

# MEADOWBANK DIVISION

# Monitoring Program Summary Report October 2021

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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 (m <sup>3</sup> )	Ore	4 408	3 310	3 684	2 416	3 310	3 561
Reclaim Water Usage (m <sup>3</sup> )	Tailings Pond	237 647	205 445	277 684	171 821	209 538	237 348

Water Location	Source Lake	July	Aug	Sept	Oct	Total
Camp	Third Portage Lake	2 665	2 721	2 845	2 989	25 810
Mill (freshwater tank)	Third Portage Lake	120 687	104 144	93 228	110 522	988 318
Emulsion plant	Unnamed Lake	115	124	165	130	1 172
Total Freshwater Usage (m³)		123 467	106 989	96 239	113 641	1 015 300
Ore Water (m³)	Ore	3 310	4 064	4 530	3 424	36 017
Reclaim Water Usage (m³)	Tailings Pond	194 844	246 887	255 378	196 739	2 233 331

# 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In October, a total of 7,378 m³ of water was pumped back to the North Cell TSF from the ST-16 sump. Of that amount, 1,336 m³ was transferred from WEP1 sump and 1,797 m³ from 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 October, 123,466 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 October, 2,161 m<sup>3</sup> 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 October.

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

**Table 2.6.1: Seprotech Effluent Results** 

Parameters	Units	October 5, 2021
Ammonia (NH <sub>3</sub> )	mg N/L	0.092
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	24
Total Kjeldahl Nitrogen	mg N/L	24
BOD-5	mg/L	6
COD	mg/L	60
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	15.1
Nitrite	mg N/L	0.593
pH*	Units	6.88
Fecal Coliform	UFC/100 mL	100
Total Coliform	UFC/100 mL	900

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

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	October 5, 2021
Ammonia (NH <sub>3</sub> )	mg N/L	0.029
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	18
Total Kjeldahl Nitrogen	mg N/L	15
BOD-5	mg/L	7
COD	mg/L	65
Total Suspended Solids	mg/L	24
Nitrate	mg N/L	18.9
Nitrite	mg N/L	0.142
pH*	Units	6.51
Fecal Coliform	UFC/100 mL	100
Total Coliform	UFC/100 mL	900

<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. 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 October, water from the East Dike was discharged into Pit E.

#### 2.10 NON CONTACT WATER

In October, 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

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Parameters	Units	October 3, 2021
Total Suspended Solids	mg/L	1

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

Parameters	Units	October 3, 2021
Total Suspended Solids	mg/L	1

# 2.11 IN-PIT DISPOSAL

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

Ten (10) spills occurred on site during the month with five (5) 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.

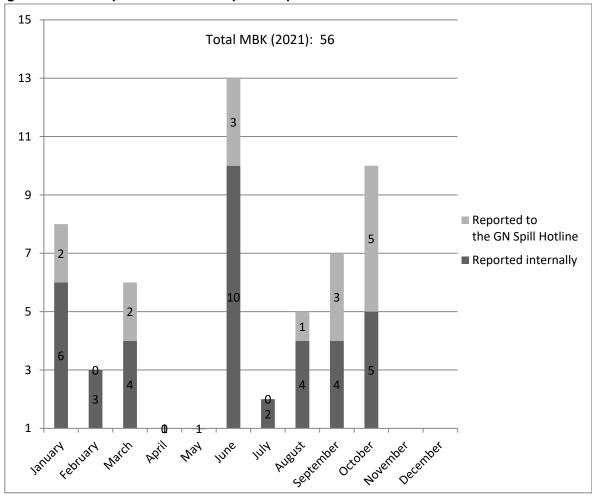


Figure 3.1 2021 Reported and Non-Reported Spills

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

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
10/2/2021	Transmission Oil	35	L	Meadowbank Lube Station	Leak from broken tote	Delineators were set up to mark the area. Contaminated material was collected and brought to the yellow bins for disposal.
10/4/2021	Petroleum Product	1	L	Baker Lake Spud Barge	Unknown	A CIRNAC inspector contacted Agnico Eagle to report a petroleum product that was photographed in the water near the Marshalling Facilities, along the floating dock. Agnico Eagle inspected the spud barge upon notification and found no remaining evidence of petroleum product in or near the water. The inspection frequency of the Spud Barge was increased following the notification by CIRNAC, until barge activities were completed.
10/9/2021	Diesel Fuel	90	L	Exploration Camp	Equipment failure	Contaminated soil was picked up and disposed of at the Meadowbank landfarm.
10/9/2021	Sewage	100	L	Baker Lake Spud Barge	Damaged pipe	A small trench was dug on the pad to collect possible run off and a plumber was called to fix the pipe. The sewage tank was removed and the area underneath and around the spill was collected with an excavator. Contaminated material was collected and brought to the Meadowbank landfarm for disposal.
10/12/2021	Unknown	TBD	L	Baker Lake	Unknown	Following the detection of the spill, the Emergency Response Plan was initiated. The ship-to-shore fuel transfer was stopped, and thorough inspection of all lines and areas surrounding the boat was performed. A clean-up operation was launched, by using U-shape petroleum absorbent booms pulled by boats. None of the used material absorbed the apparent sheen.

10/15/2021	Diesel Fuel	80	L	Leach Tanks	Leak during fuelling	Absorbent pads used to control the spill and contaminated soil was adequately disposed of in a yellow bin.
10/17/2021	Lead Nitrate	250	Kg	Meadowbank Landfill	Improper disposal	Mill workers identified the damaged Lead Nitrate bag at the landfill and barricaded the area off. The vacuum truck and excavator were used to collect the spilled Lead Nitrate and brought to the tailings area at Meadowbank where it was adequately disposed of. The lead nitrate remaining in the original mega bag was brought back to the Mill for use.
10/19/2021	Coolant	150	L	Transit Laydown	Punctured tote	The punctured tote was flipped on its side to minimize the spill and coolant was transferred to an empty tote. The contaminated soil was scraped up and adequately disposed of in the tailings facility at Meadowbank.
10/23/2021	Transmission Oil	20	L	Winter Parking	Equipment leak	Contaminated material was collected and brought to the yellow bins for disposal.
10/28/2021	Sulfur Prills	0.5	Kg	Meadowbank Landfill	Improper disposal	An email was sent to Process Plant supervisors to reiterate the need to segregate all garbage not allowed at the land fill before putting into a roll off container. The spill was cleaned up and adequately disposed of at the tailings facility.