Richard Dwyer

From: Rachel Gould [RGould@agnico-eagle.com]
Sent: Thursday, February 24, 2011 7:39 AM
To: licensingadmin@nunavutwaterboard.org
Cc: LouAnn.Cornacchio@inac-ainc.gc.ca; David.Abernethy@inac-ainc.gc.ca; environmental@kivalliqinuit.ca; ian.rumbolt@inac-ainc.gc.ca; Stephane Robert
Subject: 2AM-MEA0815 January 2011 Monitoring Summary Report
Attachments: 2AM-MEA0815 January 2011 Monitoring Summary Report.pdf

Dear Richard

As required by NWB Water license 2AM-MEA0815 Part I Item 25, please find the January 2011 Monitoring Summary Report for the Meadowbank Gold Project attached.

Should you have any questions regarding this submission, please contact me via email at rgould@agnico-eagle.com, or contact Stephane Robert at 819-763-0229 or via email at stephane.robert@agnico-eagle.com.

Regards

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MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

January 2011

Type A Water License 2AM-MEA0815

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SECTION 1 • BACKGROUND

As required under Part I, Item 25 of Type A Water License 2AM-MEA0815, this report documents the water management and monitoring activity at the mine site for the month. This activity includes: water usage, sewage treatment plant discharge water quality and dewatering monitoring.

Additionally, a summary of the AEM internal spill reporting for the month is included.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Freshwater usage for the month totals 71,509 m^3 and is summarized in Table 2.1 below. The consumption of fresh water for mine and mill operations (including production drills, batch plant and dust control) was 67,852 m^3 and the consumption of reclaim water in the mill was 162,170 m^3.

Table 2-1: Freshwater Usage (m^3)

	January
Camp	3040
Mine & Mill Operations	67852
Emulsion Plant	117
Water Truck	500
Total for the site	71509

2.2 SEWAGE TREATMENT PLANT MONITORING

Four water samples were taken at the effluent of the sewage treatment plants (STP). No water quality sampling was conducted the week of January 3, 2011; the environmental technician on site had not received the hepatitis vaccine as required by the mine site's Health and Safety procedures.

The results showed the two systems are working well as of the week of January 17, 2011. There were fewer people at site over the Christmas holidays which interfered with the nutrient and bacteria loads in the STP plants. It took a few weeks to increase the bacteria population to peak performance levels.

Table 2-2: STP Effluent Results

Date	**Units**	3-Jan-11	10-Jan-11	17-Jan-11	24-Jan-11	31-Jan-11
BOD-5	mg/L		77	2	3	2
COD (mg/L)	mg/L		303	62	51	26
Total Suspended Solids	mg/L		108	8	5	6
Nitrate-Nitrite	mg N/L		0.03	41.4	44.9	46
pH *	units		6.23	3.54	3.69	3.60
Total Phosphorus	mg/L		8.0	13.7	16.1	13.6
Ammonia	mg/L		18.7	26.6	32.2	36.8
Fecal Coliform	UFC/100 mL		300000	0	<2	<2
Total Coliform	UFC/100 mL		20000000	4	<4	2

2.3 DEWATERING OF SECOND PORTAGE ARM

Dewatering of the northwest arm of Second Portage Lake continued throughout the month. Both water treatment plants were both operational from January 1 to 16. However, as of December 22, 2010, the discharge from WTP-02 has been redirected to WTP-01 prior to discharge. Consequently, only WTP-01 is being monitored.

The pH and Aluminum concentrations at the outlet of the TSS water treatment plants were as follows:

- pH 24 hour minimum/maximum: 6.41/6.80 units (Limit is 6-9 units)
- Al 24 hour maximum concentration: 0.977 mg/L (Limit is 1.5 mg/L)

Table 2.3 summarizes the dewatering monitoring results for pH and Aluminum for the month.

Table 2-3: Dewatering Monitoring – pH and Al

Date	DD-WTP-01	
	pH	**Total Al**
	units	mg/L
2011-01-04	6.80	0.489
2011-01-10	6.45	0.977
2011-01-12	6.41	0.783
2011-01-13	6.63	

The turbidity and Total Suspended Solids (TSS) concentrations at the outlet of the TSS water treatment plants were as follows:

- NTU 24 hour mean maximum concentration: 1.9 NTU (Maximum Limit is 30 NTU)
- TSS 24 hour mean maximum concentration: 9 mg/L (Maximum Limit is 22.5 mg/L)
- NTU 30 days mean maximum concentration: 2.0 NTU (Maximum Limit is 15 NTU)
- TSS 30 days mean maximum concentration: 5 mg/L (Maximum Limit is 15 mg/L)

Table 2.4 summarizes the dewatering monitoring results for turbidity and TSS for the month.

Table 2-4: Dewatering Monitoring – TSS and Turbidity

Date	DD-WTP-01(Out)		DD-WTP-02(Out)		Both WTP Outlets			
	24-hour Mean	Lab TSS	24-hour Mean	Lab TSS	NTU 24-hour Mean	TSS 24-hour Mean	NTU 30-day Mean	TSS 30-day Mean
	NTU	mg/L	NTU	mg/L	NTU	mg/L	NTU	mg/L
2011-01-01	1.0	1	exit by line 1		1.0	1	2.0	5
2011-01-02	1.1	1	exit by line 1		1.1	1	1.8	5
2011-01-03	Bad weather		exit by line 1					
2011-01-04	1.9	1	exit by line 1		1.9	1	1.8	5
2011-01-05	1.2	6	exit by line 1		1.2	6	1.7	5
2011-01-06	1.7	4	exit by line 1		1.7	4	1.8	5
2011-01-07	1.2	4	exit by line 1		1.2	4	1.7	5
2011-01-08	0.8	3	exit by line 1		0.8	3	1.7	5
2011-01-09	1.0	4	exit by line 1		1.0	4	1.6	5
2011-01-10	1.2	5	exit by line 1		1.2	5	1.6	5
2011-01-11	No sample		exit by line 1					
2011-01-12	1.2	7	exit by line 1		1.2	7	1.5	5
2011-01-13	1.7	9	exit by line 1		1.7	9	1.5	5
2011-01-14	1.8	6	exit by line 1		1.8	6	1.6	5
2011-01-15	0.9	3	exit by line 1		0.9	3	1.5	5
2011-01-16	0.9	3	exit by line 1		0.9	3	1.5	5
2011-01-17	Not in operation		Not in operation					
2011-01-18	Not in operation		Not in operation					
2011-01-19	Not in operation		Not in operation					
2011-01-20	Not in operation		Not in operation					
2011-01-21	Not in operation		Not in operation					
2011-01-22	Not in operation		Not in operation					
2011-01-23	Not in operation		Not in operation					
2011-01-24	Not in operation		Not in operation					
2011-01-25	Not in operation		Not in operation					
2011-01-26	Not in operation		Not in operation					
2011-01-27	Not in operation		Not in operation					
2011-01-28	Not in operation		Not in operation					
2011-01-29	Not in operation		Not in operation					
2011-01-30	Not in operation		Not in operation					
2011-01-31	Not in operation		Not in operation					

SECTION 3 • SPILL MANAGEMENT SUMMARY

AEM has developed a system of tracking spills on-site. Table 3.1 summarizes the AEM internal spill reports for the month. No spills were reported to the GN spill hotline.

Table 3-1: Summary of AEM Internal Spill Reports

Date of Spill	Hazardous Material	Quantity	Location	Cause of spill	Clean-up action taken	Reported to Spill HotLine
2011-01-08	hydraulic oil	45 L	South portage pit	hydraulic hose broke	Contaminated soil taken to hazardous materials storage area	N
2011-01-08	hydraulic oil	55 L	North portage pit	hydraulic hose broke	Contaminated soil taken to hazardous materials storage area	N