



AGNICO EAGLE

MELIADINE GOLD PROJECT

ENVIRONMENTAL REPORT: MAY 2017

WATER LICENCE 2BB-MEL1424

**SUBMITTED TO THE
NUNAVUT WATER BOARD**

Contact:

Manon Turmel
Environmental Compliance Counselor
AGNICO EAGLE Mines Ltd.
Phone : 1 (819) 759-3555 (ext. 8136)
manon.turmel@agnicoeagle.com

Jeffrey Pratt/Jessica Huza
Senior Environmental Coordinator
AGNICO EAGLE Mines Ltd.
Phone : 1 (819) 759-3555 (ext. 3928)
Mobile : 1 (306) 960-2370
Jeffrey.pratt@agnicoeagle.com / jessica.huza@agnicoeagle.com

Erika Voyer
Environment General Supervisor
AGNICO EAGLE Mines Ltd.
Mobile : 1 (819) 856-1956
erika.voyer@agnicoeagle.com

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.

MEL-1	Daily average (m ³)
Camp	29.41
Construction	0.00
MEL-2 (A8)	
Underground	2.62
Drilling	38.91
Not MEL-1 or MEL-2	
Drilling	21.29
May Daily Average	91.45
Total May	2835
Total 2017	8149

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.

In May 2017, 1 m³ of 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 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 May 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.*

	Landfill
Latitude	63.030631
Longitude	-92.220890

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

Six (6) samples were collected during the month. An Oil & Grease exceedance was recorded on May 1st 2017. The water license limit is 5 mg/L. This was reported as a spill to relevant authorities. The follow up report will be submitted during the month of July. To ensure compliance in the future, an Oil and Grease filter has been ordered in May and should be installed shortly on the system.

Station: STP-FINAL		May					
DATE	Limits	5/1/2017	5/8/2017	5/15/2017	5/18/2017	5/22/2017	5/29/2017
Biochemical Oxygen Demand	80 mg/L	23	26	11	44	54	17
pH	6.0 - 9.5	7.61	7.35	7.07	7.15	7.43	7
Phosphorus (P)-Total		13	13	14	13	16	14
Total Suspended Solids	100 mg/L	5	6	5	4	4	5
Oil & Grease-(IR)	5 mg/L	6.1	<0.50	1.7	1.3	<0.50	<0.50
Atypical		27000	14100	6100	not reported	9700	240
Fecal Coliforms (CFU/100mL)	1000	<2	2	<2	<2	<2	<2
Heterotrophic Plate Count (AAHB) (CFU/100mL)		24,000	25,600	24,800.00	6,000.00	>30000	17,700.00
Total Coliforms (CFU/100mL)		42,000	< 100	800	not reported	1000	50

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 May, 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.

- Results from water quality samples collected prior to, during and after drilling activities undertaken in 2017 can be found in Appendix A.

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 May, no water was transferred from/to the P-cells. Water was pumped from underground to the P-cells area. Evaporators were not in operation during the month. They will be started in June.
3. ***Seepage:*** No seepage was observed in May 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.

Appendix A

Sample ID	Date	Conductivity	Hardness	pH	Tss	Turbidity	Ag	Al	As	Ba	Be	B	Ca	Cd	Cl	Cr	Cu	Fe	Pb	K	Li	Mg	Mn	Hg	Mo	Na	Ni	Sb	Se	Sn	SO 4 (Sulfate)	Sr	Ti	U	V	Zn	
	Units	µmhos/cm	mg CaCO3/L		mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
D12-001 (Before)	2017-04-15	364	148	7.22	7	2.02	<0.0001	<0.006	<0.0005	0.037	<0.0005	<0.01	48.4	<0.00002	22.0	0.0008	<0.0005	0.08	<0.0003	3.25	0.006	6.62	0.0676	<0.00001	<0.0005	10.7	0.0035	<0.0001	<0.001	<0.001		16	0.233	0.05	<0.001	<0.0005	0.014
D12-001 (During)	2017-04-20	405	169	7.28	8	2.89	<0.0001	0.043	<0.0005	0.0488	<0.0005	<0.01	54.8	<0.00002	25.3	0.0008	0.02230	0.27	0.0045	3.76	<0.005	7.85	0.1012	<0.00001	0.0005	14.1	0.0043	0.0001	<0.001	<0.001		19.4	0.275	0.05	<0.001	<0.0005	0.094
D12-001 (During)	2017-04-28	391	158	7.19	11	4.03	<0.0001	<0.006	<0.0005	0.0508	<0.0005	<0.01	51.4	<0.00002	18.4	<0.0006	0.00570	0.43	<0.0003	3.66	<0.005	7.08	0.1111	<0.00001	<0.0005	12.2	0.0026	<0.0001	<0.001	<0.001		16.1	0.241	0.05	<0.001	<0.0005	0.075
D12-001 (During)	2017-05-05	379	174	7.19	<1	1.81	<0.0001	0.009	0.0033	0.0492	0.0009	<0.01	56.5	0.0001	25.0	0.0031	0.00300	0.07	0.0065	3.34	<0.005	1.55	0.1396	<0.00001	<0.0005	12.5	0.0029	0.0001	<0.001	<0.001		15.9	0.301	0.03	<0.001	<0.0005	0.023
D12-001 (After)	2017-05-16	75	31	7.32	6	3.38	<0.0001	0.032	<0.0005	0.0185	<0.0005	<0.01	10.7	<0.00002	5.4	0.0035	0.00250	0.34	<0.0003	0.86	<0.005	1.12		0.00002	<0.0005	2.77	0.0015	<0.0001	<0.001	<0.001		3.8	0.043	0.01	<0.001	<0.0005	0.053
MEL-Lake-002 (Before)	2017-04-15	104	30	7.31	3	1.01	<0.0001	0.055	<0.0005	0.0085	<0.0005	<0.01	9.71	<0.00002	11.2	0.0008	<0.0005	0.08	<0.0003	1.21	<0.005	1.5	0.003	<0.00001	<0.0005	5.68	0.0011	0.0001	<0.001	<0.001		4.1	0.041	0.01	<0.001	<0.0005	0.004
MEL-Lake-002 (During)	2017-04-28	99		7.27	12	0.83	<0.0001	<0.006	<0.0005	0.0508	<0.0005	<0.01	51.4	<0.00002	11	<0.0006	0.00570	0.43	<0.0003	1.12	<0.005	1.42	<0.0005	<0.00001	<0.0005	5.52	<0.0005	<0.0001	<0.001	<0.001		5.2	0.043	<0.01	<0.001	0.0023	<0.001
MEL-Lake-002 (During)	2017-05-05	93	37	7.29	5	0.96	<0.0001	<0.006	0.0019	0.0084	0.0005	<0.01	12.2	0.00004	9.7	0.0038	0.00170	0.03	0.0034	1.4	<0.005	1.67	0.0019	0.00001	<0.0005	5.76	0.0007	<0.0001	<0.001	<0.001		2.2	0.053	<0.01	<0.001	<0.0005	0.027
Mel-Lake-002 (After)	2017-05-16	93	29	7.27	4	1.85	<0.0001	<0.006	<0.0005	0.0131	<0.0005	<0.01	9.95	<0.00002	10.1	0.0019	0.00170	0.07	0.0036	1.36	<0.005	1.12		<0.00001	<0.0005	4.73	0.0010	<0.0001	<0.001	<0.001		6.5	0.035	0.01	<0.001	<0.0005	0.035
MEL-Lake-003 (Before)	2017-04-15	93	27	7.27	7	0.5	<0.0001	<0.006	<0.0005	0.0067	<0.0005	<0.01	8.66	<0.00002	11.4	<0.0006	<0.0005	0.01	0.0012	1.09	<0.005	1.35	0.001	<0.00001	<0.0005	5.27	0.0009	<0.0001	<0.001	<0.001		2.8	0.039	<0.01	<0.001	<0.0005	0.001
MEL-Lake-003 (Before)	2017-04-28	86	26	7.29	10	0.55	<0.0001	<0.006	<0.0005	0.0028	<0.0005	<0.01	7.61	<0.00002	11	<0.0006	0.00270	0.02	<0.0003	1.15	<0.005	1.46	0.001	<0.00001	<0.0005	5.74	<0.0005	<0.0001	<0.001	<0.001		5.2	0.042	<0.01	<0.001	<0.0005	<0.001
MEL-Lake-003 (Before)	2017-05-05	98	36	7.3	1	0.76	<0.0001	0.023	<0.0005	0.0094	0.0011	<0.01	11.7	<0.00002	11.9	0.0036	0.00240	0.07	0.002	1.59	<0.005	1.54	0.0022	0.00001	<0.0005	6.14	0.0011	<0.0001	<0.001	<0.001		3.7	0.061	<0.01	<0.001	0.0007	0.075
MEL-Lake-004 (Before)	2017-04-15	101	27	7.3	6	0.53	<0.0001	0.006	<0.0005	0.0063	<0.0005	<0.01	8.59	<0.00002	10.1	<0.0006	<0.0005	0.01	<0.0003	1.13	<0.005	1.37	0.0006	<0.00001	<0.0005	5.34	0.0008	<0.0001	<0.001	<0.001		3.2	0.04	<0.01	<0.001	<0.0005	0.002
MEL-Lake-004 (During)	2017-04-28	96	26	7.28	<1	0.68	<0.0001	0.012	<0.0005	0.0046	<0.0005	<0.01	7.95		11	<0.0006	0.0017	0.03	<0.0003	1.12	<0.005	1.44	0.0006	<0.00001	<0.0005	5.7	<0.0005	<0.0001	<0.001	<0.001		4.7	0.042	<0.01	<0.001	0.0027	0.004
MEL-Lake-004 (During)	2017-05-05	89	33	7.3	<1	0.5	<0.0001	<0.006	<0.0005	0.0083	0.0007	<0.01	10.6	0.00003	9.6	0.0039	0.0017	0.01	0.0046	1.42	<0.005	8.28	0.0012	0.00002	<0.0005	5.72	0.0007	0.0006	<0.001	<0.001		3.1	0.049	<0.01	<0.001	<0.0005	0.037
MEL-Lake-004 (After)	2017-05-16	99	33	7.18	14	1.29	<0.0001	0.012	<0.0005	0.0158	<0.0005	<0.01	11.3	<0.00002	10.7	0.0013	0.0025	0.17	0.0005	1.55	<0.005	1.28		<0.00001	<0.0005	4.82	0.0008	<0.0001	<0.001	<0.001		7	0.038	<0.01	<0.001	<0.0005	0.033