



# **AGNICO EAGLE**

**MELIADINE GOLD PROJECT**

**ENVIRONMENTAL REPORT: JULY 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 Bormed 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.***

Table 2: Water quantities utilized

MEL-1 <sup>1</sup>	Daily average (m <sup>3</sup> )
Camp	27.82
Construction	12.78
MEL-2 (A8) <sup>2</sup>	
Underground	2.35
Drilling	0.00
Not MEL-1 or MEL-2	
Drilling	0
July Daily Average	30.17
Total July	935
Total 2017	11,914

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

In July 2017, no contaminated soil was brought to the landfarm.

**4. *The Licensee shall assess and record the concentration of F1 – F4 fractions in petroleum hydrocarbon contaminated soil, according to the***

<sup>1</sup> MEL-1: 541943E, 6989174N

<sup>2</sup> MEL-2 (A8): 540076E, 6987731N

**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 July 2017 from 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.**

Table 3: GPS Coordinates of the landfill and landfarm

	Landfill	Landfarm
<b>Latitude</b>	63.03063	63.02386
<b>Longitude</b>	-92.22089	-92.18639

- 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)**

Six (6) samples were collected during the month. A fecal coliforms exceedance at 2,600 CFU/100 ml was recorded on July 24<sup>th</sup> 2017 (the water license limit is 1,000 CFU/100 ml); an investigation is underway to determine the cause of the incident. The next sample was collected on July 31; according to the sample analysis, the coliform count at <2 CFU/100 ml was below the permitted discharge limit (1000 CFU/100 ml).

This was reported as a spill to relevant authorities. Upon the completion, a follow-up report will be issued.

Table 4: Effluent testing results

Station: STP-Final		July					
DATE	Limits	7/3/2017	7/10/2017	7/17/2017	7/20/2017	7/24/2017	7/31/2017
Biochemical Oxygen Demand	80	20	12	12	29	23	19
pH	6.0 - 9.5	6.94	7.27	6.92	6.84	7.41	6.99
Total Suspended Solids	100 mg/L	<10	5	2	3	5	4
Oil & Grease-(IR)	5 mg/L	<0.50	1.3	<1	1.4	0.5	<0.50
Atypical		250	1470	130000	1860	29 000	1400
Fecal Coliforms (CFU/100ml)	1000	<2	2	<10	<2	2600	<2
Heterotrophic Plate Count (CFU/100ml)		12,000	8,800	>6000	8,000.00	> 30 000	11,200
Total Coliforms (CFU/100ml)		>800	80	<10	18	12 000	230

- 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 July, no water was released from the Bermed 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.***

No on-ice drilling was conducted during the month of July. Sampling will resume next winter.

- 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.***

1. Waste water treatment options:

In July, 3,124 m<sup>3</sup> was pumped from the underground mine to the P2 cell.

Water is not transferred from the P-Cells and is evaporated; the evaporators started operation in June.