



MEADOWBANK COMPLEX

# **Monitoring Program Summary Report**

**December 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	April	May	June
Camp	Third Portage Lake	3,070	2,607	2,996	3,056	2,996	3,122
Mill (freshwater tank)	Third Portage Lake	67,195	67,265	68,740	73,895	78,772	93,042
Emulsion plant	Unnamed Lake	0	0	0	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>76,951</b>	<b>81,768</b>	<b>96,164</b>
<b>Ore Water (m<sup>3</sup>)</b>	Ore	4,895	3,611	3,713	2,800	4,141	3,424
<b>Reclaim Water Usage (m<sup>3</sup>)</b>	Tailings Pond	310,525	302,920	323,994	239,893	271,080	311,616

Water Location	Source Lake	July	Aug	Sept	Oct	Nov	Dec	Total
Camp	Third Portage Lake	2,976	2,848	2,708	2,877	2,515	2,717	34,488
Mill (freshwater tank)	Third Portage Lake	77,779	87,857	81,290	80,540	73,860	119,242	969,477
Emulsion plant	Unnamed Lake	0	0	0	0	0	0	0
<b>Total Freshwater Usage (m<sup>3</sup>)</b>		<b>80,755</b>	<b>90,705</b>	<b>83,998</b>	<b>83,417</b>	<b>76,375</b>	<b>121,959</b>	<b>1,003,965</b>
<b>Ore Water (m<sup>3</sup>)</b>	Ore	2,871	3,951	3,722	3,866	3,811	4,036	44,841
<b>Reclaim Water Usage (m<sup>3</sup>)</b>	Tailings Pond	305,019	307,092	315,016	249,557	306,559	263,926	3,507,197

### 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In December, no water was pumped back to Portage Pit from the ST-16 sump. No sampling was completed at WEP1 (Station ST-30) or 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 December, 15,681 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 December, no water was pumped from the mill trench back to the mill due to frozen conditions. Routine inspections occurred 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 December. 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 December, no water was pumped from the Stormwater Management Pond to Portage Pits.

**Table 2.6.1: Seprotech Effluent Results**

Parameters	Units	12/2/2024
Unionized Ammonia (NH <sub>3</sub> )	mg N/L	0.24
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	72
Total Kjeldahl Nitrogen	mg N/L	76
BOD-5	mg/L	9
COD	mg/L	69
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	0.85
Nitrite	mg N/L	0.975
pH*	Units	7.00
Fecal Coliform	UFC/100 mL	170
Total Coliform	UFC/100 mL	8,200

\*Parameter measured by STP operators

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

Parameters	Units	12/2/2024
Unionized Ammonia (NH <sub>3</sub> )	mg N/L	0.0011
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	21
Total Kjeldahl Nitrogen	mg N/L	22
BOD-5	mg/L	3
COD	mg/L	44
Total Suspended Solids	mg/L	4
Nitrate	mg N/L	28.4
Nitrite	mg N/L	1.98
pH*	Units	5.00
Fecal Coliform	UFC/100 mL	< 10
Total Coliform	UFC/100 mL	< 1,000

\*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

Discharge to Second Portage Lake occurred for the entire month and a total of 7,275 m<sup>3</sup> was discharged.

Four (4) weekly effluent samples were collected at ST-8 in December. 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 December are provided in Table 2.9.1 below.

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

Parameter	Unit	Sample Date					Monthly Average
		12/2/2024	12/9/2024	12/16/2024	12/28/2024	12/30/2024	
Total Suspended Solids (TSS)	mg/L	< 1	2	1	2	3	1.7

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

**Table 2.9.2: December Monthly Monitoring Results**

Parameters	Unit	Sample Date
		12/2/2024
pH*	pH units	8.94
Aluminum	mg/L	0.0295
Sulphate	mg/L	9.8
Arsenic	mg/L	0.00111
Copper	mg/L	0.00133
Nickel	mg/L	< 0.0010
Lead	mg/L	< 0.00020
Zinc	mg/L	< 0.0050
Radium 226	mg/L	< 0.0050
Total Cyanide	mg/L	< 0.00050
Turbidity*	NTU	1.12
Un-Ionized Ammonia	mg/L	< 0.0035

\* 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 December due to the diversion ditches being frozen. Sampling is conducted during open water conditions.

## **2.11 IN-PIT DISPOSAL**

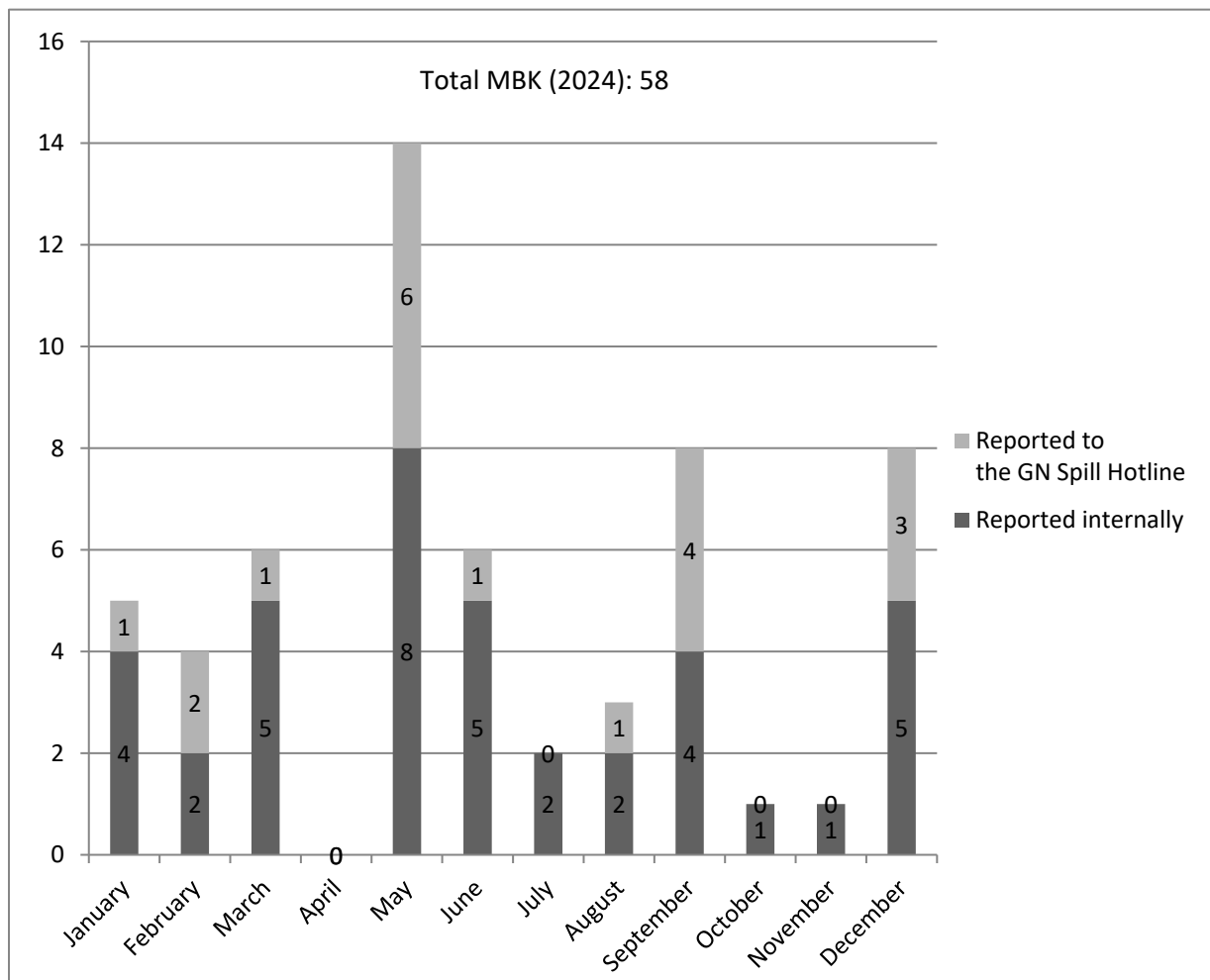
Tailings were disposed of in Portage Pits and reclaim water was taken from Portage Pits for the month.

### 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 December.

Eight (8) spills occurred on site during the month with three (3) 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**





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

Date of Spill	Hazardous Material	Quantity	Units (L / Kg / m <sup>3</sup> )	Location	Cause of spill	Clean-up action taken
12/12/2024	Engine Oil	2	L	Carpenter Shop Parking Lot	Equipment failure	Contaminated snow was collected and placed in roll off bin for disposal at the Meadowbank Landfarm
12/12/2024	Sewage Water	5	L	Sewage Treatment Plant	Equipment failure due to regular wear and freezing conditions.	The operator stopped offloading and siphoned the remaining sewage back into the sewage truck. A plumber replaced the defective piping/fitting. Approximately 0.1 m <sup>3</sup> of contaminated material was collected and returned to the sewage circuit for disposal. A visual inspection of the sewage transfer piping will be carried out by the operators prior to transferring waste into the sewage treatment plant. Portable secondary containments will be carried on sewage trucks and utilized during the transfer process.
12/15/2024	Coolant	20	L	AWAR KM108	Equipment failure	Contaminated material was collected and brought for disposal at the Meadowbank TSF.
12/26/2024	Tailings	15	m <sup>3</sup>	Tailings Storage Facility Area	Equipment failure	The process plant was immediately shut down to stop the spill, and recovery of the contaminant began. Approximately 175 m <sup>3</sup> of contaminated snow and tailings were removed and disposed of within the tailings storage facility. Additionally, the tailings slurry and contaminated material remaining in the area will be removed and disposed of in the TSF. These operations will be carried out during favorable weather conditions.
12/27/2024	Glycol	5	L	Transit Pad	Improper Storage	Contaminated material was collected and placed in roll off bin for disposal at the Meadowbank TSF.
12/28/2024	Glycol	5	L	Transit Pad	Improper Storage	Contaminated material was collected and placed in roll off bin for disposal at the Meadowbank TSF.

12/28/2024	Diesel Fuel	2	L	AWAR KM 43	Human Error	Contaminated snow was collected and placed in roll off bin for disposal at the Meadowbank Landfarm
12/29/2024	Tailings	900	m <sup>3</sup>	Tailings Storage Facility Area	Equipment failure	The process plant immediately switched to water before proceeding with the complete shut down of the circuit to stop the spill. Approximately 692 m <sup>3</sup> of contaminated snow and tailings were removed and disposed of within the tailings storage facility. Additionally, the tailings slurry and contaminated material remaining in the area will be removed and disposed of in the TSF. These operations will be carried out during favorable weather conditions.

### **3.1 KM 87 SPILL FOLLOW UP**

In December, Agnico Eagle completed inspections at KM87 spill areas. No samples were collected during the month due to frozen conditions