



MEADOWBANK DIVISION

Monitoring Program Summary Report

April 2020

Type A Water License 2AM-MEA1526

Table of Contents

SECTION 1 • BACKGROUND 3

SECTION 2 • WATER MANAGEMENT 4

2.1 WATER USAGE4

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE4

2.3 CENTRAL DIKE SEEPAGE4

2.4 ASSAY ROAD SEEPAGE4

2.5 SEEPAGE AND RUNOFF FROM THE LANDFILL.....4

2.6 SEEPAGE AT PIT WALL AND PIT WALL FREEZE/THAW AND PERMAFROST AGGRADATION4

2.7 SEWAGE TREATMENT PLANT5

2.8 VAULT ATTENUATION POND EFFLUENT5

2.9 PHASER ATTENUATION POND6

2.10 EAST DIKE SEEPAGE EFFLUENT.....6

2.11 NON CONTACT WATER7

2.12 IN-PIT DISPOSAL7

SECTION 3 • SPILL MANAGEMENT 8

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 April is summarized in Table 2-1 below.

Table 2-1: Freshwater Usage (m³)

Water Location	Source Lake	Jan	Feb	March	April	Total
Camp	Third Portage Lake	3 612	3 264	3 141	2 155	12 172
Mill (freshwater tank)	Third Portage Lake	220 085	229 949	270 242	219 998	940 274
Emulsion plant	Unnamed Lake	67	76	75	70	286
Total Freshwater Usage (m³)		223 764	233 289	273 458	222 223	952 732
Ore Water (m³)	Ore	4 668	3 821	2 306	0	10 795
Reclaim Water Usage (m³)	Tailings Pond	155	295	1 828	3 079	5 357

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In April, 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 April 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 April, a total of 29,543 m³ of water was pumped from ST-S-5 sump to Portage Pit.

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 April, 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 April, ice wall continued to be observed into Vault Pit. There are 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 April.

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 April, no water was discharged from the Stormwater Management pond.

Table 2.7.1: Seprotech Effluent Results

Parameters	Units	April 6, 2020
Ammonia (NH ₃)	mg N/L	<0.01
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	0.96
Total Kjeldahl Nitrogen	mg N/L	3.7
BOD-5	mg/L	3
COD	mg/L	56
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	13.0
Nitrite	mg N/L	0.57
pH*	Units	6.10
Fecal Coliform	UFC/100 mL	<10
Total Coliform	UFC/100 mL	3,000

*Parameter measured by STP operators

Table 2.7.2: LJ-Mix Effluent Results

Parameters	Units	April 6, 2020
Ammonia (NH ₃)	mg N/L	<0.01
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	9.71
Total Kjeldahl Nitrogen	mg N/L	11
BOD-5	mg/L	2
COD	mg/L	37
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	26.7
Nitrite	mg N/L	0.16
pH*	Units	5.20
Fecal Coliform	UFC/100 mL	800
Total Coliform	UFC/100 mL	<10,000

*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 April.

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

2.10 EAST DIKE SEEPAGE EFFLUENT

In April, the discharge to Second Portage Lake was ongoing for the whole month. A total of 12,548 m³ of water was discharged during the month.

Four (4) weekly effluent samples were collected at ST-8 in April 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	April 6, 2020	April 13, 2020	April 20, 2020	April 27, 2020	Maximum Average Concentration
Total Suspended Solids	mg/L	4	8	6	4	5.5

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: April 2020 Monthly Monitoring Results

Parameters	Units	April 6, 2020
pH*		7.51
Aluminum	mg/L	0.067
Sulphate	mg/L	16.0
Arsenic	mg/L	0.0257
Copper	mg/L	0.0019
Nickel	mg/L	0.0044
Lead	mg/L	<0.0003
Zinc	mg/L	0.002
Radium 226	mg/L	0.010
Total Cyanide	mg/L	0.002

2.11 NON CONTACT WATER

In April, 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 April. No issues to report. Discussion regrading the Pore Water Quality Management Plan update was held with CIRNAC and ECCC in February. Updated plan submitted with the 2019 Annual Report on April 21st, 2020.

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 April.

One (1) spill was reported during the month and was managed appropriately on site according to Agnico's spill contingency plan. Spill was contained and cleaned, contaminated material was disposed to the appropriate area (landfarm), 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

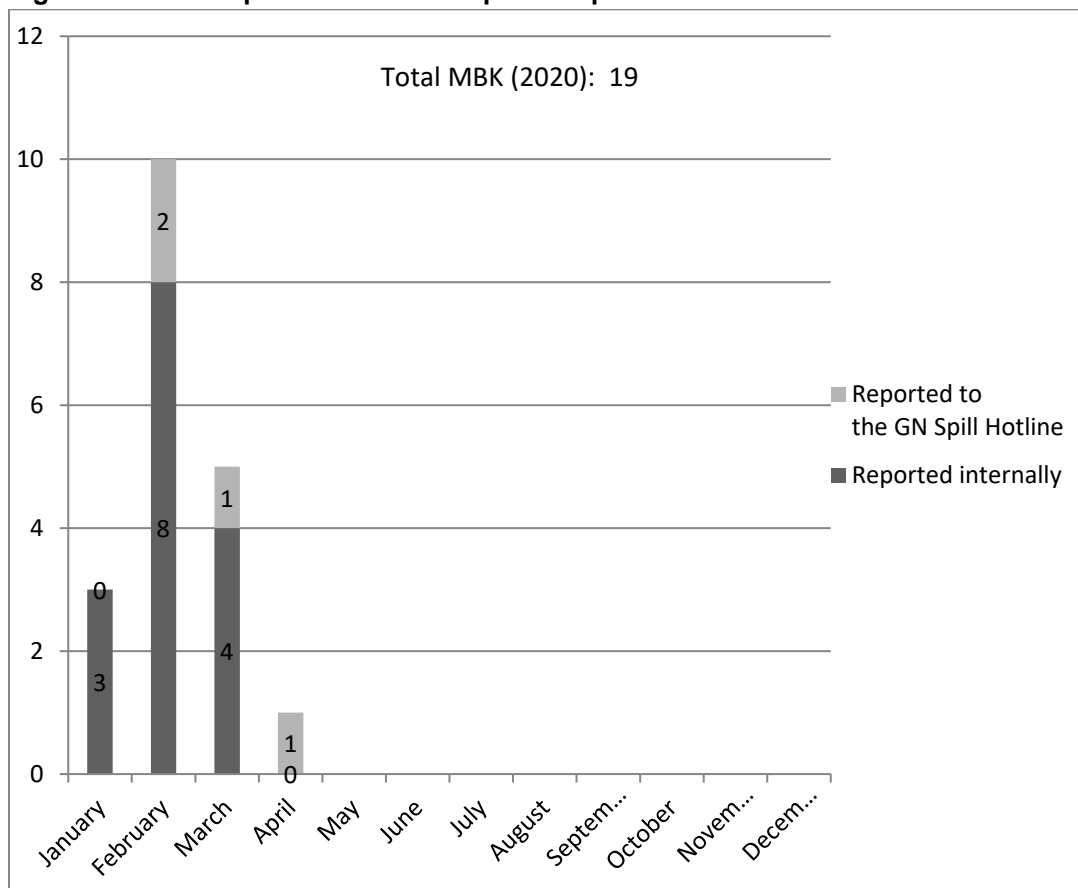


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, April 2020

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
April 7, 2020	Diesel	100	L	Transit Area	Punctured Fuel cap - During operations at Meadowbank, both side-mounted fuel tanks were filled on tractor truck 14 by the operator with Diesel fuel at the end of shift. The next morning, the operator noticed that fuel was leaking from a small hole in the fuel tank cap	Spill pads were placed on the ground and the truck was parked in a flat area. Spill pads were collected and brought to the hazmat area. Approximately 3m ³ of contaminated snow and material was collected and brought to the landfarm at Meadowbank.