



# **AGNICO EAGLE**

## **MELIADINE GOLD PROJECT**

**ENVIRONMENTAL REPORT: FEBRUARY 2017**

**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 <sup>3</sup> )
Drilling	0
Camp	32.73
Construction	0.39
MEL-2 (A8)	
Underground	2.44
February Average	35.56
Total February	995.66
Total 2017	1942.44

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 February.

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 soil samples were taken in February as Agnico Eagle is not planning to take soil out of the landfarm in March due to frozen conditions.

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.***

Landfill:

Latitude: 63.030631

Longitude: -92.22089

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**

Four (4) samples were collected during the month. All results were below allowable limits.

Station: STP-FINAL		February			
DATE	Limits	2/6/2017	2/13/2017	2/20/2017	2/27/2017
Ammonia as N (mg/L)		44	50	38	49
Biochemical Oxygen Demand	80	21	39	14	9
Kjeldahl nitrogen		52	47	39	47
pH	6.0 - 9.5	7.25	7.42	7.25	7.39
Phosphorus (P)-Total		14	13	13	14
Total Suspended Solids	100	10	10	6	4
Transmittance %		20	26	29	27
Nitrite-N		1.13	1.34	2.36	2.72
Nitrate-N		24.1	17.4	19.1	16.2
Nitrate and Nitrite as N		25.3	18.8	21.5	18.9
Oil & Grease- (IR)	5	1.3	<0.50	1.5	0.7
Total Nitrogen (N)					
Atypical		7900	12000	>20000	2500
Fecal Coliforms (CFU/100mL)	1000	<2	2	<2	<2
Heterotrophic Plate Count (AAHB) (CFU/100mL)		>3000	26,000.00	>3000	11,400.00
Total Coliforms (CFU/100mL)		500	9000	***	600

\*\*\* Footnote of Certificate of Analysis: The great number of bacteria retain distinction of total coliforms and atypical colonies. Number of total coliforms may be misjudged; it is not mentioned.

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 February, 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 February 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:**

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

2. **Modifications of the freshet action plan:** An updated version of the Freshet Action Plan will be submitted with the 2016 Annual Report.
3. **Seep:** There were no active seeps in February 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.