



MEADOWBANK COMPLEX

Monitoring Program Summary Report

January 2023

Type A Water License 2AM-MEA1530

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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) 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 (m³)

Water Location	Source Lake	Jan
Camp	Third Portage Lake	3,288
Mill (freshwater tank)	Third Portage Lake	50,174
Emulsion plant	Unnamed Lake	0
Total Freshwater Usage (m³)		53,462
Ore Water (m³)	Ore	5,853
Reclaim Water Usage (m³)	Tailings Pond	294,828

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In January, 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 January, 14,029 m³ 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 January, 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 January.

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

Table 2.6.1: Seprotech Effluent Results

Parameters	Units	January 3, 2023
Unionized Ammonia (NH ₃)	mg N/L	0.11
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	27
Total Kjeldahl Nitrogen	mg N/L	29
BOD-5	mg/L	15
COD	mg/L	62
Total Suspended Solids	mg/L	13
Nitrate	mg N/L	7.78
Nitrite	mg N/L	1.22
pH*	Units	7.00
Fecal Coliform	UFC/100 mL	50
Total Coliform	UFC/100 mL	2000

*Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	January 3, 2023
Unionized Ammonia (NH ₃)	mg N/L	0.085
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	22
Total Kjeldahl Nitrogen	mg N/L	20
BOD-5	mg/L	2
COD	mg/L	28
Total Suspended Solids	mg/L	7
Nitrate	mg N/L	36.9
Nitrite	mg N/L	0.027
pH*	Units	7.00
Fecal Coliform	UFC/100 mL	3
Total Coliform	UFC/100 mL	< 100

*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 from January 1st to January 31st, a total of 8,619 m³ was discharged.

Four (4) weekly effluent samples were collected at ST-8 in January 2023. 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 January are provided in Table 2.9.1 below.

Table 2.9.1 East Dike Seepage Results for TSS

Parameter	Unit	Sample Date					Monthly Average
		1/2/2023	1/9/2023	1/16/2023	1/23/2023	1/31/2023	
Total Suspended Solids	mg/L	2	4	6	6	5	4.6

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

Table 2.9.2: January 2023 Monthly Monitoring Results

Parameter	Unit	Sample Date
		1/2/2023
pH*	-	7.81
Aluminum	mg/L	0.052
Sulphate	mg/L	6.4
Arsenic	mg/L	0.00093
Copper	mg/L	0.00148
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	2.12
Un-Ionized Ammonia	mg/L	< 0.0004

* 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 January 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 Pit E for the month.

SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2023 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for January.

Eight (8) spills occurred on site during the month with three (3) 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 2023 Reported and Non-Reported Spills

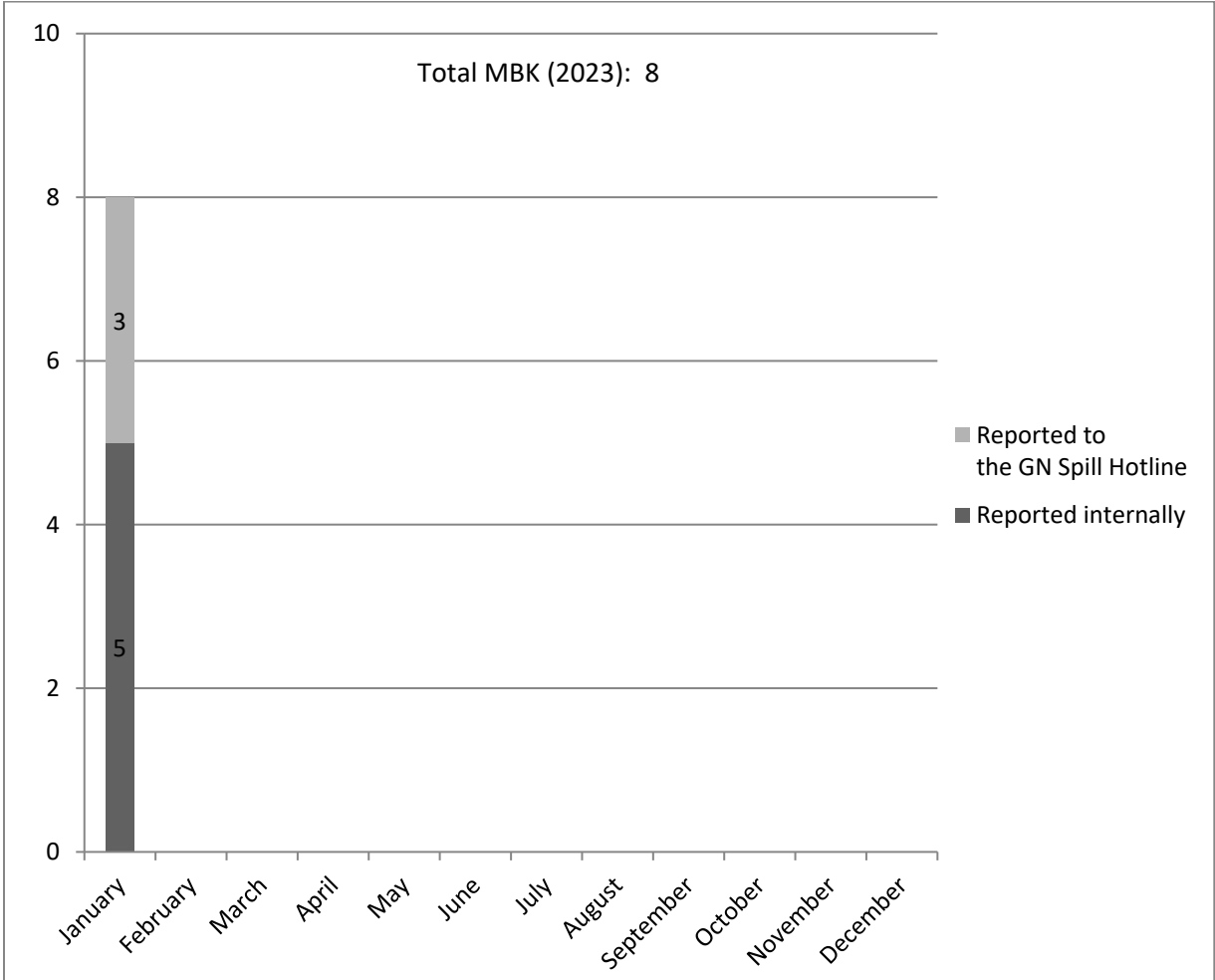


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, January 2023

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
1/5/2023	Diesel Fuel	450	L	AWAR KM 97	Tanker off road	Spill pads and spill booms were immediately placed on the ground. A tarp was used to create a secondary containment at the fuel leak and immediately pumped back into the vacuum truck. The fuel in the tanker on its side was transferred into an empty tanker Fuel collected in the secondary containment was pumped into the vacuum truck. The fuel tanker contained 36,075L and 35,675L was recovered, accounting for a loss of 400L of Diesel fuel. The area was scraped clean and approximately 21m ³ of contaminated snow and material was collected and brought to the Meadowbank landfarm.
1/7/2023	Transmission Oil	250	L	Winter Parking	Equipment failure	Secondary containment was placed under the leak and spill pads were immediately placed on the ground over the spill area. The area was scraped clean with a loader and approximately 10m ³ of contaminated snow and material was collected and brought to the Meadowbank landfarm.
1/12/2023	Coolant	20	L	End of Airstrip	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
1/13/2023	Coolant	20	L	Road by Airport	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
1/21/2023	Hydraulic Oil	10	L	Crusher Pad	Equipment damage due to procedure not being followed	Contaminated soil was collected and brought to a yellow bin for disposal.
1/25/2023	Windshield washer	30	L	LHT Fuel Station	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
1/26/2023	Windshield Washer Fluid	250	L	Site Services Yard	Punctured tote	Approximately 4m ³ of contaminated snow and material was and brought to the South cell tailings area.
1/30/2023	Diesel Fuel	10	L	Fuel Farm	Equipment malfunction	Contaminated soil was collected and brought to a yellow bin for disposal.