



Meliadine Gold Project
NWB 2BB-MEL1424
October 2018 Monthly Report

Prepared for:
Nunavut Water Board

Prepared by:
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November 13th, 2018

This monthly report is delivered under water license 2BB-MEL1424, PART J, Item 13.

1. The Licensee shall maintain Monitoring Stations at the following locations:

Table 1: Monitoring stations

| Monitoring Station | Description | Status |
|--------------------|--|---------------------------------|
| MEL-1 | Raw water supply intake at Meliadine Lake | Active (Volume m ³) |
| MEL-2 | Raw water supply intake at Pump, A8 or other Lakes | Active (Volume m ³) |
| MEL-5 | Point of discharge for the Bermed Fuel Containment Facilities | Inactive |
| MEL-6 | Effluent from the Landfarm Treatment Facility prior to release | Active |
| MEL-7 | Final Effluent Discharge from the BIODISK treatment system | Active (no direct discharge) |
| MEL-8 | Point of discharge or runoff from the Non-Hazardous Waste landfill | Inactive |

2. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes from all sources.

Table 2: Water quantities utilized (average)

| | | | |
|-------------------------|--------------|---------------------|--------|
| MEL-1 ¹ | Camp | m ³ /day | 34.53 |
| | Pump Shack | m ³ /day | 1.71 |
| | Construction | m ³ /day | 0.00 |
| MEL-2 (A8) ² | Underground | m ³ /day | 1.76 |
| | Drilling | m ³ /day | 0.00 |
| Not MEL-1 or MEL-2 | Drilling | m ³ /day | 21.58 |
| Daily Average | | m ³ /day | 54.94 |
| Total | | m ³ | 1,758 |
| Total 2018 | | m ³ | 17,363 |

3. The Licensee shall measure and record the volume of all soil from all locations entering the Landfarm Treatment Facility.

In October 2018, no material entered the Type B landfarm, all new contaminated material is brought to the Type A landfarm.

¹ MEL-1: 541943E, 6989174N

² MEL-2 (A8): 540076E, 6987731N

4. *The Licensee shall assess and record the concentration of F1 – F4 fractions in petroleum hydrocarbon contaminated soil, according to the CCME Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil that is entering the Land Treatment Unit from all sources and excavations.*

No contaminated soil was deposited in October, 2018 therefore no samples were taken..

5. *The Licensee shall provide the GPS coordinates (in decimal degrees) of all locations where wastes associated with camp operations and exploration activities are deposited.*

Table 3: GPS Coordinates of the landfill and landfarm

| | Landfill | Landfarm | Incinerator |
|-----------|------------|------------|-------------|
| Latitude | 63.03063° | 63.02386° | 63.02981° |
| Longitude | -92.22089° | -92.18639° | -92.16750° |

6. *Licensee shall sample at Monitoring Program Station MEL-7, monthly during wastewater effluent discharge. Samples shall be analyzed for the parameters listed under Part D Item 11:*

pH

Biochemical Oxygen Demand – BOD5

Total Suspended Solids (TSS)

Fecal Coliforms

Oil and Grease (and visual)

The STP upgrade and maintenance program was initiated in November 2017. The effluent, treated at the exploration STP is trucked to and discharged into CP1.

Agnico continued to monitor the quality of the effluent; 5 samples were collected during the month. The summary of the results is provided in Table 4 below.

Table 4: Effluent testing results at STP-FINAL (MEL-7) sampling station, October 2018

| Parameters | Limits | 10/01 | 10/08 | 10/15 | 10/22 | 10/29 |
|--|-----------|-------|--------|-------|-------|-------|
| Biochemical Oxygen Demand, mg/L | 80 | 4 | 5 | 4 | 2 | 5 |
| pH | 6.0 - 9.5 | 7.63 | 7.54 | 7.27 | 7.42 | 7.40 |
| Total Suspended Solids, mg/L | 100 | 2 | 5 | 3 | 2 | 5 |
| Oil and Grease, mg/L | 5 | 2.9 | 0.9 | <0.5 | 0.6 | <0.5 |
| Atypical | - | 220 | 21,000 | 70 | 1,900 | 160 |
| Fecal Coliforms (CFU/100mL) | 1000 | 2 | 36 | <2 | <2 | 4 |
| Heterotrophic Plate Count (AAHB) (CFU/100mL) | - | 636 | 6,700 | 2,400 | 930 | 91 |
| Total Coliforms (CFU/100mL) | - | 30 | <1000 | 40 | 100 | <10 |

7. *The Licensee shall, prior to the release of effluent from the Bermed Fuel Containment Facilities at Monitoring Program Station MEL-5 and the Landfarm Treatment Facility at Monitoring Program Station MEL-6 for the purpose of demonstrating compliance, sample for the parameters listed under Part D item 15.*

In October, no water was discharged from the Fuel Containment Facilities (Monitoring station MEL-5) and the Landfarm Treatment Facility (Monitoring Station MEL-6).

- 8. *The Licensee shall obtain representative samples of the water column below any ice where required under part F, Items 5 and 6. Monitoring shall include but not limited to the following:***

Total Suspended Solids

pH

Electrical Conductivity, and

Total trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and Trace Arsenic and Mercury.

There was no drilling being conducted on ice in October thus no samples were taken.

- 9. *Modify the monthly monitoring reports, starting April 2016, to include, at a minimum, waste water treatment options; and modifications of the freshet action plan.***

Since Nov, 2017 (check this date) all treated sewage from the Exploration Camp STP is trucked and deposited in CP1. Previously the effluent from this system was discharged directly into Meliadine Lake. As a modification and alternate wastewater treatment option the effluent from this facility is now monitored and trucked to CP1