



MEADOWBANK DIVISION

Monitoring Program Summary Report

April 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 April is summarized in Table 2-1 below.

Table 2-1: Freshwater Usage (m³)

| Water Location | Source Lake | Jan | Feb | March | April | Total |
|---|--------------------|----------------|----------------|----------------|----------------|----------------|
| Camp | Third Portage Lake | 3 577 | 3 238 | 3 539 | 3 188 | 13 542 |
| Mill (freshwater tank) | Third Portage Lake | 214 981 | 182 096 | 112 326 | 142 405 | 651 808 |
| Emulsion plant | No-name Lake | 50 | 13 | 48 | 57 | 168 |
| Total Freshwater Usage (m³) | | 218 608 | 185 347 | 115 913 | 145 650 | 665 518 |
| Ore Water (m³) | Ore | 4 610 | 3 045 | 2 727 | 4 539 | 14 921 |
| Reclaim Water Usage (m³) | Tailings Pond | 7 180 | 29 023 | 91 207 | 69 216 | 196 626 |

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

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

Agnico Eagle completed in April inspections at the Portage and Vault RSFs. No open water sampling at WEP1 (Station ST-30) and WEP2 (Station ST-31) were completed during the month due to frozen condition.

The KIA requested that Agnico continue monitoring until there is a 5 year period of non-detect cyanide results. To date (5 previous year - 2014-2018), the monitoring indicated that yearly average for CN levels does not exceed the CCME guideline, the MDMER or Water License limit for effluent discharge into the environment for NP2, NP1 and downstream lakes, Dogleg and Second Portage. Thus, based on the analysis of the previous result, Agnico Eagle suspended the current program in 2019.

2.3 CENTRAL DIKE SEEPAGE

In April, 180,898 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 April, no water was pumped back to the mill. No wells monitoring for CN downstream and trench sampling in March 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 April, 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 April.

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

Table 2.7.1: Seprotech Effluent Results

| Parameters | Units | April 1, 2019 |
|--|------------|---------------|
| Ammonia (NH ₃) | mg N/L | 0.69 |
| Ammonia-Nitrogen (NH ₃ -NH ₄) | mg N/L | 36.2 |
| Total Kjeldahl Nitrogen | mg N/L | 45.6 |
| BOD-5 | mg/L | 12 |
| COD | mg/L | 78 |
| Total Suspended Solids | mg/L | 12 |
| Nitrate | mg N/L | 6.08 |
| Nitrite | mg N/L | 1.50 |
| pH* | Units | 7.20 |
| Fecal Coliform | UFC/100 mL | 200 |
| Total Coliform | UFC/100 mL | <10,000 |

*Parameter measured by STP operators

Table 2.7.2: LJ-Mix Effluent Results

| Parameters | Units | April 1, 2019 |
|--|------------|---------------|
| Ammonia (NH ₃) | mg N/L | 0.01 |
| Ammonia-Nitrogen (NH ₃ -NH ₄) | mg N/L | 2.82 |
| Total Kjeldahl Nitrogen | mg N/L | 4.57 |
| BOD-5 | mg/L | 2 |
| COD | mg/L | 54 |
| Total Suspended Solids | mg/L | 1 |
| Nitrate | mg N/L | 16.3 |
| Nitrite | mg N/L | 0.40 |
| pH* | Units | 7.10 |
| Fecal Coliform | UFC/100 mL | 70 |
| Total Coliform | UFC/100 mL | 5,000 |

*Parameter measured by STP operators

2.8 VAULT ATTENUATION POND EFFLUENT

No discharge occurred from the Vault Attenuation Pond into Wally Lake in April. There is currently no plan to restart the discharge in 2019.

2.9 PHASER ATTENUATION POND

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

2.10 EAST DIKE SEEPAGE EFFLUENT

No discharge occurred from the East Dike Seepage into Second Portage Lake in April. The discharge was stopped on March 30 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

No water sample at Portage Area East (ST-5) and West (ST-6) diversion ditches in April 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 April.

All spills reported internally (16) were managed appropriately on site according to Agnico's spill contingency plan. One (1) was reported to regulators in April. 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

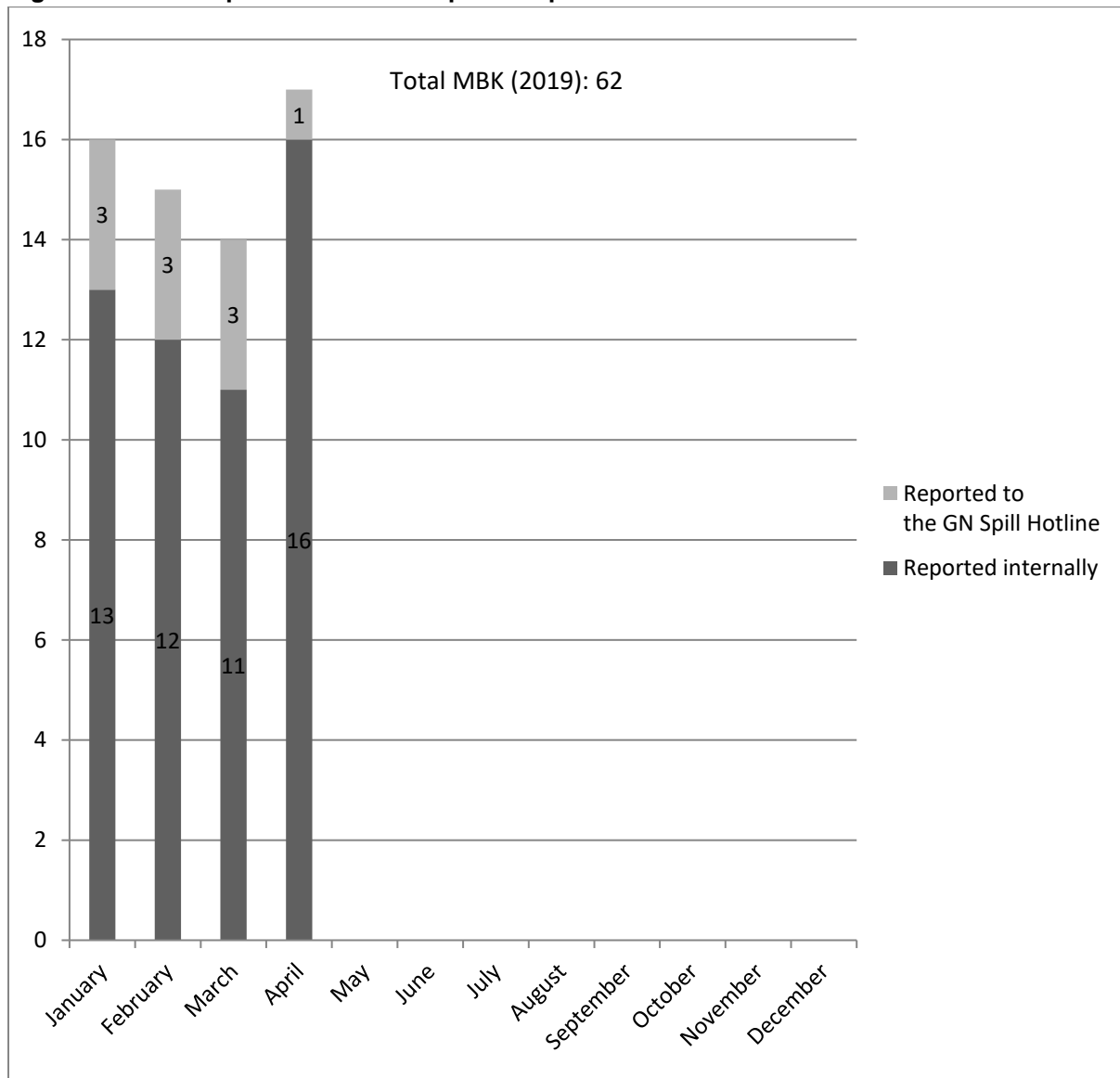


Table 3.1: Summary of Agnico Eagle Internal and Reported Spill Reports, April 2019

| Date of Spill | Hazardous Material | Qty | Units (L / Kg) | Location | Cause of spill | Clean-up action taken |
|----------------|--------------------|-----|----------------|----------------------------|--|--|
| April 1, 2019 | Diesel | 1 | L | Fuel Tank Meadowbank | Valve seal leaking | Contaminated soil picked up and disposed of appropriately |
| April 2, 2019 | Hydraulic Oil | 95 | L | Marginal Stockpile | Hydraulic hose failure | Advise maintenance department for repairs. Contaminated soil picked up and disposed of appropriately |
| April 4, 2019 | Hydraulic Oil | 90 | L | Tear drop Lake Road (DOME) | Hydraulic hose fitting cracked | Blocked off the spill area with delineators. Placed absorbent pads on the ground to contain the oil. Contaminated soil picked up and disposed of appropriately |
| April 8, 2019 | Hydraulic oil | 70 | L | Portage Pit | Hydraulic hose failure | Absorbent pads placed on the ground to contain oil. Contaminated soil picked up and disposed of appropriately |
| April 9, 2019 | Hydraulic oil | 80 | L | Vault Marginal A stockpile | Hydraulic hose failure | Contaminated soil was picked up and placed with the Vault roll-off |
| April 13, 2019 | Diesel Fuel | 50 | L | Fuel Tank Meadowbank | Operator lost control of the nozzle, as truck was just about full. | Clean up contaminated area; speak with operator about proper fueling procedure. Contaminated material picked up and disposed of appropriately |
| April 13, 2019 | Petroleum Product | 50 | L | Winter parking | Traction hose failure | Contained spill with absorbent pad. Contaminated snow shoveled waste drums |

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|-------------------|---------------------|----|---|-------------------------|--|--|
| April 14, 2019 | Hydraulic Oil | 40 | L | Goose Road | Hydraulic hose o ring failure | Contaminated soil picked up and disposed off at the landfarm. Equipment was taken out of service and repaired. |
| April 14, 2019 | Transmission Oil | 60 | L | Portage Pit | Equipment failure | Contaminated soil picked up and placed at the landfarm. Equipment was taken off the shovel and out of service until repaired. |
| April 18, 2019 | Hydraulic Oil | 57 | L | Portage Pit | Hydraulic hose failure | Maintenance has been called to fix the machine. Contaminated soil picked up and disposed off adequately |
| April 20, 2019 | Hydraulic Oil | 15 | L | Sana area | The plastic container pan for used oil was cracked. | Removed some contaminated soil with the loader and disposed off adequately |
| April 21, 2019 | Coolant | 89 | L | Portage pit entrance | Worn out "o" ring on engine oil cooler and leaking went machine is not running and cold (cold leak) | Equipment repaired. Contaminated soil and material picked up and disposed off adequately |
| April 21, 2019 | Hydraulic Oil | 16 | L | Tear drop Lake | Hydraulic hose failure | Absorbent pads use to contain the spill. Contaminated material picked up and disposed off adequately |
| April 21, 2019 | Hydraulic Oil | 80 | L | Maintenance area | Hydraulic hose failure | Removed failed hose, and replaced with new one. |
| April 22, 2019 | Coolant | 65 | L | Portage Pit | Broken seal inside water pump for cooling of engine | Contaminated soil picked up and disposed of appropriately |

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|-------------------|-------------|-------|---|--|--|--|
| April 23, 2019 | Tailings | 25000 | L | Capping of Tailing Storage Facility | Tailings pipe failure near a flange | Stopped the pump and repairs the tailings pipe. Contained inside the TSF. |
| April 28, 2019 | Diesel fuel | 70 | L | Fuel Tank Meadowbank | Valve handle of fuel arm was tied up with a rope, the operator did not see the rope and he turned the pump on. | Stop the refueling. Contaminated material picked up and disposed off adequately |