



MEADOWBANK COMPLEX

## **Monitoring Program Summary Report**

**September 2022**

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 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
Camp	Third Portage Lake	2,500	2,859	2,954	3,071	3,200	2,927
Mill (freshwater tank)	Third Portage Lake	49,833	210,782	137,225	56,862	52,816	73,494
Emulsion plant	Unnamed Lake	48	14	89	64	36	13
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>52,381</b>	<b>213,655</b>	<b>140,268</b>	<b>59,997</b>	<b>56,052</b>	<b>76,434</b>
<b>Ore Water (m<sup>3</sup>)</b>	Ore	1,927	3,310	4,302	4,572	3,948	2,581
<b>Reclaim Water Usage (m<sup>3</sup>)</b>	Tailings Pond	266,541	72,375	214,517	249,495	240,145	250,371

Water Location	Source Lake	July	Aug	Sept	Total
Camp	Third Portage Lake	3,082	3,047	2,982	<b>26,622</b>
Mill (freshwater tank)	Third Portage Lake	70,603	77,975	78,385	<b>807,975</b>
Emulsion plant	Unnamed Lake	0	0	0	<b>263</b>
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>73,685</b>	<b>81,022</b>	<b>81,367</b>	<b>834,860</b>
<b>Ore Water (m<sup>3</sup>)</b>	Ore	2,453	1,971	2,644	<b>27,708</b>
<b>Reclaim Water Usage (m<sup>3</sup>)</b>	Tailings Pond	280,756	267,093	256,410	<b>2,097,704</b>

### 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In September, a total of 9,307 m<sup>3</sup> of water was pumped back to the North Cell TSF from the ST-16 sump. Of that amount, 5,492 m<sup>3</sup> was transferred from WEP1 sump and 2,866 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 September, 96,962 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 Environment Department, as well as daily monitoring of piezometric values.

### 2.4 ASSAY ROAD SEEPAGE

In September, 4,864 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 September.

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.

In September, 3,575 m<sup>3</sup> was pumped from the Stormwater Management pond to the tailings storage facility.

**Table 2.6.1: Seprotech Effluent Results**

Parameters	Units	September 5, 2022
Unionized Ammonia (NH <sub>3</sub> )	mg N/L	0.015
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	30
Total Kjeldahl Nitrogen	mg N/L	33
BOD-5	mg/L	49
COD	mg/L	86
Total Suspended Solids	mg/L	16
Nitrate	mg N/L	8.53
Nitrite	mg N/L	1.94
pH*	Units	6.00
Fecal Coliform	UFC/100 mL	640
Total Coliform	UFC/100 mL	8000

\*Parameter measured by STP operators

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

Parameters	Units	September 5, 2022
Unionized Ammonia (NH <sub>3</sub> )	mg N/L	0.023
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	27
Total Kjeldahl Nitrogen	mg N/L	31
BOD-5	mg/L	14
COD	mg/L	61
Total Suspended Solids	mg/L	16
Nitrate	mg N/L	8.59
Nitrite	mg N/L	0.066
pH*	Units	6.20
Fecal Coliform	UFC/100 mL	2900
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.

## 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 September, water from the East Dike was discharged into Portage Pits.

## 2.10 NON-CONTACT WATER

In September, Agnico Eagle completed inspections at Portage Area East diversion ditch (ST-5) and West diversion ditch (ST-6) as part of the 2022 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	September 4, 2022
Total Suspended Solids (TSS)	mg/L	1

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

Parameters	Units	September 12, 2022
Total Suspended Solids (TSS)	mg/L	< 1

## 2.11 IN-PIT DISPOSAL

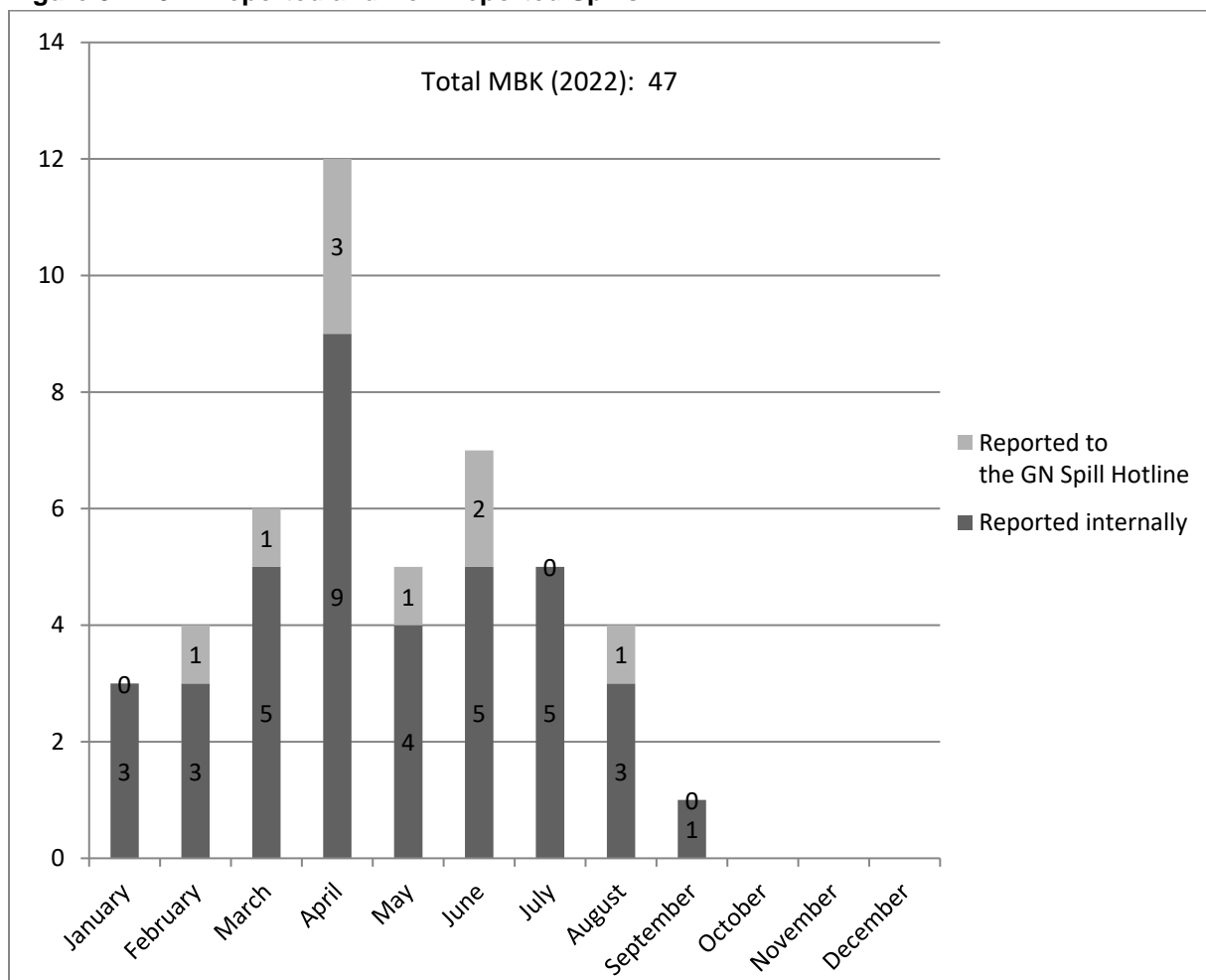
Tailings were disposed of in Portage Pits and reclaim water was taken from Portage Pit E for the month.

## SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2022 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for September.

One (1) spill occurred on site during the month with none (0) 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 2022 Reported and Non-Reported Spills**



**Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, September 2022**

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
9/1/2022	Diesel Fuel	27	L	Fuel Farm Baker Lake	Tanker Valve Malfunction	Contaminated soil was collected and brought to a yellow bin for disposal.