



**AGNICO EAGLE**

MEADOWBANK DIVISION

## **Monitoring Program Summary Report**

**March 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

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### 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         | Total          |
|---|--------------------|----------------|---------------|---------------|----------------|
| Camp  | Third Portage Lake | 2,639          | 2,334         | 2,376         | 7,349          |
| Mill (freshwater tank)                        | Third Portage Lake | 125,901        | 87,438        | 87,445        | 300,784        |
| Emulsion plant                                | Unnamed Lake       | 104            | 90            | 127           | 321            |
| <b>Total Freshwater Usage (m<sup>3</sup>)</b> |                    | <b>128,644</b> | <b>89,862</b> | <b>89,948</b> | <b>308,454</b> |
| <b>Ore Water (m<sup>3</sup>)</b>              | Ore                | 4,408          | 3,310         | 3,684         | <b>11,402</b>  |
| <b>Reclaim Water Usage (m<sup>3</sup>)</b>    | Tailings Pond      | 237,647        | 205,445       | 277,684       | <b>720,776</b> |

### 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In March, no water was pumped back to the North Cell TSF from the ST-16 sump. No sampling was completed at WEP1 (Station ST-30) and WEP2 (Station ST-31) during the month as they were frozen.

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

### 2.3 CENTRAL DIKE SEEPAGE

In March, 16,273 m<sup>3</sup> of water was pumped from ST-S-5 sump to Portage Pit A.

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 March, no water was pumped from the mill trench back to the mill. No non-conformities were found.

### 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 March.

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      | March 8, 2021 |
|--|------------|---------------|
| Ammonia (NH <sub>3</sub> )                           | mg N/L     | 16            |
| Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> ) | mg N/L     | 13            |
| Total Kjeldahl Nitrogen                              | mg N/L     | 14            |
| BOD-5  | mg/L       | 4             |
| COD  | mg/L       | 53            |
| Total Suspended Solids                               | mg/L       | 8             |
| Nitrate  | mg N/L     | 30.9          |
| Nitrite  | mg N/L     | 0.033         |
| pH*  | Units      | 6.00          |
| Fecal Coliform                                       | UFC/100 mL | 10            |
| Total Coliform                                       | UFC/100 mL | 19000         |

\*Parameter measured by STP operators

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

| Parameters   | Units      | March 8, 2021 |
|--|------------|---------------|
| Ammonia (NH <sub>3</sub> )                           | mg N/L     | 25            |
| Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> ) | mg N/L     | 21            |
| Total Kjeldahl Nitrogen                              | mg N/L     | 21            |
| BOD-5  | mg/L       | 8             |
| COD  | mg/L       | 69            |
| Total Suspended Solids                               | mg/L       | 15            |
| Nitrate  | mg N/L     | 32.0          |
| Nitrite  | mg N/L     | 0.087         |
| pH*  | Units      | 6.60          |
| Fecal Coliform                                       | UFC/100 mL | 280           |
| Total Coliform                                       | UFC/100 mL | 11000         |

\*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

Discharge to Second Portage Lake occurred for the entire month of March and a total of 7,928 m<sup>3</sup> was discharged.

Five (5) weekly effluent samples were collected at ST-8 during the month. The TSS results did not exceed the maximum allowable grab sample concentration (30 mg/L) or the maximum monthly average concentration (15 mg/L) permitted by the Water License, Part F, Item 7. The TSS monitoring results for the month are provided in Table 2.9.1 below.

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

| Parameter              | Unit | Sample Date |            |            |            |            | Monthly Average |
|------------------------|------|-------------|------------|------------|------------|------------|-----------------|
|                        |      | 03/01/2021  | 03/08/2021 | 03/15/2021 | 03/23/2021 | 03/29/2021 |                 |
| Total Suspended Solids | mg/L | 8           | 8          | 6          | 9          | 7          | 7.6             |

Monthly sampling pursuant to the Water License was also conducted at ST-8 in March. The results are shown in Table 2.9.2 below. There were no exceedances of MDMER criteria.

**Table 2.9.2: March 2021 Monthly Monitoring Results**

| Parameter     | Unit | Sample Date |
|---------------|------|-------------|
|               |      | 03/01/2021  |
| pH*           | -    | 6.66        |
| Aluminum      | mg/L | 0.123       |
| Sulphate      | mg/L | 6.3         |
| Arsenic       | mg/L | 0.00063     |
| Copper        | mg/L | 0.00095     |
| Nickel        | mg/L | <0.001      |
| Lead          | mg/L | <0.0002     |
| Zinc          | mg/L | <0.005      |
| Radium 226    | mg/L | <0.005      |
| Total Cyanide | mg/L | <0.005      |

\* Parameter measured by technician

## **2.10 NON CONTACT WATER**

Portage Area East diversion ditch (ST-5) and West diversion ditch (ST-6) were not sampled in March due to the diversion ditches being frozen. Sampling is conducted during open water conditions.

## **2.11 IN-PIT DISPOSAL**

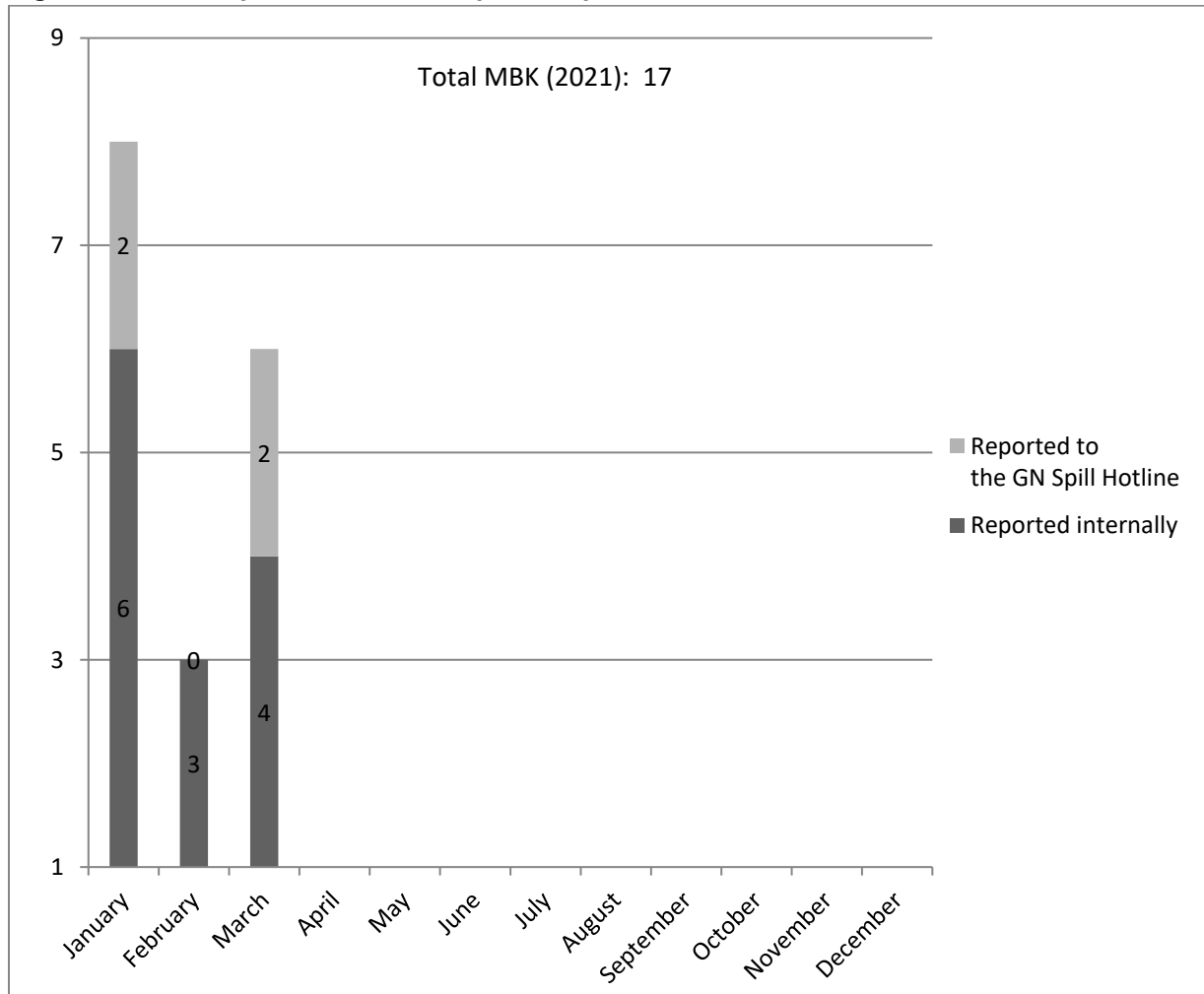
In-Pit tailings disposal occurred in Portage Pit E and reclaim water was taken from Portage Pit A for the month.

### 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 March.

Six (6) spills occurred in March with two (2) reported to regulators. The spills were contained, and clean-up actions were monitored closely by the Environment Department. There were no off-site impact to any watercourses.

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





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

| Date of Spill | Hazardous Material | Qty | Units (L / Kg) | Location       | Cause of spill  | Clean-up action taken   |
|---------------|--------------------|-----|----------------|----------------|---|---|
| 3/7/2021      | Coolant            | 1   | L              | Winter Parking | Equipment failure   | Contaminated material was removed and adequately disposed of.   |
| 3/13/2021     | Diesel             | 100 | L              | AWAR           | Fuel tanker went off the road and tipped damaging the passenger side fuel tank. | Spill pads and a secondary containment were deployed to contain the spill. Contaminated material was removed and adequately disposed of in the MBK landfarm |
| 3/14/2021     | Coolant            | 2   | L              | Winter parking | Equipment failure   | Contaminated material was removed and adequately disposed of.   |
| 3/22/2021     | Grey/sewage water  | 50  | L              | Wing 4         | Frozen pipe cracked causing spill.  | Section of pipe was replaced and material was removed and adequately dispose of.  |
| 3/31/2021     | Coolant            | 3   | L              | Winter Parking | Equipment failure   | Contaminated material was removed and adequately disposed of.   |
| 3/31/2021     | Diesel             | 4   | L              | Winter Parking | Overfilling of tank   | Contaminated material was removed and adequately disposed of.   |