

January 25, 2011

Via Email

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Re: Water License 2AM-MEA0815 December Monitoring Program Summary Report

As required by Water license 2AM-MEA0815 Part I Item 25, please find the December 2010 Monitoring Program Summary Report enclosed.

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

Regards,



Stéphane Robert,
Environment Superintendent

Encl

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MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

December 2010

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 of December 2010. 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 volumes reported previously for October and November 2010 over-estimated the monthly volume used by a small amount. As of the beginning of October, the water used at the batch plant is obtained from the freshwater storage tank at the mine, not directly from the lake. Consequently, the volume of water used at the batch plant is included with the total volume reported for the mill. The revised volumes of freshwater used by the mine in October and November are reported in Table 2-1 below.

Freshwater usage for the month of December totals 81,645 m³ and is summarized in Table 2.1 below. The consumption of fresh water for the mill was 78,527 m³ and the consumption of reclaim water was 162,165 m³. It was necessary to use the water truck in December to take water directly from the lake to the production drills and the emulsion plant; external valves on both the freshwater storage tanks at the mill and emulsion plant were temporarily frozen.

Table 2-1: Freshwater Usage (m³) for October, November and December 2010

	October	November	December
Camp	3035	3146	3039
Batch Plant	NA	NA	NA
Mill & Dust control	85176	71344	78527
Emulsion Plant	199	136	27
Water Truck	-	-	52
Total for the site	88410	74626	81645

2.2 SEWAGE TREATMENT PLANT MONITORING

Four water samples were taken at the effluent of the sewage treatment plants (STP). On December 28 the coliform parameters could not be analyzed due to the laboratory holiday schedule (the samples have to incubate for a period of time). The results showed the two systems are working well.

Table 2-2: December 2010 STP Effluent Results

Parameter	06-Dec-10	13-Dec-10	20-Dec-10	28-Dec-10
NH3-NH4 (mg/L)	25.2	19.4	12.0	21.7
BOD-5 (mg/L)	2	1	3	67
COD (mg/L)	39	57	46	374
TSS (mg/L)	7	19	14	91
NO2-NO3 (mg N/L)	44.5	38.1	27.6	35.2
pH (mg/L)	3.72	3.53	3.77	6.19
P tot (mg P/L)	15.5	13.3	12.0	8.9
Fecal Coliform (UFC/100mL)	< 2	< 2	< 2	**
Total Coliform (UFC/100mL)	< 10	< 10	4,800	**
Atypical Colony (UFC/100mL)	< 10	< 10	7,700	**

2.3 DEWATERING OF SECOND PORTAGE ARM

Water quality monitoring for the Second Portage Arm dewatering project continued throughout December.

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

- pH 24 hour minimum/maximum: 6.44/6.82 units (Limit is 6-9 units)
- Al 24 hour maximum concentration: 0.89 mg/L (Limit is 1.5 mg/L)

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

Table 2-3: December 2010 Dewatering Monitoring – pH and Al

Date	DD-WTP-01		DD-WTP-02		Both WTP Outlets	
	pH	Total Al	pH	Total Al	pH 24-hour Mean	Al 24-hour Mean
	units	mg/L	units	mg/L	units	mg/L
2010-12-01	6.70				6.70	
2010-12-06	6.68	0.89			6.68	0.89
2010-12-07	6.62				6.62	
2010-12-08	6.61				6.61	
2010-12-13	6.71	0.60			6.71	0.60
2010-12-14	6.56				6.56	
2010-12-15	6.44				6.44	
2010-12-20	6.57	0.68			6.57	0.68
2010-12-21						
2010-12-28	6.82	0.53			6.82	0.53

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

- NTU 24 hour mean maximum concentration: 5.7 NTU (Maximum Limit is 30 NTU)
- TSS 24 hour mean maximum concentration: 17 mg/L (Maximum Limit is 22.5 mg/L)
- NTU 30 days mean concentration: 4.3 NTU (Maximum Limit is 15 NTU)
- TSS 30 days mean concentration: 5 mg/L (Maximum Limit is 15 mg/L)

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

Table 2-4: December 2010 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
2010-12-01	3.8	2	Not in operation		3.8	2	4.3	2
2010-12-02	5.7	3	Not in operation		5.7	3	4.3	2
2010-12-03	3.6	1	Not in operation		3.6	1	4.2	2
2010-12-04	2.9	1	Not in operation		2.9	1	4.1	2
2010-12-05	0.7	1	Not in operation		0.7	1	4.0	2
2010-12-06	2.1	6	Not in operation		2.1	6	3.9	2
2010-12-07	2.2	3	Not in operation		2.2	3	3.8	2
2010-12-08	4.0	4	Not in operation		4.0	4	3.8	2
2010-12-09	2.3	7	Not in operation		2.3	7	3.7	2
2010-12-10	1.3	9	Not in operation		1.3	9	3.5	3
2010-12-11	1.6	5	Not in operation		1.6	5	3.4	3
2010-12-12	1.5	7	Not in operation		1.5	7	3.1	3
2010-12-13	3.5	12	Not in operation		3.5	12	3.2	3
2010-12-14	1.4	10	Not in operation		1.4	10	3.0	3
2010-12-15	2.6	17	Not in operation		2.6	17	3.0	4
2010-12-16	1.3	6	Not in operation		1.3	6	2.9	4
2010-12-17	2.2	7	Not in operation		2.2	7	2.9	4
2010-12-18	0.9	4	Not in operation		0.9	4	2.8	4
2010-12-19	0.9	4	Not in operation		0.9	4	2.7	4
2010-12-20	1.3	12	Not in operation		1.3	12	2.6	5
2010-12-21	Not in operation		Not in operation					
2010-12-22	1.7	4	Not in operation		1.7	4	2.6	5
2010-12-23	1.6	4	Not in operation		1.6	4	2.5	5
2010-12-24	3.2	3	Not in operation		3.2	3	2.5	5
2010-12-25	1.7	2	Not in operation		1.7	2	2.4	5
2010-12-26	1.1	3	Not in operation		1.1	3	2.4	5
2010-12-27	1.1	3	Not in operation		1.1	3	2.3	5
2010-12-28	0.6	4	Not in operation		0.6	4	2.2	5
2010-12-29	2.6	7	Not in operation		2.6	7	2.2	5
2010-12-30	1.5	5	Not in operation		1.5	5	2.1	5
2010-12-31	2.1	1	Not in operation		2.1	1	2.1	5

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 December. One spill was reported to the GN spill hotline.

Table 3-1: Summary of December 2010 AEM Internal Spill Reports

Date of Spill	Hazardous Material	Quantity	Location	Cause of spill	Clean-up action taken	Reported to Spill HotLine
2010-12-09	Hydraulic oil	4 L	South Portage Pit	Hydraulic oil hose broke	Absorbent pads placed under leak	N
2010-12-15	Glycol	80 L	Reclaim tunnel	Broken pipe	Absorbent pads placed under leak	N
2010-12-18	Coolant	1 L	Old kitchen	Broken radiator	Cleaned up with rags; contaminated soil taken to Hazmat area	N
2010-12-18	Hydraulic oil	50 L	South Portage Pit	Hydraulic oil hose broke	Contaminated soil taken to Hazmat area	N
2010-12-22	Hydraulic oil	300 L	South Portage Pit	Hydraulic oil hose broke	Blasted area; contaminated soil taken to Quarry 22	Y
2010-12-26	Fuel and Oil	30 L	Km 18 AWPAP	Fuel tanker tipped to the side	Contaminated snow taken to the snow cells	N