



MEADOWBANK DIVISION

Monitoring Program Summary Report

February 2019

Type A Water License 2AM-MEA1526

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SECTION 1 • BACKGROUND

As required under Part I, Item 20 of Type A Water License 2AM-MEA1526 (Amendment No.2), 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, and sewage treatment plant discharge water quality (which are directed to the onsite storm water management pond).

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 February is summarized in Table 2-1 below.

Table 2-1: Freshwater Usage (m³)

Water Location	Source Lake	Jan	Feb	Total
Camp	Third Portage Lake	3 577	3 238	6 815
Mill (freshwater tank)	Third Portage Lake	214 981	182 096	397 077
Emulsion plant	No-name Lake	50	13	63
Total Freshwater Usage (m³)		218 608	185 347	403 955
Ore Water (m³)	Ore	4 610	3 045	7 655
Reclaim Water Usage (m³)	Tailings Pond	7 180	29 023	36 203

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

No water was pumped back to the North Cell TSF from the ST-16 sump in February due to frozen condition.

Agnico Eagle completed in February inspections at the Portage and Vault RSFs. No open water sampling at WEP1 (Station ST-30), WEP2 (Station ST-31), ST-16, NP-2 and the downstream lakes were completed in February. NP2-Winter water sampling through ice into NP-2 Lake was done as the ice condition permitted safe sampling.

2.3 CENTRAL DIKE SEEPAGE

In February, 154,560 m³ of water was pumped from the ST-S-5 sump back into the South Cell TSF.

Sampling was conducted monthly at ST-S-5 and the South Cell TSF (ST-21) 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 February, no water was pumped back to the mill. No wells monitoring for CN downstream and trench sampling in February due to frozen condition.

2.5 SEEPAGE AND RUNOFF FROM THE LANDFILL

The landfill was inspected weekly and no seepage or runoff was observed.

2.6 SEEPAGE AT PIT WALL AND PIT WALL FREEZE/THAW AND PERMAFROST AGGRADATION

In February, ice wall continued to be observed into Vault Pit.

2.7 SEWAGE TREATMENT PLANT

One (1) effluent wastewater sample was collected at the onsite sewage treatment plant (STP) in February.

The Seprotech STP results are shown in Table 2.7.1 below; the LJ-Mix STP results are shown in Table 2.7.2. The effluent is discharged to the Stormwater Management pond which is pumped to the South Cell TSF during summer months. In February, no water was discharged from the Stormwater Management pond to the South Cell TSF.

Table 2.7.1: Seprotech Effluent Results

Parameters	Units	February 4, 2019
Ammonia (NH ₃)	mg N/L	0.31
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	29.4
Total Kjeldahl Nitrogen	mg N/L	33.4
BOD-5	mg/L	11
COD	mg/L	77
Total Suspended Solids	mg/L	11
Nitrate	mg N/L	7.24
Nitrite	mg N/L	1.18
pH*	Units	7.60
Fecal Coliform	UFC/100 mL	120
Total Coliform	UFC/100 mL	10,100

*Parameter measured by STP operators

Table 2.7.2: LJ-Mix Effluent Results

Parameters	Units	February 4, 2019
Ammonia (NH ₃)	mg N/L	0.07
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	11.3
Total Kjeldahl Nitrogen	mg N/L	14.7
BOD-5	mg/L	5
COD	mg/L	53
Total Suspended Solids	mg/L	8
Nitrate	mg N/L	12.0
Nitrite	mg N/L	0.77
pH*	Units	7.38
Fecal Coliform	UFC/100 mL	2,700
Total Coliform	UFC/100 mL	>80,000

*Parameter measured by STP operators

2.8 VAULT ATTENUATION POND EFFLUENT

No discharge occurred from the Vault Attenuation Pond into Wally Lake in February.

2.9 PHASER ATTENUATION POND

No water was pumped from the Phaser Attenuation Pond in February due to frozen condition.

2.10 EAST DIKE SEEPAGE EFFLUENT

No discharge occurred from the East Dike Seepage into Second Portage Lake in February.

2.11 NON CONTACT WATER

No water sample at Portage Area East (ST-5) and West (ST-6) diversion ditches in February due to frozen condition.

SECTION 3 • SPILL MANAGEMENT

Figure 3.1 shows reported and non-reported spills for 2019 broken down per month and Table 3.1 summarizes Agnico Eagle spill reports for February.

All spills reported internally (11) were managed appropriately on site according to Agnico's spill contingency plan. Four (4) were reported to regulators in February. Spills were contained and cleaned, contaminated material was disposed to the appropriate area (landfarm, TSF if required), and the clean-up actions were monitored closely by the Environment Department. There was no off site impact to any watercourses.

Figure 3.1 2019 Reported and Non-Reported Spills

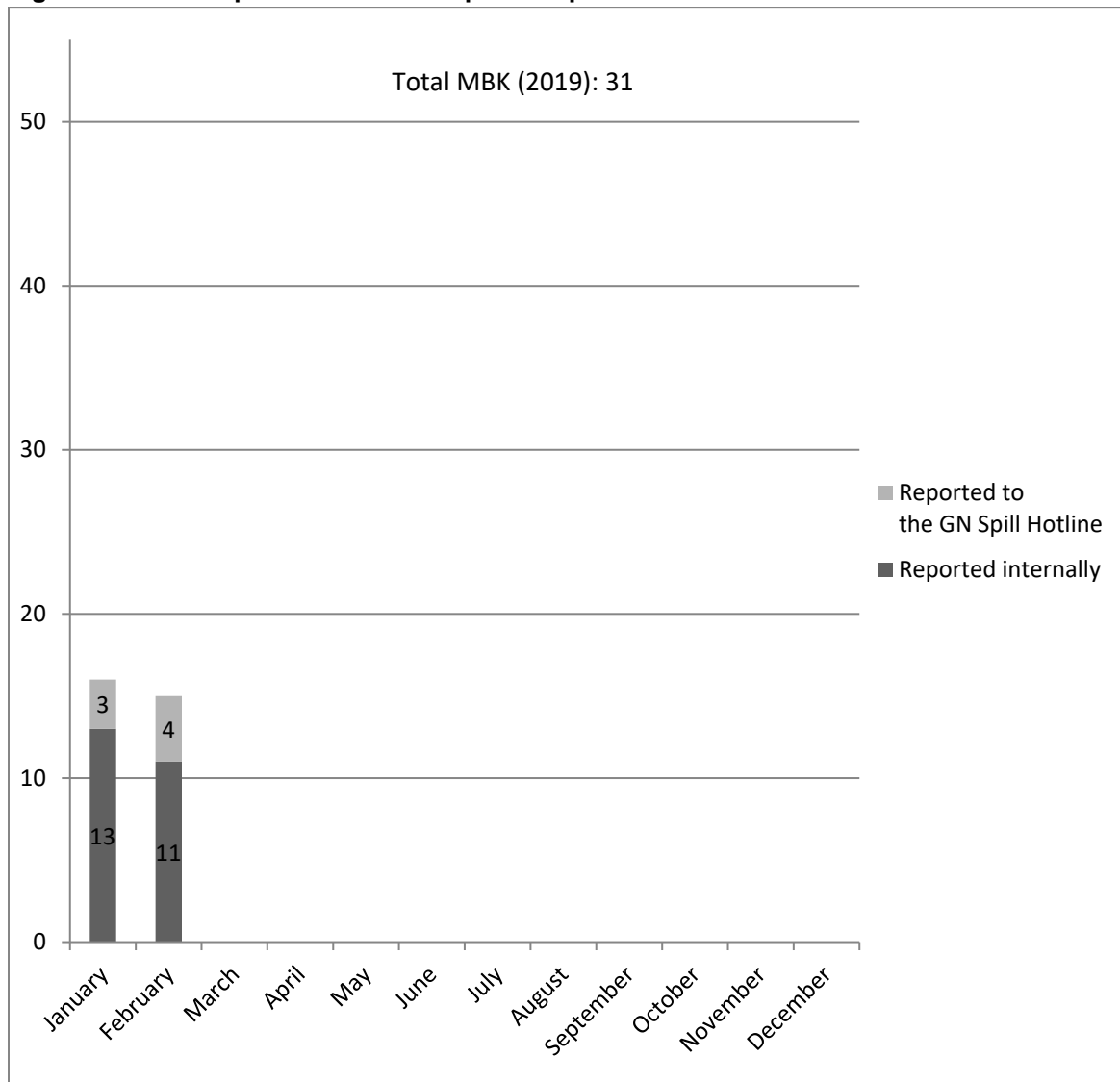


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, February 2019

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
February 1, 2019	Coolant	60	L	MBK Long Haul Truck Dump piles	Coolant hose failure	Contaminated soil picked up and disposed of appropriately
February 2, 2019	Fuel	30	L	Meadowbank fuel farm	Fuel truck loading arm was leaking by the joint	Spill was contained and contaminated soil picked up and disposed of appropriately
February 2, 2019	Transmission oil	10	L	Goose Parking	Oil blew on the ground during maintenance due to high wind	Contaminated soil picked up with the loader and disposed of appropriately
February 3, 2019	Hydraulic Oil	10	L	MBK Crusher Pad	Hydraulic hose failure	Call 980 loader and sent material to the contaminated pad.
February 3, 2019	Diesel fuel	40	L	MBK Site Service Parking	Accidentally start tidy tank pump in pick-up truck	Used absorbant pads to clan the spill and lockout tidy tank pump. Spill was contained and contaminated soil picked up and disposed of appropriately
February 4, 2019	Hydraulic Oil	150	L	MBK Pit E3	Hydraulic hose failure	Call mechanics for repairs. Contaminated material cleaned-up and disposed in MBK Landfarm
February 5, 2019	Diesel fuel	85	L	MBK Maintenance parking	Spill during refuelling	Spill was contained and contaminated soil picked up and disposed of appropriately

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February 5, 2019	Engine oil	10	L	MBK Maintenance parking	Oil pan seal failure	Stop the engine. Clean-up using absorbent pad. Contaminated soil has been disposed appropriately
February 7, 2019	Coolant	85	L	MBK Pit E3	Coolant hose failure	Call mechanics for repairs. Contaminated material cleaned-up and disposed appropriately
February 7, 2019	Hydraulic Oil	250	L	MBK Portage Pit	Hydraulic hose failure	Contaminated material cleaned-up and disposed appropriately
February 7, 2019	Diesel fuel	5	L	MBK snow cat garage	The fuel transfer pump skid is not properly sealed off and some fuel leaked on the ground	Shoveled the gravel that was contaminated and disposed of it in the yellow bin
February 9, 2019	Hydraulic Oil	400	L	MBK Pit E3	Hydraulic hose failure	Contaminated soil picked up with the loader and disposed of appropriately
February 10, 2019	Hydraulic Oil	150	L	MBK South cell road	Hydraulic hose failure	Pick up spill and brought to contaminated pad at main site. Spill was contained and contaminated soil picked up and disposed of appropriately
February 11, 2019	Coolant	50	L	MBK Pit E Ramp	Coolant Leak	Loader picked up contaminant immediately. Spill was contained and contaminated soil picked up and disposed of appropriately

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February 16, 2019	Hydraulic Oil	10	L	MBK Fuel Farm	O-ring failure	Contaminant was picked up with loader and disposed of appropriately
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