,647	205,445	277,684	171,821	209,538	237,348	<b>1,339,483</b>

### 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In June, a total of 34,656 m<sup>3</sup> of water was pumped back to the North Cell TSF from the ST-16 sump. Of that amount, 10,040 m<sup>3</sup> was transferred from WEP1 sump and 10,013 m<sup>3</sup> from WEP2 sump to the ST-16 sump.

As per the Freshet Action Plan, Agnico Eagle completed inspections at the Portage and Vault RSFs, no non-conformities were found during the month.

### 2.3 CENTRAL DIKE SEEPAGE

In June, 141,570 m<sup>3</sup> of water was pumped from ST-S-5 sump to Portage Pits.

Sampling was conducted minimally on a monthly basis at ST-S-5 as per the requirements of the NWB water license.

Visual inspections are completed monthly, by the Engineering Department, as well as daily monitoring of piezometric values.

### 2.4 ASSAY ROAD SEEPAGE

In June, 8,331 m<sup>3</sup> of water was pumped from the mill trench back to the mill. As per the Freshet Action Plan, Agnico Eagle completed inspections and no non-conformities were found during the month.

### 2.5 SEEPAGE AND RUNOFF FROM THE LANDFILL

The landfill was inspected weekly and no seepage or runoff was observed.

## 2.6 SEWAGE TREATMENT PLANT

One (1) effluent wastewater sample was collected at the onsite sewage treatment plant (STP) in June.

The Seprotech STP results are shown in Table 2.6.1 below; the LJ-Mix STP results are shown in Table 2.6.2. The effluent from the STP is discharged to the Stormwater Management pond.

No water was pumped from the Stormwater Management pond to the tailings storage facility during the month.

**Table 2.6.1: Seprotech Effluent Results**

Parameters	Units	June 7, 2021
Ammonia (NH <sub>3</sub> )	mg N/L	0.018
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	14
Total Kjeldahl Nitrogen	mg N/L	14
BOD-5	mg/L	7
COD	mg/L	67
Total Suspended Solids	mg/L	12
Nitrate	mg N/L	23.7
Nitrite	mg N/L	0.058
pH*	Units	6.40
Fecal Coliform	UFC/100 mL	<10
Total Coliform	UFC/100 mL	1000

\*Parameter measured by STP operators

**Table 2.6.2: LJ-Mix Effluent Results**

Parameters	Units	June 7, 2021
Ammonia (NH <sub>3</sub> )	mg N/L	0.019
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	6.8
Total Kjeldahl Nitrogen	mg N/L	6.7
BOD-5	mg/L	3
COD	mg/L	47
Total Suspended Solids	mg/L	4
Nitrate	mg N/L	14.7
Nitrite	mg N/L	0.264
pH*	Units	6.70
Fecal Coliform	UFC/100 mL	20
Total Coliform	UFC/100 mL	<10000

\*Parameter measured by STP operators

## 2.7 VAULT ATTENUATION POND EFFLUENT

No discharge has occurred from the Vault Attenuation Pond since October 9, 2017. There is currently no plan to restart the discharge in the future.

## 2.8 PHASER ATTENUATION POND

No water was pumped from the Phaser Attenuation Pond during the month.

No water was transferred from BB Phaser Pit sumps to the Phaser Attenuation Pond during the month.

## 2.9 EAST DIKE SEEPAGE EFFLUENT

No water was discharged from the East Dike to Second Portage Lake during the month. In the month of June, water from the East Dike was discharged into Pit E.

## 2.10 NON CONTACT WATER

In June, Agnico Eagle completed inspections at Portage Area East diversion ditch (ST-5) and West diversion ditch (ST-6) as part of the 2021 Freshet Management Plan. Portage Area East (ST-5) and West diversion ditches (ST-6) water quality results are shown in Tables 2.10.1 and 2.10.2, respectively.

TSS results for both stations did not exceed the maximum allowable grab sample concentration (30 mg/L) permitted by the Water License, Part F, Item 7. Both stations did not exceed the maximum average concentration (15 mg/L).

**Table 2.10.1: Portage Area East Diversion Ditch (ST-5) Results**

Parameters	Units	June 21, 2021
Total Suspended Solids	mg/L	3

**Table 2.10.2: Portage Area West Diversion Ditch (ST-6) Results**

Parameters	Units	June 21, 2020
Total Suspended Solids	mg/L	<1

## 2.11 IN-PIT DISPOSAL

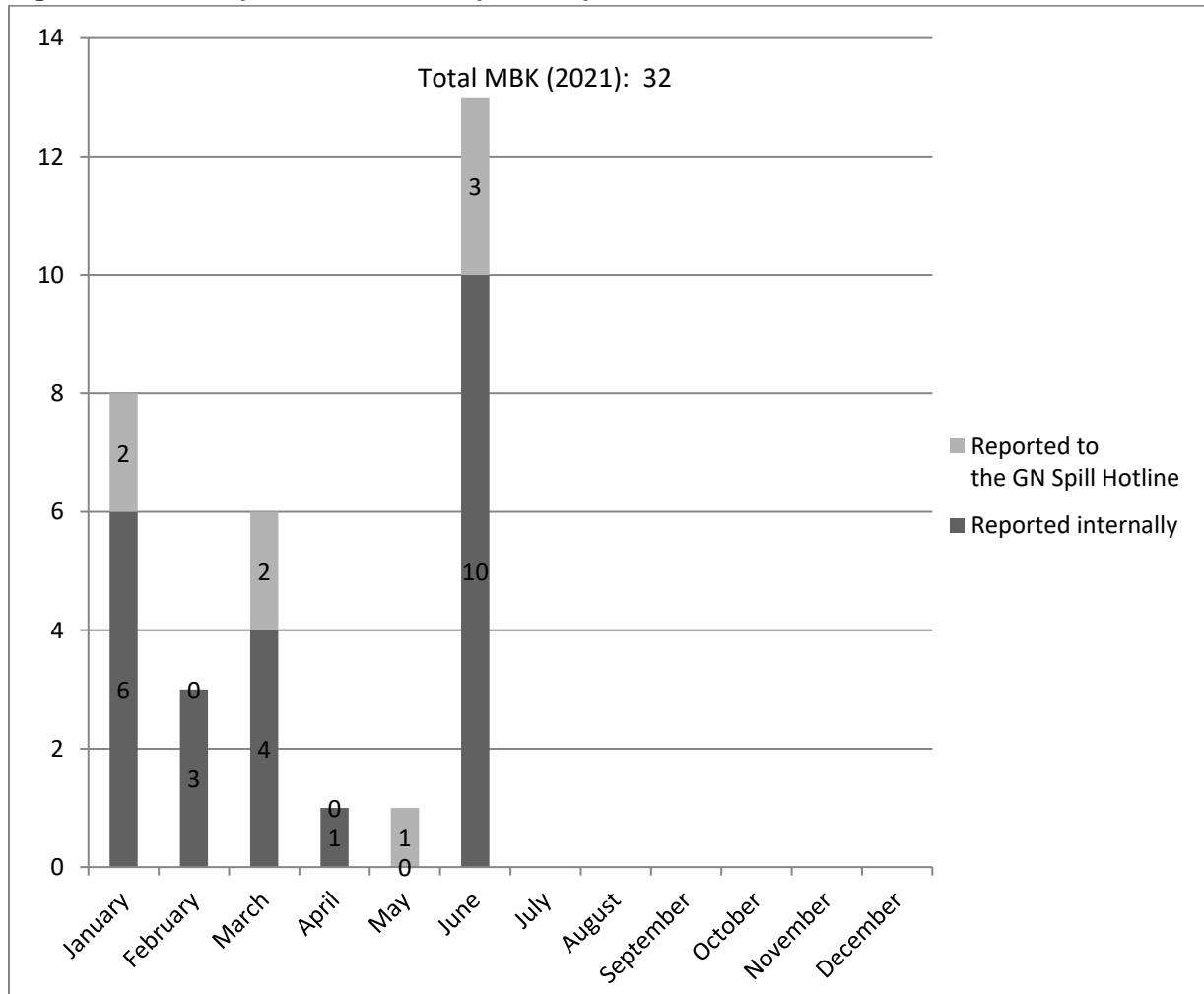
In-Pit tailings disposal occurred in Portage Pit E and reclaim water was taken from Portage Pit A for the month.

### SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2021 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for June.

Thirteen (13) spills occurred on site during the month with three (3) reported to regulators. Spills were contained and cleaned, contaminated material was disposed to the appropriate area, and the clean-up actions were monitored closely by the Environment Department.

**Figure 3.1 2021 Reported and Non-Reported Spills**



**Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, June 2021**

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
6/1/2021	Transmission oil	55	L	AWAR KM 111	Equipment Failure	Equipment was turned off. Spill kit was used to contain as much as possible. Equipment repaired. Contaminated material was removed and adequately disposed of
6/3/2021	Diesel	20	L	Near East Dike Garage	Equipment Failure	Contaminated material was removed and adequately disposed of
6/4/2021	Contaminated Water	90	L	Baker Lake Seacan	Punctured Tote	Contaminated Water was contained in seacan using Absorbent Pads. Contaminated absorbent pads were disposed in drums
6/8/2021	Diesel	2	L	Fuel Farm	Equipment malfunction	Contaminated soil picked up and disposed in the landfarm
6/10/2021	Fuel	50	L	Sana Crusher (Vault laydown)	Nozzle malfunction on fuel truck.	The contaminated soil was collected and disposed properly
6/11/2021	Diesel	500	L	Maintenance Shop	Fuel tank tipped over due to ice melt	The contaminated soil was collected and disposed properly
6/13/2021	Sulfur Condensation	0.1	L	SO2 plant beside garage door	Sulfur condensation came out of the sulfur melter vent	Contaminated soil was picked up and dispose in the process plant
6/13/2021	Fine ground silica	0.02	Kg	Behind Assay Lab near Mill door A	Ripped Bag	Called environment to assess situation and spill properly disposed of.
6/16/2021	Diesel	TBD	L	Meadowbank Fuel Tank	During a routine inspection, a small presence of diesel fuel was observed in the secondary containment of the Meadowbank Fuel Tank. Further investigation has failed to demonstrate	Diesel is fully contained within the secondary containment.



					any new inflow of fuel in the secondary containment. No conclusion has come to as the origin of the fuel. Nevertheless, due to the proximity of the fuel storage facility, further investigation and monitoring is ongoing. This spill report is communicated in the spirit of transparency, and by due diligence, as the diesel is fully contained within the secondary containment.	
6/17/2021	Coolant	0.5	L	Winter parking	Equipment failure	Contaminated material was removed and adequately disposed of properly
6/19/2021	Waste Oil	60	L	Oil Trailer	Punctured tote	Absorbent pads were put in place. Contaminated soil was removed and adequately disposed of in the landfarm
6/20/2021	Coolant	70	L	Transit laydown	Broken tote	Absorbent pads were used to contain the spill. Coolant was transferred to another tote. Contaminated material disposed of adequately.
6/25/2021	TSS	TBD	Kg	Baker Lake	During operations at the Meadowbank complex - overburden material was being removed for the pad extension at the Baker Lake spud barge. The construction activities were in a wet area and the runoff created an apparent plume of TSS flowing into Baker Lake.	Construction activities were stopped and efforts to prevent further TSS discharge are underway. Internal water samples were collected at the time of the incident and external laboratory samples results will be included in the follow up along with corrective actions.