



MEADOWBANK DIVISION

Monitoring Program Summary Report

March 2020

Type A Water License 2AM-MEA1526

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SECTION 1 • BACKGROUND

As required under Part I, Item 20 of Type A Water License 2AM-MEA1526 (Amendment No.3), this report documents the water management and monitoring activities at the mine site for the month. This includes water usage, Vault Attenuation Pond discharge water quality, Phaser Attenuation Pond, 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 In-Pit disposal update.

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 March is summarized in Table 2-1 below.

Table 2-1: Freshwater Usage (m³)

Water Location	Source Lake	Jan	Feb	March	Total
Camp	Third Portage Lake	3 612	3 264	3 141	10 017
Mill (freshwater tank)	Third Portage Lake	220 085	229 949	270 242	720 276
Emulsion plant	Unnamed Lake	67	76	75	217
Total Freshwater Usage (m³)		223 764	233 289	273 458	730 510
Ore Water (m³)	Ore	4 668	3 821	2 306	10 795
Reclaim Water Usage (m³)	Tailings Pond	155	295	1 828	2 278

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In March, no water was pumped back to the North Cell TSF from the ST-16 sump due to freezing conditions. No water was transferred from the WEP1 and WEP2 sumps to the ST-16 sump.

Agnico Eagle completed in March inspections at the Portage and Vault RSFs. No non-conformities were found. No open water sampling at WEP1 (Station ST-30) and WEP2 (Station ST-31) were also completed during the month.

2.3 CENTRAL DIKE SEEPAGE

In March, a total of 36,347 m³ of water was pumped from ST-S-5 sump to Portage Pit A.

Sampling was conducted monthly at ST-S-5 as per the requirements of the NWB water license.

Daily visual inspections were also completed by the Engineering Department.

2.4 ASSAY ROAD SEEPAGE

In March, no of water was pumped back from the mill trench back to the mill. Inspections of the area were conducted during the month. No trench sampling and wells monitoring for CN downstream has been taken due to freezing conditions.

2.5 SEEPAGE AND RUNOFF FROM THE LANDFILL

The landfill was inspected weekly and no seepage or runoff was observed.

2.6 SEEPAGE AT PIT WALL AND PIT WALL FREEZE/THAW AND PERMAFROST AGGRADATION

In March, ice wall continued to be observed into Vault Pit. There is no more mining activities in Vault Pit.

2.7 SEWAGE TREATMENT PLANT

One (1) effluent wastewater sample was collected at the onsite sewage treatment plant (STP) in March.

The Seprotech STP results are shown in Table 2.7.1 below; the LJ-Mix STP results are shown in Table 2.7.2. The effluent is discharged to the Stormwater Management pond. In March, no water was discharged from the Stormwater Management pond.

Table 2.7.1: Seprotech Effluent Results

Parameters	Units	March 2, 2020
Ammonia (NH ₃)	mg N/L	0.77
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	43.13
Total Kjeldahl Nitrogen	mg N/L	47
BOD-5	mg/L	9
COD	mg/L	58
Total Suspended Solids	mg/L	10
Nitrate	mg N/L	2.76
Nitrite	mg N/L	1.39
pH*	Units	7.50
Fecal Coliform	UFC/100 mL	120
Total Coliform	UFC/100 mL	5,000

*Parameter measured by STP operators

Table 2.7.2: LJ-Mix Effluent Results

Parameters	Units	March 2, 2020
Ammonia (NH ₃)	mg N/L	0.03
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	7.28
Total Kjeldahl Nitrogen	mg N/L	12
BOD-5	mg/L	10
COD	mg/L	61
Total Suspended Solids	mg/L	10
Nitrate	mg N/L	11.5
Nitrite	mg N/L	1.76
pH*	Units	6.80
Fecal Coliform	UFC/100 mL	>6,000
Total Coliform	UFC/100 mL	150,000

*Parameter measured by STP operators

2.8 VAULT ATTENUATION POND EFFLUENT

No discharge from Vault Attenuation Pond since October 9, 2017. There is currently no plan to restart the discharge in 2020.

2.9 PHASER ATTENUATION POND

No water was pumped out from the Phaser Attenuation Pond in March.

No water transferred from BB Phaser Pit sumps to the Phaser Attenuation Pond during the month.

2.10 EAST DIKE SEEPAGE EFFLUENT

In March, the discharge to Second Portage Lake was ongoing for the whole month. A total of 13,949 m³ of water was discharged during the month.

Five (5) weekly effluent samples were collected at ST-8 in March 2020. TSS results did not exceed the maximum allowable grab sample concentration (30 mg/L) and maximum average concentration (15 mg/L) permitted by Water License, Part F, Item 6. TSS monitoring results for March 2020 are shown in Table 2.10.1 below. There have been no exceedances of MDMER criteria.

Table 2.10.1: East Dike Seepage Results for TSS

Parameters	Units	March 2, 2020	March 9, 2020	March 19, 2020	March 23, 2020	March 30, 2020	Maximum Average Concentration
Total Suspended Solids	mg/L	3	5	2	2	3	3

Monthly regular sampling pursuant to the Water License was also conducted at this location. Results are shown in Table 2.10.2 below. There have been no exceedances of MDMER for those criteria.

Table 2.10.2: March 2020 Monthly Monitoring Results

Parameters	Units	March 2, 2020
pH*		7.97
Aluminum	mg/L	0.017
Sulphate	mg/L	6.2
Arsenic	mg/L	0.0005
Copper	mg/L	0.0016
Nickel	mg/L	<0.0005
Lead	mg/L	<0.0003
Zinc	mg/L	<0.001
Radium 226	mg/L	0.008
Total Cyanide	mg/L	<0.001

2.11 NON CONTACT WATER

In March, no monthly open water sampling conducted at Portage Area East (ST-5) and West diversion ditches (ST-6).

2.12 IN-PIT DISPOSAL

In-Pit disposal in Goose Pits was ongoing for March. No issues to report. Discussion regrading the Pore Water Quality Management Plan update was held with CIRNAC and ECCC in February. Updated plan will be submitted with the 2019 Annual Report in April.

SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2020 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for March.

All spills reported internally (4) were managed appropriately on site according to Agnico's spill contingency plan. One (1) spill was reported to regulators in March. Spills were contained and cleaned, contaminated material was disposed to the appropriate area (landfarm, TSF if required), and the clean-up actions were monitored closely by the Environment Department. There was no off-site impact to any watercourses.

Figure 3.1 2020 Reported and Non-Reported Spills

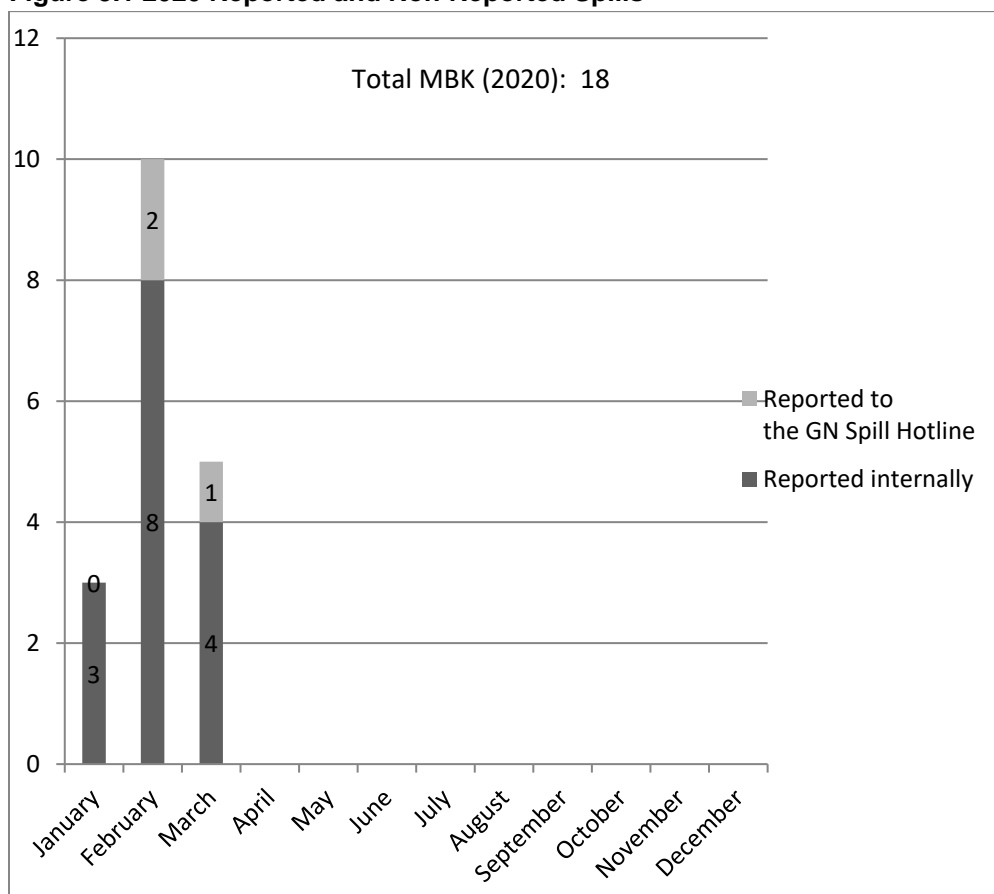


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, March 2020

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
March 1, 2020	Calcium chloride	2	Kg	Mill door B	Employee brought 4 calcium chloride bags to the mill door B and 1 of them had a hole on the side	Used plastic wrapping to stop the spill. Contaminated soil picked up and disposed of on the tailings at the Mill
March 11, 2020	Hydraulic Oil	100	L	MBK truck shop parking	During operations at Meadowbank, an operator was moving a tote outside the Maintenance shop and punctured the tote with forks of the loader. Spill pads were placed on the ground and the tote was tipped on its side to prevent any further spill.	Spill pads were collected and brought to the hazmat area. Approximately 2m ³ of contaminated snow and material was collected and brought to the landfarm at Meadowbank.
March 13, 2020	Hydraulic Oil	20	L	Maintenance Shop, in front of door 10	Hydraulic hose failure	Spill was contained and contaminated soil picked up and disposed of adequately
March 18, 2020	Coolant	5	L	AWAR km 19	Truck rolled over and engine fluid leaked out	Secondary container was installed underneath. Spill was contained and contaminated soil picked up and disposed of appropriately
March 29, 2020	Coolant	5	L	Vault Parking	Leak on heating system.	Put absorbant pad on ground and inside the compartment to avoid fluid to drop on ground. Shut down the heating system and repair the leak. Contaminated soil was brought to the yellow bin