



MEADOWBANK DIVISION

Monitoring Program Summary Report

August 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	Total
Camp	Third Portage Lake	2 665	2 721	19 976
Mill (freshwater tank)	Third Portage Lake	120 687	104 144	784 568
Emulsion plant	Unnamed Lake	115	124	876
Total Freshwater Usage (m³)		123 467	106 989	805 420
Ore Water (m³)	Ore	3 310	4 064	28 063
Reclaim Water Usage (m³)	Tailings Pond	194 844	246 887	1 781 214

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In August, a total of 4,395 m³ of water was pumped back to the North Cell TSF from the ST-16 sump. Of that amount, 817 m³ was transferred from WEP1 sump and 297 m³ from WEP2 sump to the ST-16 sump.

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

2.3 CENTRAL DIKE SEEPAGE

In August, 48,939 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 August, 1,247 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 August.

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 August, a total of 2,045 m³ of water was pumped from the Stormwater Management pond to the tailings storage facility.

Table 2.6.1: Seprotech Effluent Results

Parameters	Units	August 2, 2021
Ammonia (NH ₃)	mg N/L	0.057
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	13
Total Kjeldahl Nitrogen	mg N/L	13
BOD-5	mg/L	6
COD	mg/L	47
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	22.5
Nitrite	mg N/L	<0.010
pH*	Units	6.00
Fecal Coliform	UFC/100 mL	<10,000
Total Coliform	UFC/100 mL	<10,000

*Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	August 2, 2021
Ammonia (NH ₃)	mg N/L	0.019
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	19
Total Kjeldahl Nitrogen	mg N/L	16
BOD-5	mg/L	5
COD	mg/L	48
Total Suspended Solids	mg/L	26
Nitrate	mg N/L	14.9
Nitrite	mg N/L	0.389
pH*	Units	6.10
Fecal Coliform	UFC/100 mL	<10
Total Coliform	UFC/100 mL	2,700

*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 August, water from the East Dike was discharged into Pit E.

2.10 NON CONTACT WATER

In August, 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	August 2, 2021
Total Suspended Solids	mg/L	2

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

Parameters	Units	August 2, 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 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 August.

Five (5) spills occurred on site during the month with one (1) 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. There was no off-site impact to any watercourses.

Figure 3.1 2021 Reported and Non-Reported Spills

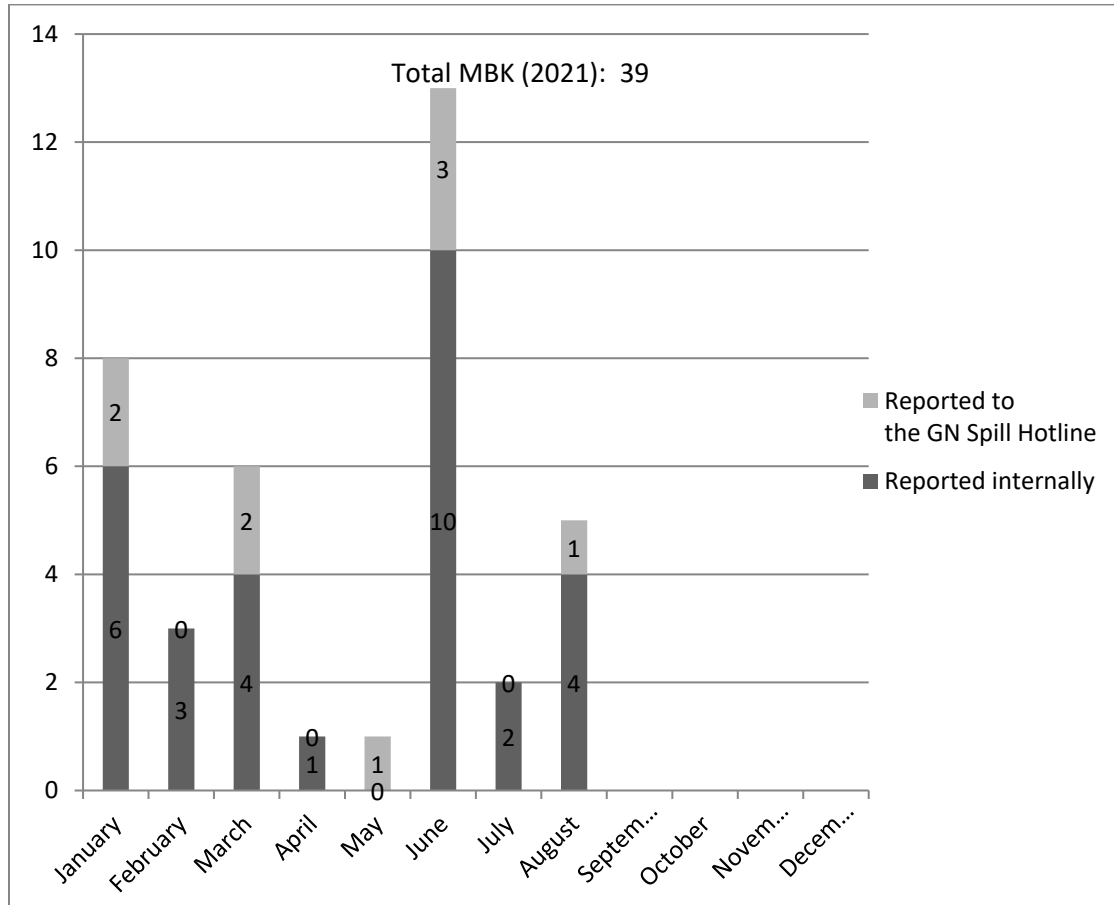


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, August 2021

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
2021-08-04	Contaminated Water	40	L	Secondary containment	Equipment leak	Containment was pumped out and contaminated soil was removed and adequately disposed of.
2021-08-18	Cupric Sulphate	10	Kg	Transit Laydown	During operations at Meadowbank, the hyster operator removed a sea can from the flatbed and noticed that copper sulphate was leaking from underneath it. He then placed it on the ground.	The copper sulphate in the sea can and on the ground that could be picked up, were placed in some quatrex bags and then brought to the HAZMAT laydown.
2021-08-23	Diesel Fuel	20	L	Baker Lake Fuel Farm	Fuelling procedure not properly followed	Contaminated soil was pushed up and removed by a loader. The contaminated soil was adequately disposed of.
2021-08-26	Hydraulic Oil	15	L	Construction Office	Broken hydraulic hose	Spill pads were placed immediately on ground to absorb the spill. Contaminated rags disposed of at the Hazmat area and contaminated solid was picked up and disposed of in the appropriate area. The zoom boom has been parked and a locked out until will be repaired.
2021-08-27	Sulfur Pills	0.3	Kg	Meadowbank Landfill	Improper disposal of sulphur pills	The sulphur pills were disposed of in the tailings sump pump of the process plant. Reagent operators and other workers of the Process Plant were advised to not dispose of sulphur pills in the garbage.