

MEADOWBANK DIVISION

Monitoring Program Summary Report January 2021

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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 January is summarized in Table 2.1 below.

Table 2.1: Freshwater Usage (m³)

Water Location	Source Lake	Jan	Total
Camp	Third Portage Lake	2,639	2,639
Mill (freshwater tank)	Third Portage Lake	125,901	125,901
Emulsion plant	Unnamed Lake	104	104
Total Freshwater Usage (m³)		128,644	128,644
Ore Water (m³)	Ore	4,408	4,408
Reclaim Water Usage (m³)	Tailings Pond	237,647	237,647

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In January, 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 January, 19,155 m³ of water was pumped from ST-S-5 sump to Portage Pit A.

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 January, 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 January.

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	January 4, 2021	
Ammonia (NH ₃)	mg N/L	0.32	
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	38.0	
Total Kjeldahl Nitrogen	mg N/L	41	
BOD-5	mg/L	7	
COD	mg/L	51	
Total Suspended Solids	mg/L	10	
Nitrate	mg N/L	4.87	
Nitrite	mg N/L	1.11	
pH*	Units	7.10	
Fecal Coliform	UFC/100 mL	46	
Total Coliform	UFC/100 mL	<1000	

^{*}Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	January 4, 2021
Ammonia (NH₃)	mg N/L	<0.01
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	8.44
Total Kjeldahl Nitrogen	mg N/L	9.9
BOD-5	mg/L	3
COD	mg/L	61
Total Suspended Solids	mg/L	9
Nitrate	mg N/L	14.0
Nitrite	mg N/L	0.28
pH*	Units	7.40
Fecal Coliform	UFC/100 mL	25
Total Coliform	UFC/100 mL	60000

^{*}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 January and a total of 8,437 m³ was discharged.

Four (4) weekly effluent samples were collected at ST-8 in January 2021. 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 January are provided in Table 2.9.1 below.

Table 2.9.1: East Dike Seepage Results for TSS

Parameter		Sample Date				Monthly
	Unit	01/04/2021	01/11/2021	01/18/2021	01/25/2021	Average
Total Suspended Solids	mg/L	7	6	6	4	5.75

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

Table 2.9.2: January 2021 Monthly Monitoring Results

B	11.74	Sample Date	
Parameter	Unit	01/04/2021	
pH*	-	7.64	
Aluminum	mg/L	0.0837	
Sulphate	mg/L	6.1	
Arsenic	mg/L	0.00091	
Copper	mg/L	0.00111	
Nickel	mg/L	<0.001	
Lead	mg/L	0.00033	
Zinc	mg/L	<0.005	
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 January 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 2021 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for January.

Eight (8) spills occurred in January with two (2) reported to regulators. The spills were contained, and clean-up actions were monitored closely by the Environment Department. There were no off-site impact to any watercourses.

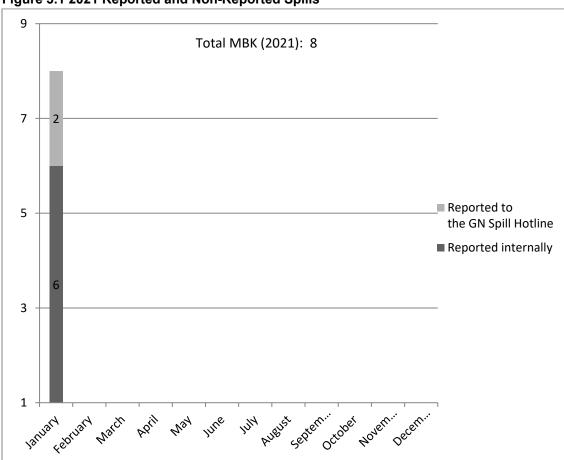


Figure 3.1 2021 Reported and Non-Reported Spills

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

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
1/4/2021	Diesel Fuel	1	L	Fuel farm	While refueling the vehicle, a small amount of diesel fuel overflowed on the snow underneath.	The snow was shoveled into the appropriate container immediately after the spill occurred.
1/10/2021	Oil	2	L	Winter parking	Pick up truck had leak, oil was dripping onto the ground.	Material was removed and adequately disposed of.
1/13/2021	Sulfur prills	150	kg	Process Plant Meadowbank	A ripped sulphur prills bag was brought from the storage sea-can to the mill. The rip was not noticed causing a trail of sulphur prills from the storage to the mill.	The spill was shoveled and swept into an empty sulphur bag and brought to the tailings for disposal.
1/15/2021	Coolant	10	L	Maintenance shop	Pump failure	Contaminated material was adequately disposed of.
1/20/2021	Hydraulic Oil	15	L	Pit A	Hydraulic hose failure	Contaminated material was removed and disposed on in the MBK landfarm
1/24/2021	Coolant	20	L	Near air strip	A ratchet strap broke and became caught in the engine fan and breaking the coolant lines to the radiator.	Contaminated material was removed and adequately disposed of.
1/26/2021	Contaminated Water	100	L	Internal ditch at air strip	Cracked grey water line.	The STP pumps were stopped and the leak was repaired. The contaminated water is frozen and will be removed disposed of when possible.
1/30/2021	Transmission Fluid	10	L	Winter parking	Slow leak of transmission fluid.	Spill pads were used and the contaminated material was removed and adequately disposed of.