



MEADOWBANK DIVISION

Monitoring Program Summary Report

June 2020

Type A Water License 2AM-MEA1530

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SECTION 1 • BACKGROUND

On May 13, 2020, Agnico received the minister 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 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 June is summarized in Table 2-1 below.

Table 2-1: Freshwater Usage (m³)

Water Location	Source Lake	Jan	Feb	March	April	May	June	Total
Camp	Third Portage Lake	3 612	3 264	3 141	2 155	2 484	2 807	17 463
Mill (freshwater tank)	Third Portage Lake	220 085	229 949	270 242	219 998	231 334	130 128	1 301 736
Emulsion plant	Unnamed Lake	67	76	75	70	114	83	483
Total Freshwater Usage (m³)		223 764	233 289	273 458	222 223	233 932	133 018	1 319 682
Ore Water (m³)	Ore	4 668	3 821	2 306	0	534	5 737	17 066
Reclaim Water Usage (m³)	Tailings Pond	0	0	0	0	864	185 144	186 008

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In June, a total of 57,013 m³ of water was pumped back to the North Cell TSF from the ST-16 sump. Of that amount, 25,408 m³ was transferred from WEP1 sump and 7,380 m³ from WEP2 sump to the ST-16 sump.

Agnico Eagle completed in June inspections at the Portage and Vault RSFs as per the Freshet Action Plan. No non-conformities were found. 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 June, a total of 131,338 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 June, a total of 23,730 m³ of water was pumped back from the mill trench back to the mill. Inspections of the area were conducted during the month as per the Freshet Action Plan. No non-conformity was found.

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 June.

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 is discharged to the Stormwater Management pond. In June, no water was discharged from the Stormwater Management pond.

Table 2.6.1: Seprotech Effluent Results

Parameters	Units	June 1, 2020
Ammonia (NH ₃)	mg N/L	0.02
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	9.62
Total Kjeldahl Nitrogen	mg N/L	13
BOD-5	mg/L	4
COD	mg/L	49
Total Suspended Solids	mg/L	5
Nitrate	mg N/L	22.7
Nitrite	mg N/L	0.5
pH*	Units	6.40
Fecal Coliform	UFC/100 mL	<100
Total Coliform	UFC/100 mL	2,000

*Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	June 1, 2020
Ammonia (NH ₃)	mg N/L	<0.01
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	9.89
Total Kjeldahl Nitrogen	mg N/L	12
BOD-5	mg/L	3
COD	mg/L	42
Total Suspended Solids	mg/L	5
Nitrate	mg N/L	28.6
Nitrite	mg N/L	0.21
pH*	Units	5.90
Fecal Coliform	UFC/100 mL	10
Total Coliform	UFC/100 mL	<1,000

*Parameter measured by STP operators

2.7 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.

2.8 PHASER ATTENUATION POND

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

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

2.9 EAST DIKE SEEPAGE EFFLUENT

The discharge to Second Portage Lake was stopped on June 5 due to an increased trending of TSS. A total of 2,040 m³ of water was discharged during the month.

One (1) weekly effluent samples were collected at ST-8 in June 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 7. TSS monitoring results for June 2020 are shown in Table 2.9.1 below. There have been no exceedance of Water License and MDMER criteria.

Table 2.9.1: East Dike Seepage Results for TSS

Parameters	Units	June 1, 2020	Maximum Average Concentration
Total Suspended Solids	mg/L	1	1

There was no monthly regular sampling pursuant to the Water License in June. Monthly sampling was planned to be taken on June 8 but the discharge was stopped before the sampling can be performed.

2.10 NON CONTACT WATER

In July, Agnico Eagle completed inspections at ST-5 and ST-6 as per the 2020 Freshet Action Plan. 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 have exceeded the maximum average concentration (15 mg/L). Daily TSS analysis performed at the onsite laboratory show that TSS remain below 5 mg/L for most of the month. In no case, internal analyses have showed results exceeding the maximum allowable grab sample.

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

Parameters	Units	June 17, 2020
Total Suspended Solids	mg/L	17

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

Parameters	Units	June 17, 2020
Total Suspended Solids	mg/L	26

2.11 IN-PIT DISPOSAL

In-Pit disposal in Goose Pits was ongoing for June. No issues to report.
Reclaim from Portage Pit was ongoing in June.

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 June.

Six (6) spills were reported during the month and was managed appropriately on site according to Agnico's spill contingency plan. Of that amount, two (2) were reportable spills to the Hotline. 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

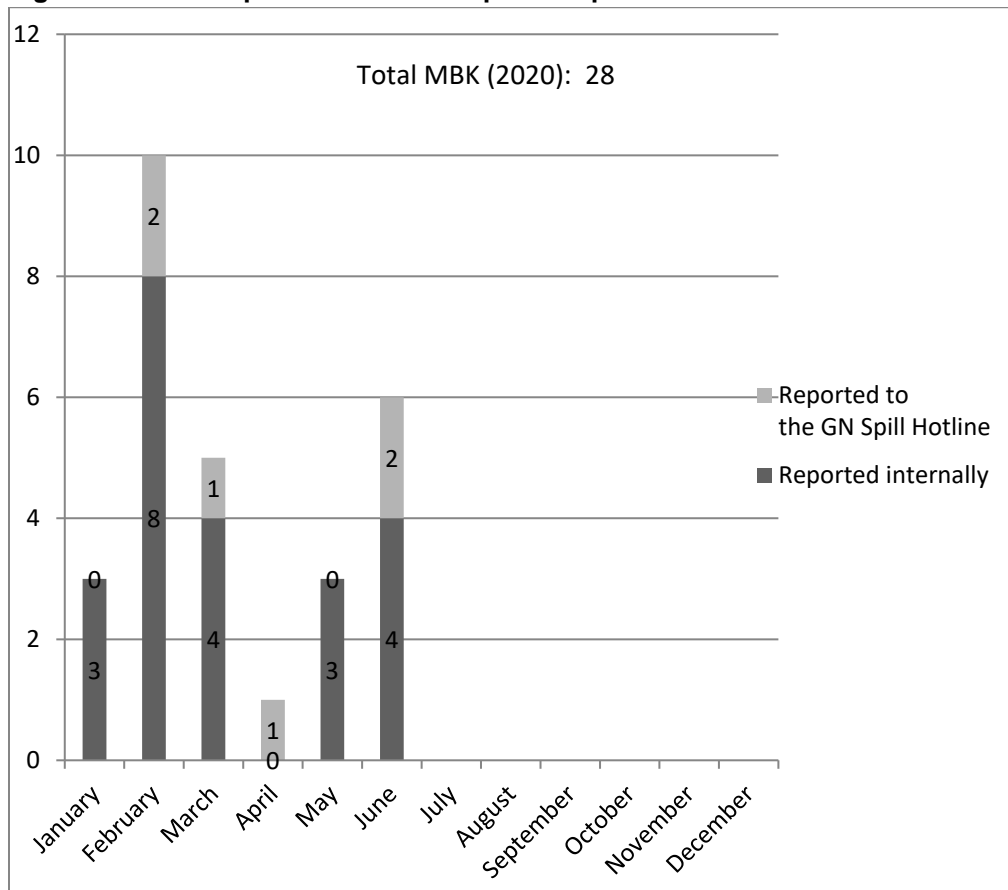


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, June 2020

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
June 9, 2020	Diesel	1,200	L	Baker Lake fuel farm	During operations at Meadowbank, Tanker 7 was refueling at Baker Lake. After refueling the operator pressurized the tanks and fuel started leaking out underneath the rear fuel tank compartment	Spill pads were placed on the ground and a berm was constructed to stop any fuel. A second tanker was parked next to Tanker 7 and began pumping out the rear fuel compartment. Contaminated soil picked up and disposed of appropriately at MBK.
June 12, 2020	Diesel	15	L	Fuel Farm	Perforated fuel tank was accidentally fueled.	Spill was contained and cleaned up with loader and brought to contaminated soil area.
June 14, 2020	Diesel	400	L	KM 115 near Vault laydown	The drive shaft of long haul truck 15 came off and hit the fuel tank. The weight of the drive shaft cracked the tank on both side.	A berm was constructed to prevent fuel seeping, spill pads and secondary containment was put under the tank until it could be pumped out. Approximately 10m ³ of contaminated material was collected and will be brought to the Meadowbank land farm.
June 16, 2020	Hydraulic Oil	30	L	Reefer pad MBK	O-ring failure	Stop the engine, call supervisor and install rag/absorbent on the ground. Contaminated soil picked up and disposed of appropriately at MBK landfarm
June 20, 2020	Diesel	30	L	AWAR KM 62	The hose elbow between the fuel tank and the engine start to leak due to wear and tear	The operator installed rags and half drum to contain the diesel fuel, use material coming from container at bridge KM 62. Contaminated soil picked up and disposed of appropriately at MBK landfarm
June 22, 2020	Oil	2	L	Winter parking	Oil seal failure on the transmission	Install rags and pail under the leak. Contaminated soil picked up and disposed of appropriately at MBK landfarm