



AGNICO EAGLE

MELIADINE GOLD PROJECT

ENVIRONMENTAL REPORT: DECEMBER 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	26.26
Construction	6.65
MEL-2 (A8)	
Underground	2.23
December Average	35.13
Total December	1,089
Total 2016	16,047

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 December.

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 December as Agnico Eagle is not planning to take soil out of the landfarm.

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

The sample collected on December 5, 2016 exceeded the allowable oil and grease criteria. A spill report will be provided shortly for this exceedance. Agnico Eagle is currently investigating the cause of this exceedance and more information will be provided in the spill follow up report and in the January 2017 Monthly Monitoring Summary Report.

Results collected during the rest of the month were below allowable limits.

Station: STP-FINAL		December			
DATE	Limits	12/5/2016	12/12/2016	12/19/2016	12/28/2016
Ammonia as N (mg/L)		40.00	66.00	36.00	9.10
Biochemical Oxygen Demand	80	23.00	34.00	47.00	9.00
Kjeldahl nitrogen		43.00	89.00	44.00	15.00
pH	6.0 - 9.5	7.42	7.72	7.35	7.09
Phosphorus (P)-Total		16.00	13.00	15.00	13.00
Total Suspended Solids	100	9.00	18.00	13.00	14.00
Transmittance %		26.00	20.00	25.00	30.00
Nitrite-N		2.70	1.58	1.65	1.27
Nitrate-N		21.50	1.97	20.50	32.70
Nitrate and Nitrite as N		24.20	3.55	22.10	34.00
Oil & Grease-(IR)	5	75.00	0.90	<0.50	1.10
Atypical		3,000.00	1,400.00	5,700.00	Lab lost samples
Fecal Coliforms (CFU/100mL)	1000	<2	34.00	4.00	Lab lost samples
Heterotrophic Plate Count (AAHB) (CFU/100mL)		16,000.00	>30,000.00	14,600.00	Lab lost samples
Total Coliforms (CFU/100mL)		<100	400.00	400.00	Lab lost samples

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 December, 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 December 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 December, 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 December 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.