



MEADOWBANK COMPLEX

# **Monitoring Program Summary Report**

**June 2024**

Type A Water License 2AM-MEA1530

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## **SECTION 1 • BACKGROUND**

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On June 13, 2020, Agnico Eagle 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 Mine.

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), an update to the In-Pit disposal and follow up to the AWAR spill at Km 87.

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

## SECTION 2 • WATER MANAGEMENT

### 2.1 WATER USAGE

Freshwater 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
Camp	Third Portage Lake	3,070	2,607	2,996
Mill (freshwater tank)	Third Portage Lake	67,195	67,265	68,740
Emulsion plant	Unnamed Lake	0	0	0
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>70,265</b>	<b>69,872</b>	<b>71,736</b>
<b>Ore Water (m<sup>3</sup>)</b>	Ore	4,895	3,611	3,713
<b>Reclaim Water Usage (m<sup>3</sup>)</b>	Tailings Pond	310,525	302,920	323,994

Water Location	Source Lake	April	May	June	Total
Camp	Third Portage Lake	3,056	2,996	3,122	<b>17,847</b>
Mill (freshwater tank)	Third Portage Lake	73,895	78,772	93,042	<b>448,909</b>
Emulsion plant	Unnamed Lake	0	0	0	<b>0</b>
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>76,951</b>	<b>81,768</b>	<b>96,164</b>	<b>466,756</b>
<b>Ore Water (m<sup>3</sup>)</b>	Ore	2,800	4,141	3,424	<b>22,584</b>
<b>Reclaim Water Usage (m<sup>3</sup>)</b>	Tailings Pond	239,893	271,080	311,616	<b>1,760,028</b>

### 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In June 16,412m<sup>3</sup> of water was pumped back to Portage Pit from the ST-16 sump. Of that amount, 8,785 m<sup>3</sup> was transferred from WEP1 sump and 7,417 m<sup>3</sup> from WEP2 sump to the ST-16 sump.

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, 101,596 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 June, 6,787 m<sup>3</sup> of water was pumped from the mill trench back to the mill. Routine monitoring occurred as part of the Freshet Action plan, no non-conformities or evidence of the May seepage was observed.

## 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.

In June, 244,990 m<sup>3</sup> of water was pumped from the Stormwater Management Pond to Portage Pits.

**Table 2.6.1: Seprotech Effluent Results**

Parameters	Units	June 3, 2024
Unionized Ammonia (NH <sub>3</sub> )	mg N/L	0.06
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	45
Total Kjeldahl Nitrogen	mg N/L	50
BOD-5	mg/L	8
COD	mg/L	41
Total Suspended Solids	mg/L	3
Nitrate	mg N/L	3.98
Nitrite	mg N/L	1.35
pH*	Units	6.50
Fecal Coliform	UFC/100 mL	100
Total Coliform	UFC/100 mL	2,200

\*Parameter measured by STP operators

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

Parameters	Units	June 3, 2024
Unionized Ammonia (NH <sub>3</sub> )	mg N/L	0.0035
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	10
Total Kjeldahl Nitrogen	mg N/L	12
BOD-5	mg/L	8
COD	mg/L	36
Total Suspended Solids	mg/L	5
Nitrate	mg N/L	32.3
Nitrite	mg N/L	0.055

pH*	Units	5.80
Fecal Coliform	UFC/100 mL	2,200
Total Coliform	UFC/100 mL	23,000

\*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 June, water from the East Dike seepage was discharged into Portage Pits.

## 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 2024 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), or the maximum average concentration (15 mg/L) permitted by the Water License, Part F, Item 7.

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

Parameter	Units	2-June
Total Suspended Solids (TSS)	mg/L	3

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

Parameter	Units	2-June
Total Suspended Solids (TSS)	mg/L	<1

## **2.11 IN-PIT DISPOSAL**

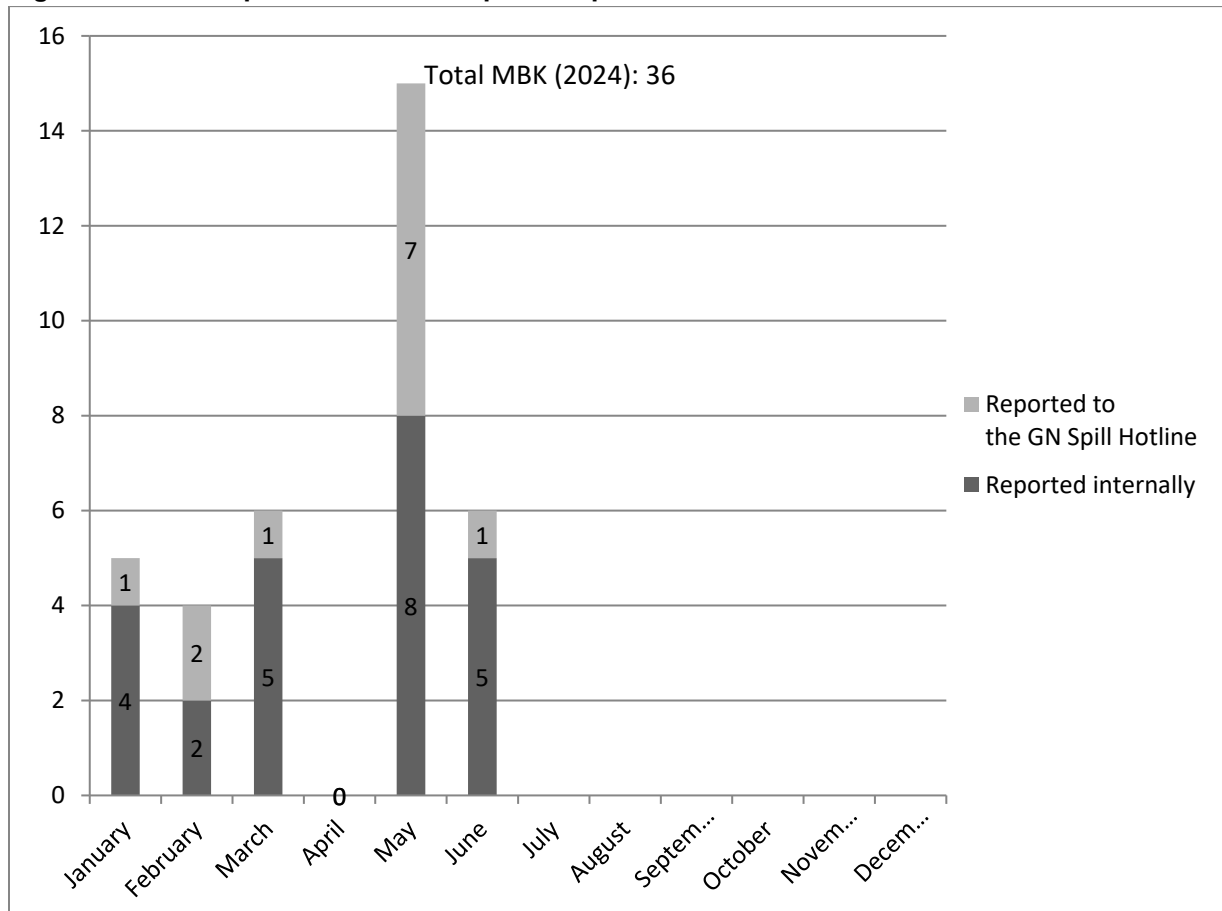
Tailings were disposed of in Portage Pits and reclaim water was taken from Portage Pits for the month.

## SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2024 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for June.

Six (6) spills occurred on site during the month with one (1) being reported to regulators. Spills were contained and cleaned, contaminated material was disposed of in the appropriate area, and the clean-up actions were monitored closely by the Environment Department. There was no off-site impact to any watercourses.

**Figure 3.1 2024 Reported and Non-Reported Spills**





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**Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, June 2024**

Date of Spill	Hazardous Material	Quantity	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
6/5/2024	Engine Oil	4	L	Meadowbank	Human Error	Contaminated material was collected and disposed at the Baker Lake Hazmat
6/8/2024	Hydraulic Oil	30	L	Meadowbank	Mechanical Failure	Contaminated material was collected and brought for disposal at the MBK Landfarm
6/12/2024	TSS	Unknown	Kg	Baker Lake	Natural Event	Wood-chip booms and maritime barriers were deployed and are present in the field. Following the observation of localized seepage paths through ditch 1 downstream berm, a review and evaluation of the performance of the entire infrastructure is being conducted. If maintenance and remediation work is required as per recommendations of the water management infrastructure performance review, it will be planned accordingly.
6/12/2024	Hydraulic Oil	50	L	Meadowbank	Mechanical Failure	Contaminated material was collected and brought for disposal at the MBK Landfarm
6/13/2024	Hydraulic Oil	30	L	Meadowbank	Mechanical Failure	Contaminated material was collected and brought for disposal at the MBK Landfarm
6/25/2024	Diesel Fuel	5	L	Meadowbank	Unknown	Contaminated material was collected and placed in a quatrex disposal for at the MBK HazMat

### 3.1 KM87 SPILL FOLLOW UP

In June, Agnico Eagle completed inspections at KM87 spill areas. A total of 6,365 m<sup>3</sup> was pumped from the collection sump and brought to the Stormwater management pond. Sampling was collected downstream of the collection sump at sampling station ST-44. Water quality results are shown in Table 3.2.

**Table 3.2: KM87 (ST-44) Results**

Parameter	Unit	3-June	9-June	16-June
pH	pH units	8.23	6.51	6.24
TSS	mg/L	4	6	3
Total oil and grease	mg/L	<0.50	<0.50	<0.50
Benzene	mg/L	< 0.00020	< 0.00020	< 0.00020
Ethylbenzene	mg/L	< 0.00020	< 0.00020	< 0.00020
Toluene	mg/L	< 0.00020	< 0.00020	< 0.00020
Xylenes	mg/L	< 0.00040	< 0.00040	< 0.00040
m,p-Xylenes	mg/L	< 0.00040	< 0.00040	< 0.00040
o-Xylene	mg/L	< 0.00020	< 0.00020	< 0.00020
F2 (C10-C16)	mg/L	< 0.1	< 0.1	< 0.1
F3 (C16-C34)	mg/L	< 0.2	< 0.2	< 0.2
F4 (C34-C50)	mg/L	< 0.2	< 0.2	< 0.2
Petroleum Hydrocarbons F (C10-C50)	mg/L	< 0.2	< 0.2	< 0.2