



MEADOWBANK DIVISION

## **Monitoring Program Summary Report**

**May 2020**

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 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 discharge water quality, Phaser Attenuation Pond, 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 In-Pit disposal update.

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 May 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	Total
Camp	Third Portage Lake	3 612	3 264	3 141	2 155	2 484	14 656
Mill (freshwater tank)	Third Portage Lake	220 085	229 949	270 242	219 998	231 334	1 171 608
Emulsion plant	Unnamed Lake	67	76	75	70	114	400
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>223 764</b>	<b>233 289</b>	<b>273 458</b>	<b>222 223</b>	<b>233 932</b>	<b>1 186 664</b>
<b>Ore Water (m<sup>3</sup>)</b>	Ore	4 668	3 821	2 306	0	534	11 329
<b>Reclaim Water Usage (m<sup>3</sup>)</b>	Tailings Pond	0	0	0	0	864	864

### 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In May, no water was pumped back to the North Cell TSF from the ST-16 sump due to freezing conditions. No water was transferred from the WEP1 and WEP2 sumps to the ST-16 sump.

Agnico Eagle completed in May inspections at the Portage and Vault RSFs as per the Freshet Action Plan. No non-conformities were found. No open water sampling at WEP1 (Station ST-30) and WEP2 (Station ST-31) were also completed during the month due to freezing conditions.

### 2.3 CENTRAL DIKE SEEPAGE

In May, a total of 28,065 m<sup>3</sup> of water was pumped from ST-S-5 sump to Portage Pit.

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

Daily visual inspections were also completed by the Engineering Department.

### 2.4 ASSAY ROAD SEEPAGE

In May, no water was pumped back from the mill trench back to the mill. Inspections of the area were conducted during the month as per the Freshet Action Plan. No trench sampling and wells monitoring for CN downstream has been taken due to freezing conditions.

### 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 May.

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 is discharged to the Stormwater Management pond. In May, no water was discharged from the Stormwater Management pond.

**Table 2.6.1: Seprotech Effluent Results**

Parameters	Units	May 4, 2020
Ammonia (NH <sub>3</sub> )	mg N/L	<0.01
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	12.23
Total Kjeldahl Nitrogen	mg N/L	15
BOD-5	mg/L	4
COD	mg/L	56
Total Suspended Solids	mg/L	10
Nitrate	mg N/L	29.0
Nitrite	mg N/L	0.18
pH*	Units	5.90
Fecal Coliform	UFC/100 mL	10
Total Coliform	UFC/100 mL	300

\*Parameter measured by STP operators

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

Parameters	Units	May 4, 2020
Ammonia (NH <sub>3</sub> )	mg N/L	<0.01
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	23.14
Total Kjeldahl Nitrogen	mg N/L	25
BOD-5	mg/L	4
COD	mg/L	48
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	38.2
Nitrite	mg N/L	0.26
pH*	Units	5.60
Fecal Coliform	UFC/100 mL	<100
Total Coliform	UFC/100 mL	31,000

\*Parameter measured by STP operators

## 2.7 VAULT ATTENUATION POND EFFLUENT

No discharge from Vault Attenuation Pond since October 9, 2017. There is currently no plan to restart the discharge in 2020.

## 2.8 PHASER ATTENUATION POND

No water was pumped out from the Phaser Attenuation Pond in May.

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

## 2.9 EAST DIKE SEEPAGE EFFLUENT

In May, the discharge to Second Portage Lake was ongoing for the whole month. A total of 14,632 m<sup>3</sup> of water was discharged during the month.

Four (4) weekly effluent samples were collected at ST-8 in May 2020. TSS results did not exceed the maximum allowable grab sample concentration (30 mg/L) and maximum average concentration (15 mg/L) permitted by Water License, Part F, Item 6. TSS monitoring results for May 2020 are shown in Table 2.9.1 below. There have been no exceedance of Water License and MDMER criteria.

**Table 2.9.1: East Dike Seepage Results for TSS**

Parameters	Units	May 4, 2020	May 11, 2020	May 18, 2020	May 25, 2020	Maximum Average Concentration
Total Suspended Solids	mg/L	1	2	2	1	1.5

Monthly regular sampling pursuant to the Water License was also conducted at this location. Results are shown in Table 2.9.2 below. There have been no exceedance of MDMER for those criteria.

**Table 2.9.2: May 2020 Monthly Monitoring Results**

Parameters	Units	May 4, 2020
pH*		8.07
Aluminum	mg/L	0.020
Sulphate	mg/L	8.5
Arsenic	mg/L	0.0006
Copper	mg/L	0.0034
Nickel	mg/L	<0.0005
Lead	mg/L	<0.0003
Zinc	mg/L	0.003
Radium 226	mg/L	0.010
Total Cyanide	mg/L	<0.001

## 2.10 NON CONTACT WATER

In May, no monthly open water sampling conducted at Portage Area East (ST-5) and West diversion ditches (ST-6).

## **2.11 IN-PIT DISPOSAL**

In-Pit disposal in Goose Pits was ongoing for May. No issues to report.

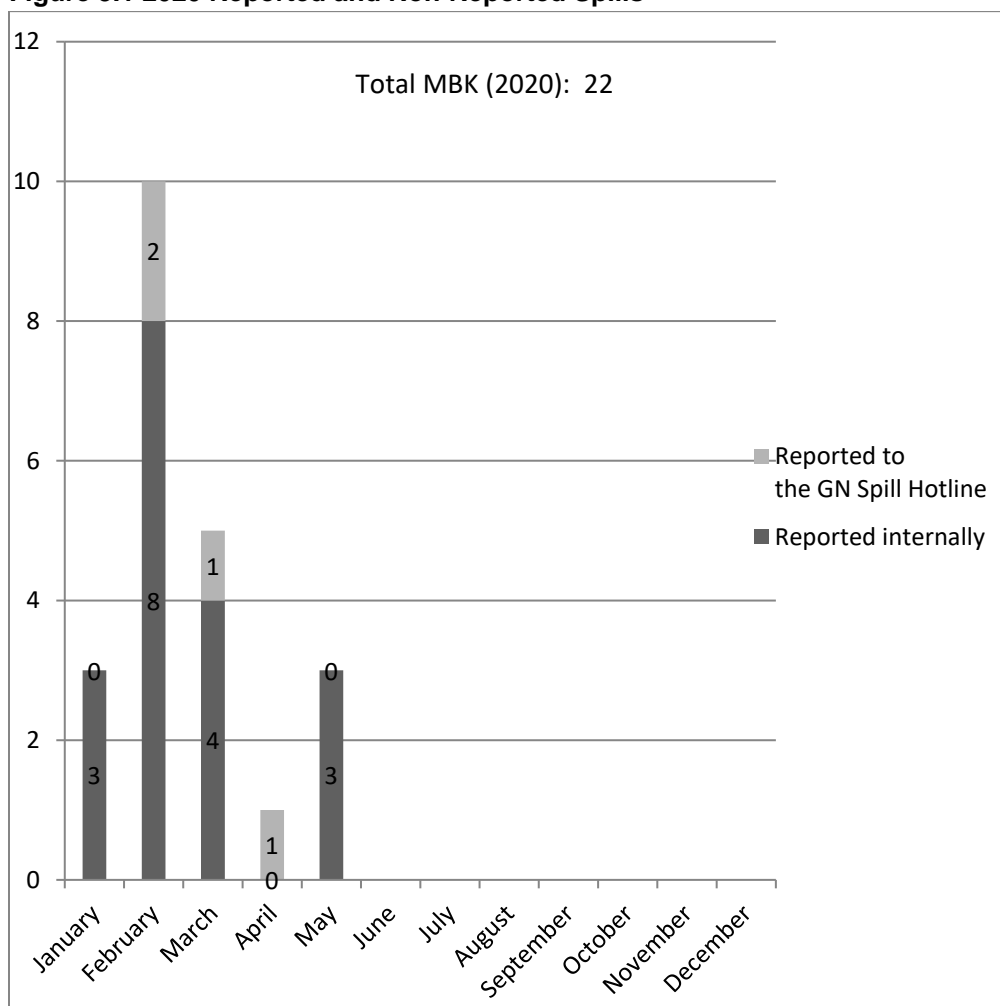
Reclaim started from Portage Pit on May 31.

## SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2020 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for May.

Three (3) spills were reported during the month and was managed appropriately on site according to Agnico's spill contingency plan. Spill was contained and cleaned, contaminated material was disposed to the appropriate area (landfarm), and the clean-up actions were monitored closely by the Environment Department. There was no off-site impact to any watercourses.

**Figure 3.1 2020 Reported and Non-Reported Spills**





**Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, May 2020**

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
May 9, 2020	Diesel	25	L	MBK fuel farm for Long Haul Trucks	Spill during refuelling	Contaminated soil picked up and disposed of appropriately in the petroleum bin
May 10, 2020	Coolant	10	L	Site Service Coverall	Radiator failure	Contaminated soil picked up and disposed of appropriately in the yellow bin
May 18, 2020	Diesel	20	L	AWAR KM 99	Slippery road conditions. Tractor trailer roll over the AWAR	Assess the area.  Absorbents pads and half cut drum were installed under the leaking tank.  Unplugged the batteries, turn the switch off. Contaminated material disposed off adequately at MBK