

### MEADOWBANK DIVISION

# Monitoring Program Summary Report November 2021

## **Table of Contents**

<b>SECTION 1</b>	L • BACKGROUND	3
SECTION 2	• WATER MANAGEMENT	4
2.1	WATER USAGE	. 4
2.2	WASTE ROCK STORAGE FACILITY SEEPAGE	
2.3	CENTRAL DIKE SEEPAGE	2
2.4	ASSAY ROAD SEEPAGE	
2.5	SEEPAGE AND RUNOFF FROM THE LANDFILL	5
2.6	SEWAGE TREATMENT PLANT	5
2.7	VAULT ATTENUATION POND EFFLUENT	
2.8	PHASER ATTENUATION POND	
2.9	EAST DIKE SEEPAGE EFFLUENT	$\epsilon$
2.10	Non Contact water	$\epsilon$
2.11	In-Pit Disposal	6
SECTION 3	3 ● SPILL MANAGEMENT	7

#### 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 the month is summarized in Table 2.1 below.

Table 2.1: Freshwater Usage (m<sup>3</sup>)

Water Location	Source Lake	Jan	Feb	March	April	May	June
Camp	Third Portage Lake	2,639	2,334	2,376	2,297	2,536	2,408
Mill (freshwater tank)	Third Portage Lake	125,901	87,438	87,445	78,643	98,397	81,913
Emulsion plant	Unnamed Lake	104	90	127	118	133	64
Total Freshwater Usage (m³)		128,644	89,862	89,948	81,058	101,066	84,385
Ore Water (m <sup>3</sup> )	Ore	4,408	3,310	3,684	2,416	3,310	3,561
Reclaim Water Usage (m <sup>3</sup> )	Tailings Pond	237,647	205,445	277,684	171,821	209,538	237,348

Water Location	Source Lake	July	Aug	Sept	Oct	Nov	Total
Camp	Third Portage Lake	2,665	2,721	2,845	2,989	2,942	28,752
Mill (freshwater tank)	Third Portage Lake	120,687	104,144	93,228	110,522	54,692	1,043,010
Emulsion plant	Unnamed Lake	115	124	165	130	106	1,278
Total Freshwater Usage (m <sup>3</sup> )		123,467	106,989	96,239	113,641	57,740	1,073,040
Ore Water (m³)	Ore	3,310	4,064	4,530	3,424	3,695	39,712
Reclaim Water Usage (m³)	Tailings Pond	194,844	246,887	255,378	196,739	291,247	2,524,578

#### 2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In November, 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 November, 63,631 m<sup>3</sup> of water was pumped from ST-S-5 sump to Portage Pits.

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

#### 2.4 ASSAY ROAD SEEPAGE

In November, no water was pumped from the mill trench back to the mill. Agnico Eagle completed inspections and no non-conformities were found during the month.

#### 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 November.

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.

In November, no water was pumped from the Stormwater Management pond to the tailings storage facility.

**Table 2.6.1: Seprotech Effluent Results** 

Parameters	Units	November 1, 2021
Ammonia (NH <sub>3</sub> )	mg N/L	0.012
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	28
Total Kjeldahl Nitrogen	mg N/L	32
BOD-5	mg/L	14
COD	mg/L	63
Total Suspended Solids	mg/L	9
Nitrate	mg N/L	11.4
Nitrite	mg N/L	1.16
pH*	Units	7.00
Fecal Coliform	UFC/100 mL	<10
Total Coliform	UFC/100 mL	2200

<sup>\*</sup>Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	November 1, 2021
Ammonia (NH <sub>3</sub> )	mg N/L	0.0011
Ammonia-Nitrogen (NH <sub>3</sub> -NH <sub>4</sub> )	mg N/L	14
Total Kjeldahl Nitrogen	mg N/L	14
BOD-5	mg/L	3
COD	mg/L	50
Total Suspended Solids	mg/L	4
Nitrate	mg N/L	18.3
Nitrite	mg N/L	0.067
pH*	Units	5.19
Fecal Coliform	UFC/100 mL	<10
Total Coliform	UFC/100 mL	<1000

<sup>\*</sup>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

No water was discharged from the East Dike to Second Portage Lake during the month. In the month of November, water from the East Dike was discharged into Pit E.

#### 2.10 NON CONTACT WATER

Portage Area East diversion ditch (ST-5) and West diversion ditch (ST-6) were not sampled in November 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 and E 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 November.

Five (5) spills occurred on site during the month with none (0) reported to regulators. Spills were contained and cleaned, contaminated material was disposed to the appropriate area, and the clean-up actions were monitored closely by the Environment Department.

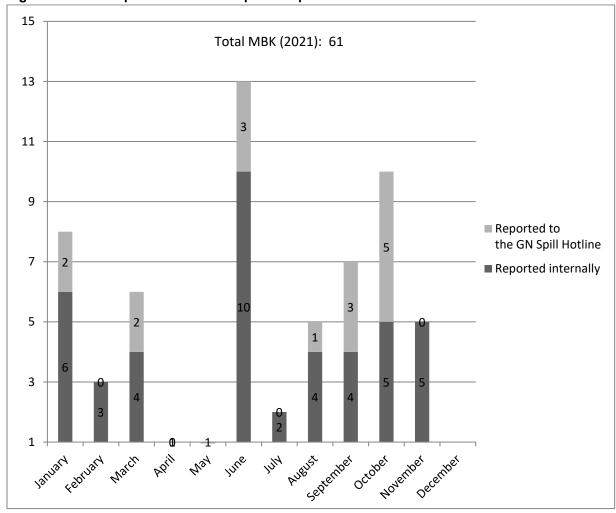


Figure 3.1 2021 Reported and Non-Reported Spills

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

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
11/7/2021	Glycol	17.5	L	LHT Winter Parking	Equipment malfunction	Leaking valve was closed. Contaminated material was collected and brought to the yellow bin for disposal.
11/18/2021	Furnace Oil	10	L	Meadowbank CAT Dome	Overfilling of tank	Sea-can was barricaded to prevent oil from spilling outside. Absorbent pads and vacuum truck were used to collect the spill. Oil from vacuum truck was disposed of at the Meadowbank Landfarm and used absorbent pads were disposed of in a Quatrex bag and brought to the Hazmat seacan for appropriate disposal.
11/19/2021	Motor Oil	20	L	AWAR KM 15	Procedure not followed	Contaminated snow and material was removed and brought to yellow bin for disposal.
11/22/2021	Engine Oil	20	L	Mill - between Pebble Crusher & HPGR	Equipment malfunction	Contaminated material was collected and brought to the yellow bins for disposal.
11/24/2021	Waste Oil	30	L	Meadowbank CAT Dome	Overfilling of tank	Spill kit was used to absorb oil. Contaminated absorbent pads were brought to the yellow bins.