



MEADOWBANK COMPLEX

Monitoring Program Summary Report

November 2022

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	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
Total Freshwater Usage (m³)		52,381	213,655	140,268	59,997	56,052	76,434
Ore Water (m³)	Ore	1,927	3,310	4,302	4,572	3,948	2,581
Reclaim Water Usage (m³)	Tailings Pond	266,541	72,375	214,517	249,495	240,145	250,371

Water Location	Source Lake	July	Aug	Sept	Oct	Nov	Total
Camp	Third Portage Lake	3,082	3,047	2,982	3,074	3,040	32,736
Mill (freshwater tank)	Third Portage Lake	70,603	77,975	78,385	61,162	63,607	932,744
Emulsion plant	Unnamed Lake	0	0	0	0	0	263
Total Freshwater Usage (m³)		73,685	81,022	81,367	64,236	66,647	965,743
Ore Water (m³)	Ore	2,453	1,971	2,644	3,795	5,778	37,281
Reclaim Water Usage (m³)	Tailings Pond	280,756	267,093	256,410	249,390	275,539	2,622,633

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In November, 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 November, 28,115 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 November, 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 November.

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 November, no water was pumped from the Stormwater Management pond to the tailings storage facility.

Table 2.6.1: Seprotech Effluent Results

Parameters	Units	November 7, 2022
Unionized Ammonia (NH ₃)	mg N/L	0.11
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	35
Total Kjeldahl Nitrogen	mg N/L	35
BOD-5	mg/L	7
COD	mg/L	55
Total Suspended Solids	mg/L	7
Nitrate	mg N/L	5.45
Nitrite	mg N/L	2.04
pH*	Units	6.90
Fecal Coliform	UFC/100 mL	180
Total Coliform	UFC/100 mL	800

*Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	November 7, 2022
Unionized Ammonia (NH ₃)	mg N/L	0.0016
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	15
Total Kjeldahl Nitrogen	mg N/L	17
BOD-5	mg/L	11
COD	mg/L	62
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	11.5
Nitrite	mg N/L	1.02
pH*	Units	5.40
Fecal Coliform	UFC/100 mL	100
Total Coliform	UFC/100 mL	900

*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 began on November 20th and continued for the remainder of the month, a total of 2,974 m³ was discharged.

Two (2) weekly effluent samples were collected at ST-8 in November 2022. 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 November are provided in Table 2.9.1 below.

Table 2.9.1 East Dike Seepage Results for TSS

Parameter	Unit	Sample Date		Monthly Average
		11/21/2022	11/28/2022	
Total Suspended Solids	mg/L	< 1	< 1	0.5

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

Table 2.9.2: November 2022 Monthly Monitoring Results

Parameter	Unit	Sample Date
		11/21/2022
pH*	-	8.05
Aluminum	mg/L	0.0245
Sulphate	mg/L	6.6
Arsenic	mg/L	0.00123
Copper	mg/L	0.00126
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	0.2
Un-Ionized Ammonia	mg/L	< 0.00049

* 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 November 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 2022 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for November.

Six (6) spills occurred on site during the month with two (2) 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

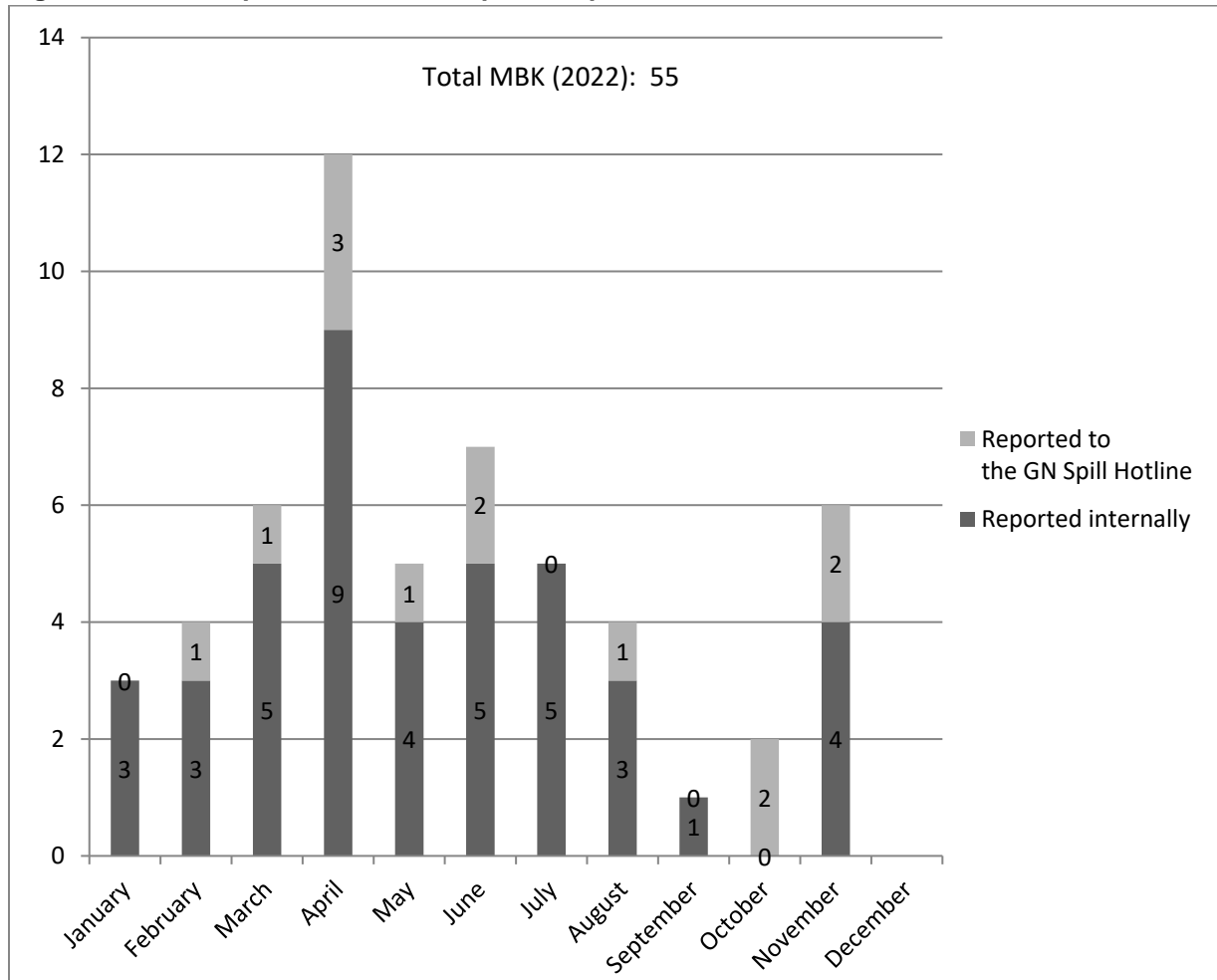


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, November 2022

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
11/9/2022	Engine Oil	1	L	Baker Lake	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
11/13/2022	Diesel Fuel	0	L	Fuel Farm	Leaking tank	Before product went to the ground installed spills pads and had containment barrel ready. Disposed rags in the bin in SS coverall.
11/21/2022	Hydraulic Oil	80	L	Warehouse Laydown	Equipment failure	Contaminated soil was collected and brought to a yellow bin for disposal.
11/25/2022	Diesel Fuel	40	L	Tanker Farm	Human error	Contaminated soil was collected and brought to a yellow bin for disposal.
11/26/2022	Contaminated Water	140	L	Underneath Main Camp	Sewage line failure	The connection was repaired immediately and a re-inspection of all sewage lines on site was completed. The spill occurred in a confined space under the building. Skirting around the camp will be removed to access the spill in spring once accessible and free of snow buildup. A combination of steaming machine and vacuum truck will be used in the confined space to cleanup the frozen sewage (estimated removal date – May 2023).
11/28/2022	Diesel Fuel	29,000	L	AWAR KM 87	Equipment Rollover	Trenches were excavated to contain the spill. Slush and liquid picked up will be disposed in totes. Contaminated solids will be disposed at the at MBK site as per approved protocol. Contaminated snow will be placed at the stormwater management pond. Contaminated area was delineated, to ensure remediation work will cover entire potential contamination zone. Remaining fuel in the tanker was transferred into another tanker.