



MEADOWBANK COMPLEX

Monitoring Program Summary Report

May 2024

Type A Water License 2AM-MEA1530

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SECTION 1 • BACKGROUND

On May 13, 2020, Agnico Eagle 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 Mine.

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), an update to the In-Pit disposal and follow up to the AWAR spill at Km 87.

In addition, a summary of spills/actions for the month is reported.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Freshwater usage for the month is summarized in Table 2.1 below.

Table 2.1: Freshwater Usage (m³)

Water Location	Source Lake	Jan	Feb	March
Camp	Third Portage Lake	3,070	2,607	2,996
Mill (freshwater tank)	Third Portage Lake	67,195	67,265	68,740
Emulsion plant	Unnamed Lake	0	0	0
Total Freshwater Usage (m³)		70,265	69,872	71,736
Ore Water (m³)	Ore	4,895	3,611	3,713
Reclaim Water Usage (m³)	Tailings Pond	310,525	302,920	323,994

Water Location	Source Lake	April	May	Total
Camp	Third Portage Lake	3,056	2,996	14,725
Mill (freshwater tank)	Third Portage Lake	73,895	78,772	355,867
Emulsion plant	Unnamed Lake	0	0	0
Total Freshwater Usage (m³)		76,951	81,768	370,592
Ore Water (m³)	Ore	2,800	4,141	19,160
Reclaim Water Usage (m³)	Tailings Pond	239,893	271,080	1,448,412

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In May, 8,212 m³ of water was pumped back to Portage Pit from the ST-16 sump. Of that amount, 3,375 m³ was transferred from WEP1 sump and 5,040 m³ from WEP2 sump to the ST-16 sump.

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

2.3 CENTRAL DIKE SEEPAGE

In May, 101,383 m³ 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 May, 28,080 m³ of water was pumped from the mill trench back to the mill. On May 20th, during routine monitoring as part of the Freshet Action Plan, evidence of seepage was observed on the west side of the assay lab road. Since the previously reported December 2023 event (#2023-524) in the same area, no evidence of seepage had been noted. Monitoring had been carried out throughout the winter and was subsequently increased for the freshet season. During freshet pumping and recovery operations on May 22nd, 2024, it was observed that the level of the leach pad containment area was decreasing faster than anticipated. Upon further inspection, it was discovered that certain areas of the containment were not watertight, allowing water to escape into a depression outside the containment. Further investigation determined that the source of the spill reported on May 21st (#2024-232) was the same as that of the spill reported on May 23rd (#2024-207). There were no off-site impacts or discharges as the seepage was contained within existing water management infrastructure previously constructed.

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 May.

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 May, 17,866 m³ of water was pumped from the Stormwater Management pond to Portage Pits.

Table 2.6.1: Seprotech Effluent Results

Parameters	Units	May 6, 2024
Unionized Ammonia (NH ₃)	mg N/L	0.11
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	46
Total Kjeldahl Nitrogen	mg N/L	46
BOD-5	mg/L	12
COD	mg/L	51
Total Suspended Solids	mg/L	4
Nitrate	mg N/L	4.20
Nitrite	mg N/L	1.39
pH*	Units	6.70
Fecal Coliform	UFC/100 mL	450
Total Coliform	UFC/100 mL	5,500

*Parameter measured by STP operators

Table 2.6.2: LJ-Mix Effluent Results

Parameters	Units	May 6, 2024
Unionized Ammonia (NH ₃)	mg N/L	0.0073
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	17
Total Kjeldahl Nitrogen	mg N/L	17
BOD-5	mg/L	2
COD	mg/L	37
Total Suspended Solids	mg/L	7
Nitrate	mg N/L	29.2
Nitrite	mg N/L	0.071
pH*	Units	5.90
Fecal Coliform	UFC/100 mL	210
Total Coliform	UFC/100 mL	2,000

*Parameter measured by STP operators

2.7 VAULT ATTENUATION POND EFFLUENT

No discharge has occurred from the Vault Attenuation Pond since October 9, 2017.

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 May, water from the East Dike seepage was discharged into Portage Pits.

2.10 NON-CONTACT WATER

In May, Agnico Eagle completed inspections at Portage Area East diversion ditch (ST-5) and West diversion ditch (ST-6) as part of the 2024 Freshet Management 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) and the maximum average concentration (15 mg/L) permitted by the Water License, Part F, Item 7.

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

Parameter	Units	27-May
Total Suspended Solids (TSS)	mg/L	8

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

Parameter	Units	27-May	30-May	31-May	Monthly Average
Total Suspended Solids (TSS)	mg/L	23	<10	<10	11

2.11 IN-PIT DISPOSAL

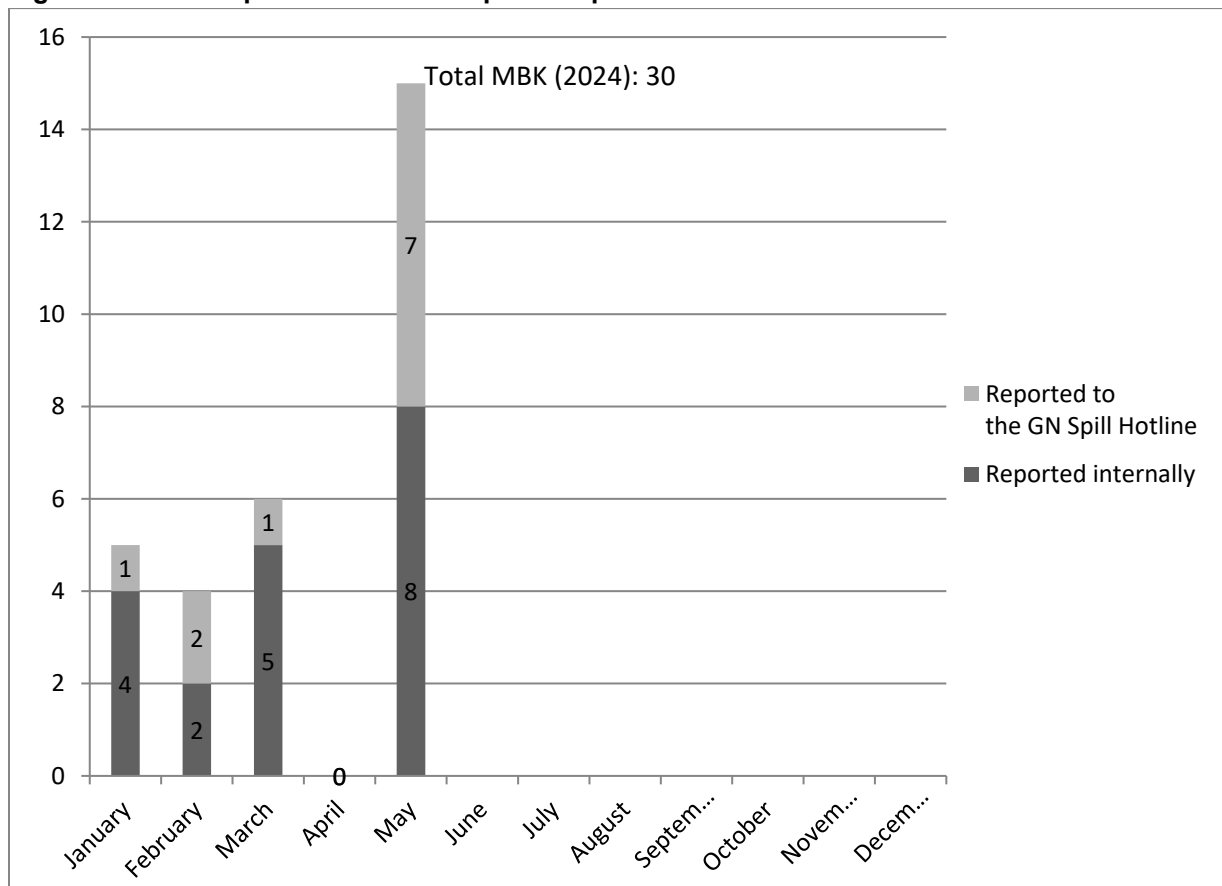
Tailings were disposed of in Portage Pits and reclaim water was taken from Portage Pits for the month.

SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2024 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for May.

Fifteen (15) spills occurred on site during the month with seven (7) being reported to regulators. Spills were contained and cleaned, contaminated material was disposed of in the appropriate area, and the clean-up actions were monitored closely by the Environment Department. There was no off-site impact to any watercourses.

Figure 3.1 2024 Reported and Non-Reported Spills



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Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, May 2024

Date of Spill	Hazardous Material	Quantity	Units (L / Kg)	Cause of spill	Clean-up action taken
5/3/2024	Transmission Oil	20	L	Mechanical Failure	Contaminated material was collected and brought for disposal at the MBK Landfarm
5/3/2024	Waste Oil	20	L	Human Error	Contaminated material was collected and placed in roll off bin for disposal at the MBK Landfarm
5/5/2024	Hydraulic Oil	10	L	Mechanical Failure	Contaminated material was collected and brought for disposal at the MBK Landfarm
5/8/2024	Waste Oil	5	L	Mechanical Failure	Contaminated material was collected and brought for disposal at the MBK Landfarm
5/8/2024	Engine Oil	1	L	Human Error	Hand shovels were used to retrieve the contaminated snow and ice, which was then brought to the Meadowbank Tailings Storage Facility.
5/9/2024	Sewage	50	L	Mechanical Failure	A plumber replaced the defective manual valve. Approximately 0.5m ³ of contaminated material will be collected to the and brought to the Tailing Storage Facility at Meadowbank.
5/18/2024	Jet-A Fuel	50	L	Human Error	Contaminated material was collected and placed in roll off bin for disposal at the MBK Landfarm
5/19/2024	Tailings	2	m ³	Blockage	The contaminated ditch was initially pumped dry using a vacuum truck. Approximately 8 cubic meters of contaminated soil were then removed and disposed of at the Tailing Storage Facility. Further remediation actions are ongoing, including pressure washing the nearby contaminated infrastructure. Additionally, a combination of a water truck and a vacuum truck will be used for further cleaning of the contaminated ditch.
5/20/2024	Tailings	10	m ³	Punctured Line	The mill operations were halted immediately after the spill was discovered. A berm was constructed on the adjacent road to prevent the contaminated material from spreading and to contain it on the mill pad. Part of the spilled material was pumped back into the secondary containment of the leaching pad, while the solid material was excavated. Areas inaccessible to heavy equipment were cleaned using a combination of manual labor, water pressure, and a vacuum truck. Remediation operations are still ongoing. To date, approximately 700 cubic meters of contaminated soil have been

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					removed, and 220 cubic meters of a tailings sediment and water mixture have been disposed of at the Tailings Storage Facility.
5/21/2024 and 5/22/2024	Contaminated Water	TBD	m ³	Seepage	Upon discovering the water inflow, an investigation was launched to identify potential sources. Samples were collected to pinpoint the source of the seepage, and a red dye test was conducted at the mill leach pad containment. The dye test conclusively determined that the source of the spill was the leach pad secondary containment. The contaminated water was contained and managed within the existing water management infrastructure. The pumping system in place directed the contaminated water back to the mill system. Additional samples were collected from the downstream environment (Third Portage Lake) and sent to external labs for analysis.
5/24/2024	Hydraulic Oil	8	L	Mechanical Failure	Absorbents were placed on the ground and disposed of in the Hazmat Storage area
5/26/2024	Waste Oil	40	L	Human Error	Contaminated material was collected and placed in roll off bin for disposal at the MBK Landfarm
5/26/2024	Diesel	50	L	Equipment Malfunction	Contaminated material was collected and placed in roll off bin for disposal at the MBK Landfarm
5/28/2024	Engine Oil	5	L	Mechanical Failure	Hand shovels were used to retrieve approximately three 20L bags of contaminated snow and ice, which was then brought to the Meadowbank Tailings Storage Facility. Spill absorbents material was used to collect the oil from on top of the ice and brought to the Meadowbank Hazmat facility.

3.1 KM87 SPILL FOLLOW UP

In May, Agnico Eagle completed inspections at KM87 spill areas. A total of 1,663 m³ was pumped from the collection sump and brought to the Stormwater management pond. Sampling was collected downstream of the collection sump at sampling station ST-44. Water quality results are shown in Table 3.2.

Table 3.2: KM87 (ST-44) Results

Parameter	Unit	5/26/2024
pH	pH units	8.34
TSS	mg/L	11
Total oil and grease	mg/L	0.9
Benzene	mg/L	< 0.00020
Ethylbenzene	mg/L	< 0.00020
Toluene	mg/L	< 0.00020
Xylenes	mg/L	< 0.00040
m,p-Xylenes	mg/L	< 0.00040
o-Xylene	mg/L	0.0003
F2 (C10-C16)	mg/L	< 0.1
F3 (C16-C34)	mg/L	< 0.2
F4 (C34-C50)	mg/L	< 0.2
Petroleum Hydrocarbons F (C10-C50)	mg/L	< 0.2