



MEADOWBANK DIVISION

Monitoring Program Summary Report

September 2021

Type A Water License 2AM-MEA1530

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SECTION 1 • BACKGROUND

On May 13, 2020, Agnico 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 Pit Project.

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 and reclaim 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	2,639	2,334	2,376	2,297	2,536	2,408
Mill (freshwater tank)	Third Portage Lake	125,901	87,438	87,445	78,643	98,397	81,913
Emulsion plant	Unnamed Lake	104	90	127	118	133	64
Total Freshwater Usage (m³)		128,644	89,862	89,948	81,058	101,066	84,385
Ore Water (m³)	Ore	4,408	3,310	3,684	2,416	3,310	3,561
Reclaim Water Usage (m³)	Tailings Pond	237,647	205,445	277,684	171,821	209,538	237,348

Water Location	Source Lake	July	Aug	Sept	Total
Camp	Third Portage Lake	2,665	2,721	2,845	22,821
Mill (freshwater tank)	Third Portage Lake	120,687	104,144	93,228	877,796
Emulsion plant	Unnamed Lake	115	124	165	1,041
Total Freshwater Usage (m³)		123,467	106,989	96,239	901,658
Ore Water (m³)	Ore	3,310	4,064	4,530	32,593
Reclaim Water Usage (m³)	Tailings Pond	194,844	246,887	255,378	2,036,592

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In September, a total of 9,655 m³ of water was pumped back to the North Cell TSF from the ST-16 sump. No water was transferred from WEP1 sump and WEP2 sump to the ST-16 sump during the month.

Agnico Eagle completed inspections at the Portage and Vault RSFs, no non-conformities were found during the month.

2.3 CENTRAL DIKE SEEPAGE

In September, 109,976 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 September, 1,090 m³ of water was pumped from the mill trench back to the mill. 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 September.

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 September, a total of 572 m³ of water was pumped from the Stormwater Management pond to the tailings storage facility.

Table 2.6.1: Seprotech Effluent Results

Parameters	Units	September 6, 2021
Ammonia (NH ₃)	mg N/L	0.046
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	25
Total Kjeldahl Nitrogen	mg N/L	23
BOD-5	mg/L	6
COD	mg/L	51
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	18.6
Nitrite	mg N/L	1.2
pH*	Units	6.66
Fecal Coliform	UFC/100 mL	1400
Total Coliform	UFC/100 mL	<1000

*Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	September 6, 2021
Ammonia (NH ₃)	mg N/L	0.043
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	42
Total Kjeldahl Nitrogen	mg N/L	34
BOD-5	mg/L	9
COD	mg/L	77
Total Suspended Solids	mg/L	22
Nitrate	mg N/L	50.1
Nitrite	mg N/L	0.075
pH*	Units	6.35
Fecal Coliform	UFC/100 mL	<10
Total Coliform	UFC/100 mL	<100,000

*Parameter measured by STP operators

2.7 VAULT ATTENUATION POND EFFLUENT

No discharge has occurred from the Vault Attenuation Pond since October 9, 2017. There is currently no plan to restart the discharge in the future.

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 the month of September, water from the East Dike was discharged into Pit E.

2.10 NON CONTACT WATER

In September, Agnico Eagle completed inspections at Portage Area East diversion ditch (ST-5) and West diversion ditch (ST-6) and no non-conformities were found. 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) permitted by the Water License, Part F, Item 7. Both stations did not exceed the maximum average concentration (15 mg/L).

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

Parameters	Units	September 19, 2021
Total Suspended Solids	mg/L	1

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

Parameters	Units	September 19, 2021
Total Suspended Solids	mg/L	3

2.11 IN-PIT DISPOSAL

In-Pit tailings disposal occurred in Portage Pit E and reclaim water was taken from Portage Pit A for the month.

SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2021 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for September.

Seven (7) 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 2021 Reported and Non-Reported Spills

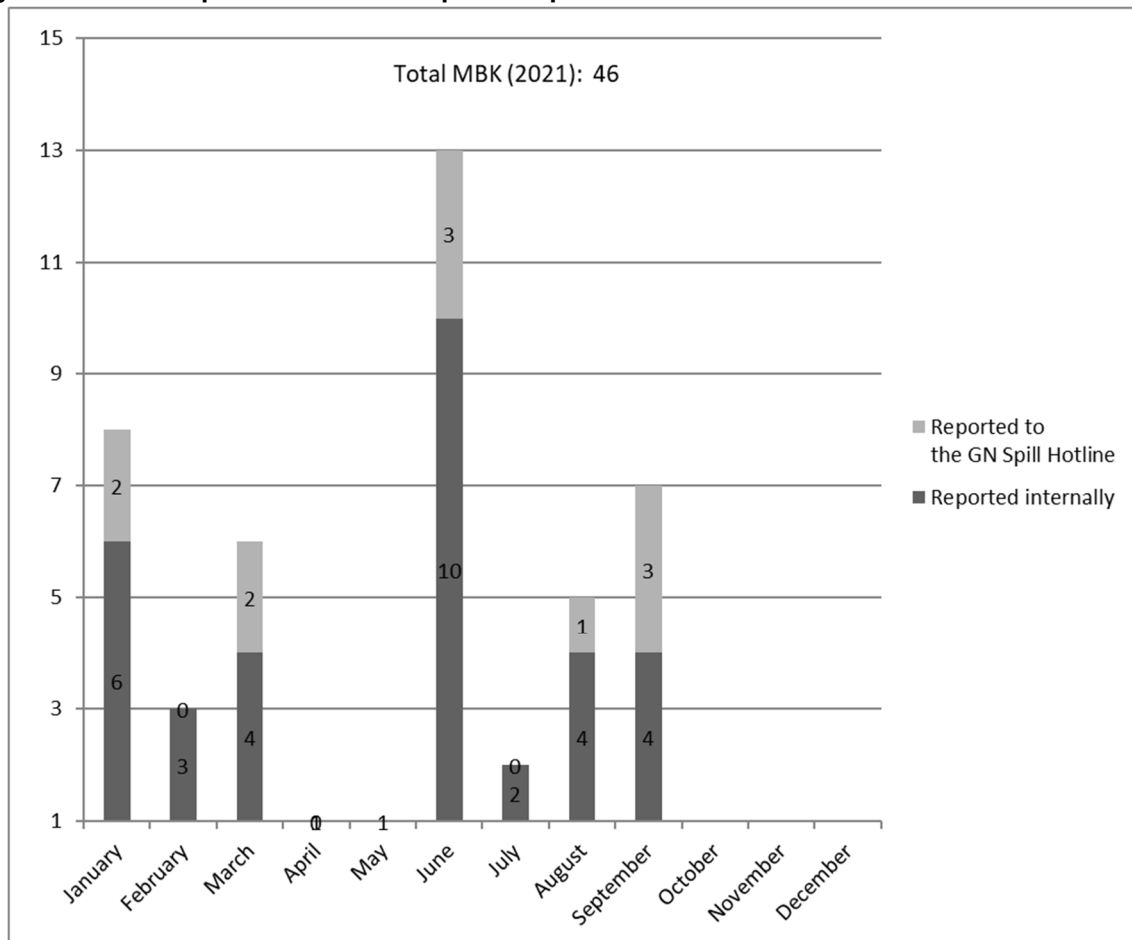


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, September 2021

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
9/1/2021	Coolant	40	L	Laydown Row 3	Defective tote. While removing a coolant tote from the sea-can in row 3, a hole (size of a pen) occurred in the middle of the tote causing a leak.	The zoom boom operator immediately flipped the tote onto its side to stop the leak. The remaining coolant was switched to a new tote and the contaminated soil was adequately disposed of.
9/8/2021	Oil, Coolant, and Diesel Fuel	11650	L	Blind Hill EMR (bottom)	9,000L of coolant, 2,600L of oil and 50L of diesel fuel spilled. from containers damaged during a tip over of a tractor-trailer on the AWAR near KM 103.	ERT responded to the event to contain the spill. Absorbent pads, combined with a localized low point and trenches were utilized to contain the spill. A vacuum truck was used to pick up the contaminated liquid and was disposed in the tailings facilities as well as 1000L totes. Contaminated material was excavated and brought back to the Meadowbank facility.
9/8/2021	Contaminated Water	280	m3	Tank 5 & 6 Containment, Tank Farm, Baker Lake	During the transfer of potentially contaminated water with diesel from the secondary containment of tanks 5 and 6 towards secondary containment tanks 3 and 4, a certain portion of the flow have migrated towards the tundra due to the misplacement of the discharge pipe of water transfer between ST-40.1 and ST-40.2	Hydrocarbon spill booms and woodchip turbidity booms were deployed in 2 visible streams to minimize potential impact on the Environment. Monitoring actions at the Baker Lake tank farm began on September 10th and included, petroleum test strip testing, soil sampling downstream of the discharge point, and sampling of water stations ST-40.1 and ST-40.2. Further monitoring actions along the Baker Lake shoreline included an acute lethality of effluent to Daphnia Magna and Rainbow Trout analysis, and daily water quality sampling from September 10th – 15th, excluding the 13th, and weekly until freeze-up thereafter. An internal investigation was initiated.
9/18/2021	Emulsifier N-59	20	L	Baker Lake Spud Barge	Improper storage. Drum of emulsifier flipped on its side and burst inside sea-can.	The sea-can was emptied, and the burst drum was isolated and brought to the end user. Spill pads were used, and the contaminated soil was disposed of in a drum.

9/20/2021	Emulsifier N-59	20	L	Baker Lake Spud Barge	Improper storage. Drum flipped over during sea-can transportation causing a leak from the cap.	Sea-can was emptied, and the drum was placed into the proper position. Spill pads were used, and the contaminated soil was disposed of in a drum.
9/24/2021	Waste Oil	250	L	Meadowbank CAT Dome	The cap of the tote had not been unscrewed thus creating suction and perforation of the tote.	Spill pads were used to control the spill. The contaminated material is being collected and will be brought to the landfarm at Meadowbank.
9/30/2021	Diesel Fuel	15	L	Baker Lake fuel farm	Equipment damage on fuel system	Fuel pipes were fixed. Absorbent pads were used and adequately disposed of in yellow bins.