



AGNICO EAGLE

MELIADINE GOLD PROJECT

ENVIRONMENTAL REPORT: NOVEMBER 2016

WATER LICENCE 2BB-MEL1424

**SUBMITTED TO THE
NUNAVUT WATER BOARD**

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A. 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 Program Station Number	Description	Status
MEL-1	Raw water supply intake at Meliadine Lake	Active (Volume cubic metres)
MEL-2	Raw water supply intake at Pump, A8 or other Lakes	Active (Volume cubic metres)
MEL-5	Point of discharge for the Bermed Fuel Containment Facilities	Active
MEL-6	Effluent from the Landfarm Treatment Facility prior to release	New
MEL-7	Final Effluent Discharge from the BIODISK treatment system	Active
MEL-8	Point of discharge or runoff from the Non-Hazardous Waste Landfill	(New) Active

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.*

MEL-1	Daily average (m ³)
Drilling	0
Camp	29.65
Construction	2.10
MEL-2 (A8)	
Underground	1.72
November Average	33.47
Total November	1004.05
Total 2016	14938.7

MEL-1: 541943E, 6989174N

MEL-2 (A8): 540076E, 6987731N

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

No contaminated soil was brought to the landfarm in November.

- 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.**

Soil samples were taken on September 25, 2016 as per Part D Item 19 prior to removal from the Landfarm Facility. The landfarm was divided into 30 sections. Of the 30 sections 19 were sampled. The remaining sections that were not sampled were submerged in water from the fall rains, and not feasible to sample at this time. In total 39 samples were taken from the Landfarm. Of the 39, 4 were QAQC samples. After reviewing the results received from the lab, 11 of the sections meet the Remediation Requirements -- Summary of Tier 1 Remediation Criteria (mg/kg) for PHC in 'Surface Soil' for Industrial Land Uses for both surface and sub-surface samples extracted from the landfarm. No soil was removed from the landfarm.

A more in depth report will be submitted with the 2016 Annual Report.

- 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.**

Construction of the landfill under license 2BB-MEL1424 was completed on October 15, 2016. All non-salvageable, non-hazardous, non-putrescible solid wastes produced at the Meliadine site are disposed of at this location:

Latitude: 63.030631

Longitude: -92.22089

As per Part E Item 6, the Construction Summary Report was submitted to the NWB on December 20, 2016.

- 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 G Item 11.**

Biochemical Oxygen Demand – BOD5

Total Suspended Solids

Oil and Grease (and visual)

Fecal Coliforms

pH

There were no exceedances during the month of November.

Station: STP-FINAL		November				
DATE	Limits	11/7/2016	11/14/2016	11/21/2016	11/23/2016	11/28/2016
Ammonia as N (mg/L)		41.0	24.0	50.0	52.0	40.00
Biochemical Oxygen Demand	80	50.0	31.0	25.0	27.0	30.00
Kjeldahl nitrogen		41.0	34.0	55.0	57.0	53.00
pH	6.0 - 9.5	7.3	7.17	7.60	7.6	7.48
Phosphorus (P)-Total		16.0	14.0	16.0	16.0	15.00
Total Suspended Solids	100	9.0	6.0	10.0	13.0	12.00
Transmittance %		28.0	31.0	23.0	22.0	23.00
Nitrite-N		2.3	5.7	1.36	1.5	11.20
Nitrate-N		14.4	23.0	9.98	10.3	14.80
Nitrate and Nitrite as N		16.70	28.70	11.30	11.80	25.90
Oil & Grease-(IR)	5	1.2	<0.50	<0.50	<0.50	<0.50
Atypical		3400	580	*	1900	430.00
Fecal Coliforms (CFU/100mL)	1000	6.0	4.0	*	<2	8.00
Heterotrophic Plate Count (AAHB) (CFU/100mL)		13,400.0	9,800.0	*	21,300.0	13,800.00
Total Coliforms (CFU/100mL)		100.0	10.0	*	600.0	490.00

*Due to weather delay, samples were received past hold time.

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 November, no water was released from MEL-5 or 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.

➤ No drilling was done in November on any lake.

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

1. ***Waste water treatment options:*** Water contained in P3 and P2 was pumped to P1 in 2016. Daily inspections were completed by environmental technicians. Evaporators were in operation until September 17. They were winterized afterwards.

In November, no water was transferred from/to the P-cells due to frozen conditions.

2. **Modifications of the freshet action plan:** There were no updates to the Freshet Action Plan. It will be reviewed and if changes are required, an updated version will be submitted with the 2016 annual report.
3. **Seep:** There were no active seeps in November due to frozen conditions.

During the 2017 freshet, Agnico Eagle will assess seepage rates at DP1-B and DP3-A as requested by INAC Inspector on November 10, 2016.