

# MEADOWBANK COMPLEX

# Monitoring Program Summary Report March 2024

# **Table of Contents**

SECTION	N1 •	BACKGROUND	3
SECTION		WATER MANAGEMENT	
2.1		JSAGE	
2.2	WASTE R	OCK STORAGE FACILITY SEEPAGE	2
2.3	CENTRAL	DIKE SEEPAGE	2
2.4	Assay Ro	DAD SEEPAGE	2
2.5	SEEPAGE	AND RUNOFF FROM THE LANDFILL	2
2.6	SEWAGE	TREATMENT PLANT	
2.7		TTENUATION POND EFFLUENT	
2.8	PHASER A	ATTENUATION POND	
2.9		E SEEPAGE EFFLUENT	
2.10		CONTACT WATER	
2.10		T DISPOSAL	
2.11	IN-PI		
SECTION	N 3 •	SPILL MANAGEMENT	7
2.4	KN 407.6		
1	K IV/IX / S	PILL FOLLOW LIP	>

# SECTION 1 • BACKGROUND

On May 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	Total
Camp	Third Portage Lake	3,070	2,607	2,996	8,673
Mill (freshwater tank)	Third Portage Lake	67,195	67,265	68,740	203,200
Emulsion plant	Unnamed Lake	0	0	0	0
Total Freshwater Usage (m	70,265	69,872	71,736	211,873	
Ore Water (m³)	Ore	4,895	3,611	3,713	12,219
Reclaim Water Usage (m³)	Tailings Pond	310,525	302,920	323,994	937,439

#### 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In March, 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 March 12,920 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 March, no water was pumped from the mill trench back to the mill due to frozen conditions. 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 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.

In March, no water was pumped from the Stormwater Management pond to Portage Pits.

**Table 2.6.1: Seprotech Effluent Results** 

Parameters	Units	March 4, 2024
Unionized Ammonia (NH <sub>3</sub> )	mg N/L	0.16
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	52
Total Kjeldahl Nitrogen	mg N/L	52
BOD-5	mg/L	13
COD	mg/L	54
Total Suspended Solids	mg/L	7
Nitrate	mg N/L	2.25
Nitrite	mg N/L	1.28
pH*	Units	6.90
Fecal Coliform	UFC/100 mL	190
Total Coliform	UFC/100 mL	1,000

<sup>\*</sup>Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	March 4, 2024
Unionized Ammonia (NH <sub>3</sub> )	mg N/L	0.050
Ammonia-Nitrogen (NH₃-NH₄)	mg N/L	18
Total Kjeldahl Nitrogen	mg N/L	17
BOD-5	mg/L	9
COD	mg/L	37
Total Suspended Solids	mg/L	15
Nitrate	mg N/L	24.9
Nitrite	mg N/L	0.183
pH*	Units	6.80
Fecal Coliform	UFC/100 mL	820
Total Coliform	UFC/100 mL	10,000

<sup>\*</sup>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 March, water from the East Dike seepage was discharged into Portage Pits.

# 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

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 March.

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 to the appropriate area, and the clean-up actions were monitored closely by the Environment Department.

Total MBK (2024): 15

Reported to the GN Spill Hotline
Reported internally

Figure 3.1 2024 Reported and Non-Reported Spills

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

Date of Spill	Hazardous Material	Quantity	Units (L / m³)	Location	Cause of spill	Clean-up action taken
3/2/2024	Oil	1	L	Vault Area Exploration Trail	Mechanical Failure	Contaminated snow and material was collected and brought to the MBK Landfarm
3/3/2024	Hydraulic Oil	48	L	Iron pad	Mechanical Failure	Contaminated snow and material was collected and brought to the MBK Landfarm
3/7/2024	Coolant	30	L	Fuel Farm	Mechanical Failure	Contaminated snow and material was picked up and brought to the MBK TSF
3/19/2024	Engine Oil	30	L	Crusher Ramp	Mechanical Failure	Contaminated snow and material was collected and brought to the MBK Landfarm
3/24/2024	Tailings	2	m³	Powerhouse	Blocked pipe	Approximately 60m³ of contaminated snow was removed and disposed of at the Tailing Storage Facility. High-pressure hoses will be utilized to clean the adjacent infrastructure that has received some contamination, alongside collection sumps and a vacuum truck to retrieve any liquid contaminants. Additionally, the tailings slurry and contaminated material remaining in the ditch will be removed and disposed of in the TSF.
3/28/2024	Hydraulic Oil	40	L	Vault Stockpile	Mechanical Failure	Contaminated snow and material was collected and brought to the MBK Landfarm.

# 3.1 KM87 SPILL FOLLOW UP

In March, Agnico Eagle completed inspections at KM87 spill areas. No samples were collected at ST-44 during the month due to frozen conditions. The installation of a monitoring wells at KM87 was completed in March. Soil samples were collected at each well location. Water samples were also collected at well installations where water was present.