AGNICO EAGLE
MELIADINE

Meliadine Gold Project
NWB 2AM-MEL1631
March, 2019 Monthly Report

Prepared for:
Nunavut Water Board

Prepared by:
Agnico Eagle Mines Limited – Meliadine Division

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SECTION 1 • BACKGROUND

As required under Part I, Item 10 of Type A Water License 2AM-MEL1631, this report documents the water management and monitoring activities at the mine site, and provides a summary of spills/ actions for the month of March 2019.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Table 2.1 details monthly water usage approved under Water License 2AM-MEL1631:

Table 2.1: Summary of Agnico's monthly water usage in March 2019

	Monthly Usage (m^3)
Camp (MEL-11)	3,218
Construction – Batch Plant (MEL-26 – A8)	0
Dust suppression	0
Total March	3,218
Year to date 2019	8,886

2.2 DEWATERING ACTIVITIES

In March 2019 no dewatering activity occurred

2.3 CP1

Discharge from CP1 into Meliadine Lake via the Final Discharge Point (MEL-14) ended September 3rd 2018.

2.4 SEEPAGE AND RUNOFF FROM THE LANDFILL AND LANDFARM

The 2AM-MEL1631 landfill and landfarm were commissioned in November 2017. No seepage or runoff was observed in March 2019.

2.5 SEWAGE TREATMENT PLANT

In March 2019, 2,603m^3 of treated wastewater was discharged into CP1. 29m^3 of sludge was removed during the month. The majority of the sludge is disposed of in in the Tailings Storage Facility as approved, the sludge can also be utilized as nutrient in the site landfarm or shipped to the south with Agnico Eagle's hazmat if needed.

2.6 CONTAINMENTS

No water was discharged from the Itivia fuel containment facility (Station Mel-25) in March.

2.7 MONITORING ANALYTICAL DATA

In March only station MEL-11 (water intake from Meliadine Lake) was sampled as all other stations are frozen. This station doesn't have quality limits. See below the analytical results from the monitoring

MEL-11	**Sample Date**	3/3/2019
Parameters	**Units**	
Conventional Parameters		
pH	pH units	6.89
Specific conductivity	umhos/cm	110
Dissolved Hardness	mg/L	27.5
Total Hardness	mg/L	29.5
Total suspended solids	mg/L	1
Total Dissolved Solids	mg/L	90
Total organic carbon	mg/L	3.2
Dissolved organic carbon	mg/L	3.2
Turbidity	NTU	0.2
Major Ions		
Alkalinity, Total as CaCO3	mg/L	23
Bicarbonate, as CaCO3	mg/L	23
Calcium	mg/L	8.70
Carbonate, as CaCO3	mg/L	< 1.0
Chloride	mg/L	13
Cyanide	mg/L	< 0.0050
Cyanide (free)	mg/L	< 0.0010
Magnesium	mg/L	1.39
Potassium	mg/L	0.994
Sodium	mg/L	5.80
Sulphate	mg/L	5.0
Nutrients and Chlorophyll a		
Nitrate	mg/L	< 0.10
Nitrite	mg/L	< 0.010
Nitrate + nitrite	mg/L	< 0.10
Total ammonia	mg/L	0.087
Total Kjeldahl nitrogen	mg/L	0.22
Total phosphorus	mg/L	< 0.020
Orthophosphate	mg/L	< 0.010
Total Metals		
Aluminum	mg/L	0.0098
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00030
Barium	mg/L	0.0110
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05

Cadmium	mg/L	< 0.000010
Calcium	mg/L	9.26
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00108
Iron	mg/L	0.051
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Magnesium	mg/L	1.54
Manganese	mg/L	0.0047
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	< 0.0010
Potassium	mg/L	1.13
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.293
Silver	mg/L	< 0.000020
Sodium	mg/L	6.09
Strontium	mg/L	0.0476
Sulphur	mg/L	< 3
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	0.0066
Zirconium	mg/L	< 0.00010
Dissolved Metals		
Aluminum	mg/L	0.0031
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00029
Barium	mg/L	0.0106
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00070
Iron	mg/L	0.0155
Lead	mg/L	< 0.00020
Lithium	mg/L	< 0.0020
Manganese	mg/L	0.0015
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010

Nickel	mg/L	< 0.0010
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.226
Silver	mg/L	< 0.000020
Strontium	mg/L	0.0469
Sulphur	mg/L	< 3.0
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010
Volatile Organics		
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	< 0.00020
F1 (C6-C10)-BTEX	mg/L	< 0.025
F1 (C6-C10)	mg/L	< 0.025
F2 (C10-C16)	mg/L	< 0.1
F3 (C16-C34)	mg/L	< 0.2
F4 (C34-C50)	mg/L	< 0.2
Reached baseline at C50	mg/L	YES

< Indicates parameter was below laboratory equipment detection limit.
> Indicates parameter detected above equipment analytical range.
- Chemical not analyzed or criteria not defined.

SECTION 3 • MATERIAL MANAGEMENT

3.1 LANDFILL / LANDFARM

The volume of material placed into the landfill is evaluated through periodic surveys. According to the most recent survey, the landfill contained approximately 11,635 m³ of material.

In March 2019, approximately less than 1m^3 of contaminated soil was transferred to the Type A Landfarm as a result of minor spills cleanup.

3.2 ORE

Approximately 87,223 tonnes of ore was processed through the Mill and 31,693 tonnes of ore was taken away from the stockpiles in March.

3.3 WASTE ROCK STORAGE FACILITY

In March, a total of 52,038 tonnes of waste rock was removed in the mine development process. 4,699 tonnes were used as underground dry rockfill. The rest of the material was used in construction on site or stockpiled for progressive closure cover.

3.4 TAILINGS

87,223 dry tonnes of filtered tailings were sent to the Tailing Storage Facility in March 2019. No tailings was used for paste underground backfill.

SECTION 4 SPILL MANAGEMENT

4.1 INTERNAL AND REPORTABLE SPILLS

All spills reported internally (3) are listed in the table 4.1 below and were managed according to Agnico's spill contingency plan. Spills were contained and cleaned up, contaminated material was disposed of in an appropriate manner, and the clean-up actions were monitored closely by the Environment Department.

One reportable spill occurred on March 20th, at 7:00a.m. A worker noticed water flowing from a drain pipe leading to the MSB lift station. The water which escaped onto the snow/ground was pre-treated, raw sewage water. It is not known how long the water had been flowing prior to being noticed and shut off. The cause was a malfunction of the heat trace which led to the drain freezing.

The spill was reported as per the obligations under the Nunavut Water Board License 2AM-MEL1631 Water Licence, part H, item 8 and the Government of Nunavut's, Environmental Protection Act, paragraph 5.1(a). The follow up report was submitted April 7th.

Table 4.1: Summary of Agnico's Spill Reports in March 2019

Date and time of occurrence	Material	Estimated quantity (l)	Location of incident	Description of incident	Describe immediate corrective actions
3/9/2019	Coolant	1.00	Lake Hole M192525	drill was repaired last week - coolant had leaked from drill onto ice bellow drill	shovel all of the contaminated snow into a bucket sent to HAZMAT
3/16/2019	Hydraulic oil	3.00	FW 150 E	Busted hydraulic hose	Install absorbent pad under the hose and picked up contaminated material
3/19/2019	Diesel	20.00	Itivia Area	During a scheduled weekly inspection of the Itivia fuel farm, an E&I Millwright observed a leak from fuel pump A (65POD11601A). The fuel was mostly contained inside of the mechanical room c-can in an area approximately 5' x 6'. Within this containment there are small holes in the flooring where the fuel was dripping onto the ground underneath.	Contaminated snow picked up and disposed of adequately

3/20/2019	Grey Water	4,500.00	Camp	On March 20th, at 7:00a.m., a worker noticed water flowing from a drain pipe leading to the MSB lift station. The water which escaped onto the snow/ground was pre-treated, raw sewage water. It is not known how long the water had been flowing prior to being noticed and shut off. The cause was a malfunction of the heat trace which led to the drain freezing.	Contaminated snow picked up and disposed of adequately. Some contaminated ice still have to be removed, this will be completed once warmer weather sets in