



MEADOWBANK DIVISION

Monitoring Program Summary Report

December 2020

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 December 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	3,612	3,264	3,141	2,155	2,484	2,807
Mill (freshwater tank)	Third Portage Lake	220,085	229,949	270,242	219,998	231,334	130,128
Emulsion plant	Unnamed Lake	67	76	75	70	114	83
Total Freshwater Usage (m³)		223,764	233,289	273,458	222,223	233,932	133,018
Ore Water (m³)	Ore	4,668	3,821	2,306	0	534	5,737
Reclaim Water Usage (m³)	Tailings Pond	0	0	0	0	864	185,144

Water Location	Source Lake	July	Aug	Sept	Oct	Nov	Dec	Total
Camp	Third Portage Lake	2,966	2,634	2,467	2,584	2,526	2,680	33,320
Mill (freshwater tank)	Third Portage Lake	183,029	170,286	144,040	145,024	79,589	125,812	2,149,515
Emulsion plant	Unnamed Lake	137	116	110	168.2	161.6	99.5	1,274
Total Freshwater Usage (m³)		186,132	173,036	146,617	147,776	82,276	128,591	2,184,110
Ore Water (m³)	Ore	4,895	3,585	3,135	2,606	3,429	3,618	38,334
Reclaim Water Usage (m³)	Tailings Pond	152,428	161,914	202,706	164,427	240,836	254,601	1,362,920

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In December, no water was pumped back to the North Cell TSF from the ST-16 sump. No sampling was completed at WEP1 (Station ST-30) and WEP2 (Station ST-31) during the month as they were frozen.

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

2.3 CENTRAL DIKE SEEPAGE

In December, 21,724 m³ of water was pumped from ST-S-5 sump to Portage Pit.

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 Engineering Department, as well as daily monitoring of piezometric values.

2.4 ASSAY ROAD SEEPAGE

In December, no water was pumped from the mill trench back to the mill. No non-conformities were 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 December.

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.

No water was pumped from the Stormwater Management pond to the tailings storage facility during the month.

Table 2.6.1: Seprotech Effluent Results

Parameters	Units	December 14, 2020
Ammonia (NH ₃)	mg N/L	0.35
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	36.86
Total Kjeldahl Nitrogen	mg N/L	37
BOD-5	mg/L	8
COD	mg/L	45
Total Suspended Solids	mg/L	12
Nitrate	mg N/L	3.67
Nitrite	mg N/L	1.05
pH*	Units	7.20
Fecal Coliform	UFC/100 mL	<100
Total Coliform	UFC/100 mL	800

*Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	December 14, 2020
Ammonia (NH ₃)	mg N/L	0.06
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	18.38
Total Kjeldahl Nitrogen	mg N/L	18
BOD-5	mg/L	3
COD	mg/L	36
Total Suspended Solids	mg/L	11
Nitrate	mg N/L	14.7
Nitrite	mg N/L	0.36
pH*	Units	6.60
Fecal Coliform	UFC/100 mL	580
Total Coliform	UFC/100 mL	6,000

*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

Discharge to Second Portage Lake occurred for the entire month of December and a total of 9,053 m³ was discharged.

Four (4) weekly effluent samples were collected at ST-8 in December 2020. The TSS results did not exceed the maximum allowable grab sample concentration (30 mg/L) or the maximum monthly average concentration (15 mg/L) permitted by the Water License, Part F, Item 7. The TSS monitoring results for December are provided in Table 2.9.1 below.

Table 2.9.1: East Dike Seepage Results for TSS

Parameter	Unit	Sample Date				Monthly Average
		12/07/2020	12/14/2020	12/21/2020	12/28/2020	
Total Suspended Solids	mg/L	2	4	7	5	4.5

Monthly sampling pursuant to the Water License was also conducted at ST-8 in December. The results are shown in Table 2.9.2 below. There were no exceedances of MDMER criteria.

Table 2.9.2: December 2020 Monthly Monitoring Results

Parameter	Unit	Sample Date
		12/07/2020
pH*	-	8.01
Aluminum	mg/L	0.0367
Sulphate	mg/L	5.9
Arsenic	mg/L	0.001
Copper	mg/L	0.00155
Nickel	mg/L	<0.001
Lead	mg/L	0.00027
Zinc	mg/L	0.0054
Radium 226	mg/L	<0.005
Total Cyanide	mg/L	<0.005

* Parameter measured by technician

2.10 NON CONTACT WATER

Portage Area East diversion ditch (ST-5) and West diversion ditch (ST-6) were not sampled in December due to the diversion ditches being frozen. Sampling is conducted during open water conditions.

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 2020 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for December.

Three (3) spills occurred in December with one (1) reported to regulators. The spill was contained and 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

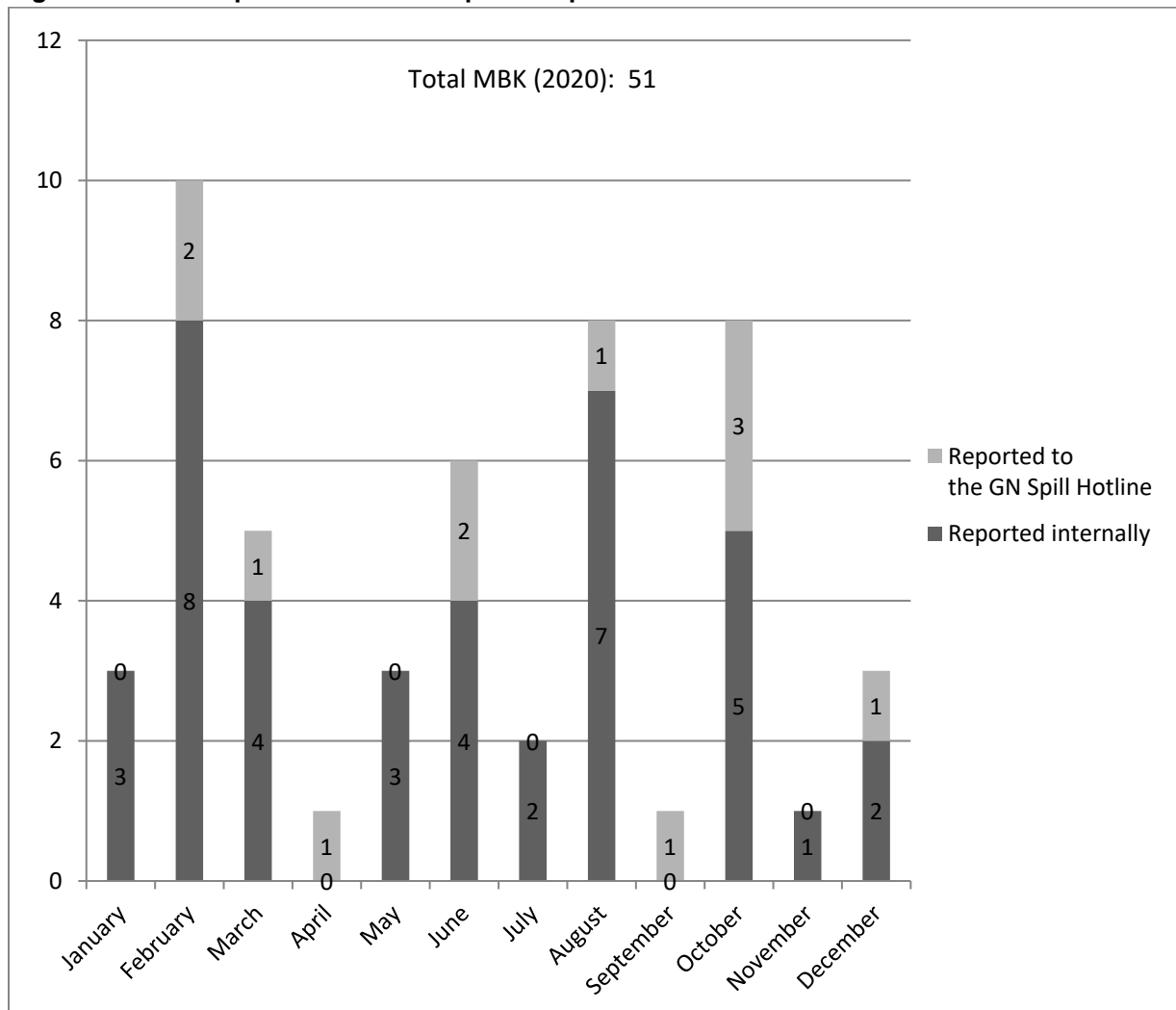


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, December 2020

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
December 3, 2020	Diesel Fuel	500	L	Baker Lake Fuel Transfer Area	A breather on the fuel tanker failed causing a buildup of pressure in the tanker compartment which caused diesel to spill.	The spill was contained using spill pads and the fuel tanker was emptied into a nearby tanker. The contaminated material was cleaned up, put into the contaminated soil bin, and sent to the MBK landfarm.
December 22, 2020	Engine Oil	75	L	Vault Coverall	Damaged seal at oil delivery station	Contaminated material was adequately disposed of.
December 23, 2020	Coolant	15	L	Maintenance Shop	Broken radiator	Contaminated material was removed and disposed of in the yellow bin.