



MEADOWBANK DIVISION

Monitoring Program Summary Report

June 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.3), 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 is 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 June is summarized in Table 2-1 below.

Table 2-1: Freshwater Usage (m³)

Water Location	Source Lake	Jan	Feb	March	April	May	June	Total
Camp	Third Portage Lake	3 577	3 238	3 539	3 188	3 624	3 418	20 584
Mill (freshwater tank)	Third Portage Lake	214 981	182 096	112 326	142 405	147 851	218 935	1 018 594
Emulsion plant	No-name Lake	50	13	48	57	83	16	267
Total Freshwater Usage (m³)		218 608	185 347	115 913	145 650	151 558	222 369	1 039 445
Ore Water (m³)	Ore	4 610	3 045	2 727	4 539	6 203	6 927	28 051
Reclaim Water Usage (m³)	Tailings Pond	7 180	29 023	91 207	69 216	82 018	17 693	296 337

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In June, 23,614 m³ of water was pumped back to the North Cell TSF from the ST-16 sump. Of that amount, 6,814 m³ and 6,319 m³ were transferred from respectively the WEP1 and WEP2 sumps to the ST-16 sump.

As per the 2019 Freshet Action Plan, Agnico Eagle completed in June freshet inspections at the Portage and Vault RSFs. Open water sampling at WEP1 (Station ST-30), WEP2 (Station ST-31) were also completed during the month.

2.3 CENTRAL DIKE SEEPAGE

In June, 157,162 m³ of water was pumped from the ST-S-5 sump back into Portage Pit.

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 June, 10,058 m³ of water was pumped back from the mill trench back to the mill. Inspections of the area were conducted during the month. Trench sampling and wells monitoring for CN downstream has been taken according to the Freshet Action Plan, when possible.

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 June, ice wall continued to be observed into Vault Pit. There is no more mining activities in Vault Pit.

2.7 SEWAGE TREATMENT PLANT

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

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 June, no water was discharged from the Stormwater Management pond to the South Cell TSF.

Table 2.7.1: Seprotech Effluent Results

Parameters	Units	June 4, 2019
Ammonia (NH ₃)	mg N/L	<0.01
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	34.2
Total Kjeldahl Nitrogen	mg N/L	35.9
BOD-5	mg/L	17
COD	mg/L	79
Total Suspended Solids	mg/L	18
Nitrate	mg N/L	5.23
Nitrite	mg N/L	1.00
pH*	Units	7.30
Fecal Coliform	UFC/100 mL	140
Total Coliform	UFC/100 mL	5,000

*Parameter measured by STP operators

Table 2.7.2: LJ-Mix Effluent Results

Parameters	Units	June 4, 2019
Ammonia (NH ₃)	mg N/L	0.61
Ammonia-Nitrogen (NH ₃ -NH ₄)	mg N/L	4.05
Total Kjeldahl Nitrogen	mg N/L	5.61
BOD-5	mg/L	40
COD	mg/L	97
Total Suspended Solids	mg/L	32
Nitrate	mg N/L	12.4
Nitrite	mg N/L	1.13
pH*	Units	7.00
Fecal Coliform	UFC/100 mL	4,200
Total Coliform	UFC/100 mL	90,000

*Parameter measured by STP operators

2.8 VAULT ATTENUATION POND EFFLUENT

No discharge from Vault Attenuation Pond since October 9, 2017. There is currently no plan to restart the discharge in 2019.

2.9 PHASER ATTENUATION POND

No water was pumped out from the Phaser Attenuation Pond in June.

A total amount, 13,940 m³ was transferred from BB Phaser Pit sumps to the Phaser Attenuation Pond in June.

2.10 EAST DIKE SEEPAGE EFFLUENT

East Dike Seepage discharge was stopped on March 30, 2019 and diverted back to the Pit. There is currently no plan to restart the discharge to Second Portage Lake in 2019 as the water can accumulate in the pits without any operational constraint.

2.11 NON CONTACT WATER

In July, Agnico Eagle completed inspections at ST-5 and ST-6 as per the 2019 Freshet Action Plan. Portage Area East (ST-5) and West diversion ditches (ST-6) water quality results are shown in Tables 2.11.1 and 2.11.2, respectively.

TSS results for ST-5 (Table 2.11.1) did not exceed the maximum average concentration and maximum allowable grab sample concentration (30 mg/L) permitted by the Water License, Part F, Item 6.

TSS result for ST-6 (Table 2.11.2) exceed the maximum average concentration (15 mg/L) permitted by the Water License Part F, Item 6. Only a monthly sample during open water season is required by the Water License, and thus, the average concentration is made only of this result on June 4 from the certified laboratory. Internal TSS analyses performed at the Meadowbank Assay Lab during June showed TSS level below 10 mg/L after June 7 and below 2 mg/L after June 14 until the end of the month.

Table 2.11.1: Portage Area East Diversion Ditch (ST-5) Results

Parameters	Units	June 4, 2019
Total Suspended Solids	mg N/L	5

Table 2.11.2: Portage Area West Diversion Ditch (ST-6) Results

Parameters	Units	June 4, 2019
Total Suspended Solids	mg N/L	21

2.12 IN-PIT DISPOSAL

Received on May 24, 2019 from NWB the Ministers Approval regarding the Amendment No.3 to Type A Water Licence No. 2AM-MEA1526 to authorize Water Uses and Waste Deposits associated with the In-Pit Tailings Disposal Proposal.

In-Pit disposal in Goose Pit is planned to start early July. As per Water License 2AM-MEA1526 Part F Item 12, Amendment No.3, the 10 days notice to CIRNAC's Inspector was provided on June 5, 2019.

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 June.

All spills reported internally (9) were managed appropriately on site according to Agnico's spill contingency plan. One (1) was reported to regulators in June. 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

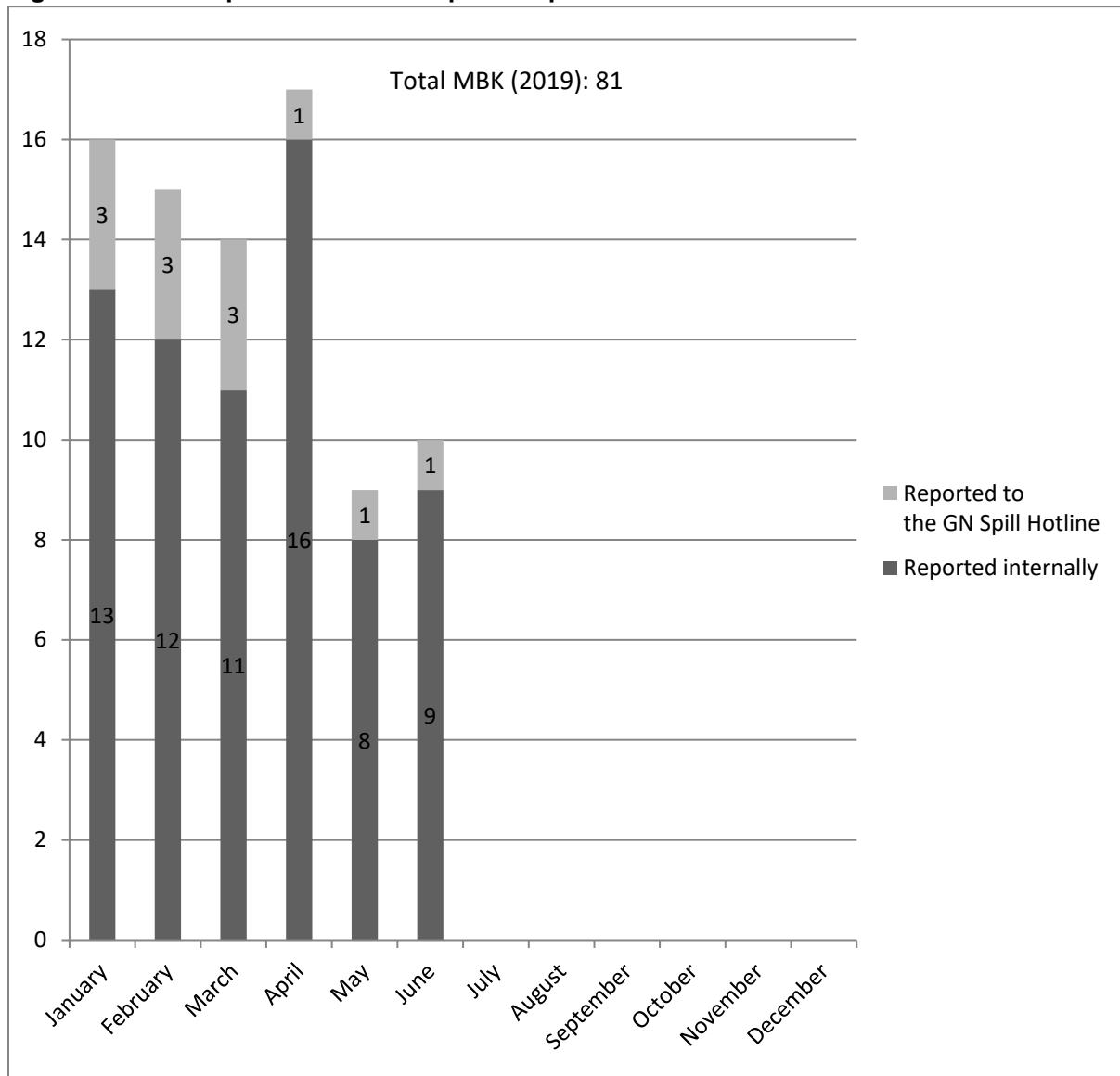


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, June 2019

Date of Spill	Hazardous Material	Qty	Units (L / Kg)	Location	Cause of spill	Clean-up action taken
June 6, 2019	Hydraulic oil	20	L	Vault Marginal Stockpile B	Pilot hose leaking	Absorbent pads used to contain the spill. All contaminated material pick up, cleaned, and disposed off adequately. Hose was replaced.
June 6, 2019	Metabisulfite	0.5	Kg	Dome Warehouse	ripped bag inside sea can	Resealed the bag. Picked up contaminated material and adequately disposed off
June 12, 2019	Diesel	5	L	MBK Tank Farm	Fuel nozzle fell off while refuelling	Contaminated soil picked up and disposed of appropriately
June 12, 2019	Food grease and water	90	L	STP new terra	Overflow of the tank	System stopped and called the sewage truck to empty the tank
June 12, 2019	Hydraulic Oil	60	L	Baker Lake Fuel Farm	Hydraulic hose failure	The excavator was stopped when the operator noticed the spill. The hose was changed and absorbent pad used. Once the repair done, the contaminated material was pick up and disposed adequately
June 14, 2019	Hydraulic oil	20	L	Primary crusher	Hydraulic hose failure	All contaminated material pick up, cleaned, and disposed off adequately. Hose was replaced.
June 19, 2019	Coolant	10	L	Transit Laydown	Coolant hose clamp failure	All contaminated material pick up, cleaned, and disposed off adequately. Hose was repaired.
June 21, 2019	Petroleum Product	4	L	Baker Lake Fuel Farm	Equipment failure	Put absorbent pad and remove contaminated soil using a hand shovel. Send the fuel truck to mechanic for repair.

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June 26, 2019	Sulphur	1000	Kg	S02 plant, mill door	Operator was bringing some sulfur prill pallets, the bag on the top fell on the ground. The bag punctured and left sulfur on the ground.	Contaminated material was brought to the tailing pond.
June 27, 2019	Hydraulic Oil	60	L	Crusher Pad	Hydraulic hose failure	Stopped loader. Put absorbent pad. All contaminated material disposed off adequately