AGNICO EAGLE

MELIADINE GOLD PROJECT

ENVIRONMENTAL REPORT: OCTOBER 2015

PRESENTED TO THE NUNAVUT WATER BOARD

Contact:

David Frenette

Environmental Coordinator
AGNICO EAGLE Mines Ltd
C.P. 87
765, Chemin de la mine Goldex
Val-d'Or (Qc) Canada
J9P 4N9
Phone : 1 (819) 874-5980 (ext. 3622)
Cell : 1 (819) 355-9271
david.frenette@agnicoeagle.com

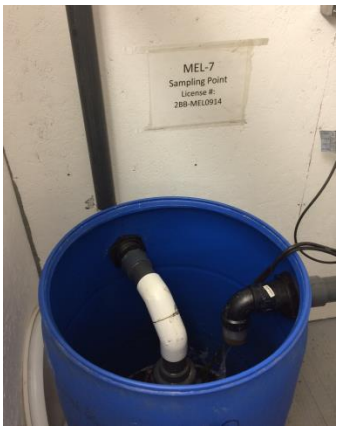
<u>This monthly report is delivered under water license 2BB-MEL1424, PART J, item 13.</u>

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

- **The Inspector requested in the October 8, 2015 inspection report, updated information (e.g.: location and rational) regarding MEL-7 in the October monthly monitoring report.**
    - It is not possible to sample the water treated by the Biodisk outside during the winter, so the MEL-7 monitoring station is proposed to be located inside the STP building.



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.***

   The daily average consumption of fresh water for the site was **34.4 m³/day** for the month of October; 0 m³/day for the drilling, 33.7 m³/day*** for the camp and 0.7 m³/day for the underground.

   *** The volume includes the indirect water use.

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

   No new material added.

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 new material added.

5. ***The Licensee shall provide the GPS coordinates of all locations where sources of water are utilized for all purposes.*** *In UTM nad 1983 zone 15.*

- Camp water source: East 541943.0 ; North 6989174.0
- Underground water source: East 540076.0 ; North 6987731.0

6. ***The Licensee shall provide the GPS coordinates (in decimal degrees) of all locations where wastes associated with camp operations and exploration activities are deposited.***

   The landfill has not been constructed yet, so most of the waste continues to be managed in containers. These containers are transported by barge during the summer and disposed of in a south facility.

7. ***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

Following the September fecal coliform exceedance, the waste water treatment system was closely monitored in October and no exceedance occurred. Increased cleaning of the UV disinfection system was also implemented.

MEL-7		October			
Parameters	**Limits**	**2015-10-08**	**2015-10-12**	**2015-10-20**	**2015-10-26**
Ammonia as N		22.2	23.0	28.2	39.3
Biochemical Oxygen Demand	80	12.3	-	10.8	26.1
Heterotrophic Plate Count (AAHB)		>3000	2 590.0	750.0	>3000
Nitrate-N		7.3	9.0	7.3	7.9
Nitrate and Nitrite as N		9.85	11.60	9.80	10.70
Nitrite-N		2.5	2.6	2.5	2.9
Oil & Grease-(IR)	5	<2.0	<2.0	<2.0	<2.0
Phosphorus (P)-Total		12.0	12.2	13.6	12.9
TKN		28.4	27.1	35.1	41.6
Total Suspended Solids	100	17.0	15.0	16.0	14.0
Transmitance %		34.4	32.2	29.2	34.0
pH	6.0-9.5	7.3	7.25	7.4	7.4
Fecal Coliforms	1000	740.0	93.0	23.0	430.0
Total Coliforms		29 000.0	200.0	930.0	2 400.0

8. ***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.***

   - No release in October.

9. ***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 October on lake.

10. **The inspector, Christine Wilson (AANDC inspector), requested AEM to** continue monitoring the ponded water at the rear of these facilities during times of flow with the same parameters as MEL-8 and the result must be included in the monthly monitoring report provided to the Nunavut Water Board ("the Board") and the Inspector.

    - Ponded water was only present in June and here are the results:

MEL-8			2015	
Station:			MEL-8 RC	MEL-8 RC
Date Sampled:			2015-06-14	2015-06-23
Sample ID:			L1627744	L1632881
Laboratory-Measured	**Units**	**Limits 2BB-MEL1424 (mg/L)**	**Results**	**Results**
Mercury (Hg)-Total	mg/L	0.0006	<0.000020	<0.000020
Aluminum (Al)-Total	mg/L		0.21	0.194
Antimony (Sb)-Total	mg/L		0.00036	0.00022
Arsenic (As)-Total	mg/L	1	0.00179	0.00285
Barium (Ba)-Total	mg/L	1	0.00375	0.00934
Beryllium (Be)-Total	mg/L		<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		<0.00020	<0.00020
Boron (B)-Total	mg/L		<0.010	0.019
Cadmium (Cd)-Total	mg/L	0.1	0.000012	0.000028
Calcium (Ca)-Total	mg/L		1.56	9.49
Cesium (Cs)-Total	mg/L		<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.1	0.00067	0.00054
Cobalt (Co)-Total	mg/L		0.00033	0.00053
Copper (Cu)-Total	mg/L	1	0.00107	0.00231
Iron (Fe)-Total	mg/L		0.282	0.46
Lead (Pb)-Total	mg/L	0.05	0.000507	0.00096
Lithium (Li)-Total	mg/L		<0.0020	0.0032
Magnesium (Mg)-Total	mg/L		0.329	1.16
Manganese (Mn)-Total	mg/L		0.0355	0.0521
Molybdenum (Mo)-Total	mg/L		<0.00020	0.00051
Nickel (Ni)-Total	mg/L	1	0.00075	0.00172
Phosphorus (P)-Total	mg/L		<0.050	<0.050
Potassium (K)-Total	mg/L		0.413	1.71
Rubidium (Rb)-Total	mg/L		0.00052	0.00127
Selenium (Se)-Total	mg/L		<0.00010	<0.00010
Silicon (Si)-Total	mg/L		0.48	0.57
Silver (Ag)-Total	mg/L	0.1	<0.000010	0.000012
Sodium (Na)-Total	mg/L		0.528	3.35
Strontium (Sr)-Total	mg/L		0.00868	0.0516
Tellurium (Te)-Total	mg/L		<0.00020	<0.00020
Thallium (Tl)-Total	mg/L		<0.00010	<0.00010
Thorium (Th)-Total	mg/L		<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		0.00529	0.00511
Tungsten (W)-Total	mg/L		0.00012	0.00023
Uranium (U)-Total	mg/L		<0.00010	<0.00010
Vanadium (V)-Total	mg/L		0.00044	0.00037
Zinc (Zn)-Total	mg/L	0.5	0.0115	0.0188
Zirconium (Zr)-Total	mg/L		<0.00040	<0.00040
Total Suspended Solids	mg/L	15	<5.0	<5.0
Oil & Grease-(IR)	mg/L	15	<2.0	<2.0