

January 28, 2010

Via Email and Xpresspost

Mr. Richard Dwyer Licensing Administrator Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0 Phone: (867) 360-6338

licensingadmin@nunavutwaterboard.org

Dear Mr. Dwyer,

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 2009 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 (1)

cc: Lou-Ann Cornacchio, Indian and Northern Affairs Canada

David Abernethy, Indian and Northern Affairs Canada Andrew Keim, Indian and Northern Affairs Canada

Stephen Hartman, Kivalliq Inuit Association

Tel: 867-793-4610 Fax: 867-793-4611



MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

December 2009

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, monitoring activity and analytical monitoring at the mine site for the month of December 2009.

It should be noted that the Meadowbank Project is in the construction phase and is not scheduled to commence operations until early 2010. Consequently many of the license specified reporting locations or requirements are associated with facilities that are not yet constructed and thus reporting cannot be fully initiated until these facilities are constructed and commissioned.

The dewatering of the northwest arm of Second Portage Lake continued during December. During this phase of construction no other water has been pumped, discharged or transferred, rather all site contact run-off are contained and directed to the Stormwater Management Pond (Tear Drop Attenuation Pond). The monitoring points covered by this monthly report will expand as the facilities are constructed. Additionally, for the NWB to review, Section 3 summarizes the AEM internal spill reporting for December.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Under Water License 2AM-MEA0815, the total water consumption limit is 700,000 m³/year or 58,333 m³/month for the batch plant, domestic and milling water use. During December, the daily average number of people on site was 434. The total consumption of water for the camp, the batch plant and the mine site was 2,477 m³ for the month, an average of 80 m³ per day.

Table 2.1: December 2009 Water Usage

	Water Usage (m³)
Batch Plant	11
Water Treatment Plant	2,466
Water for Dust Control	0
Total for the Site	2,477

2.2 SEWAGE TREATMENT PLANT MONITORING

At the sewage treatment plant (STP), two systems are now in operation (the Seprotech L333 and the two Little John LJ100s). Three water samples were taken at the effluent. The concentration of fecal coliforms increased through the month, indicating a decrease in the performance of the two systems. An action plan has been put in place to improve the performance of the system (audit, staff training, etc).

Table 2.2: December 2009 STP Effluent Results

Parameter	12/1/2009	12/7/2009	12/14/2009	12/21/2009*	12/28/2009*
NH3-NH4 (mg/L)	33	31	37		
BOD-5 (mg/L)	19	16	22		
COD (mg/L)	158	81	126		
TSS (mg/L)	9	37	46		
NO2-NO3 (mg N/L)	48.1	49.7	49.4		
рН	6.74	6.52	6.33		
P tot (mg P/L)	25.0	18.2	20.1		
Fecal Coliform (CFU/100mL)	190	350	1,700		
Total Coliform (CFU/100mL)	2,000	6,000	6,000		
Atypical Colony (CFU/100mL)	136,000	18,000	70,000		

^{*} Lab Closed

2.3 DEWATERING OF SECOND PORTAGE ARM

The dewatering of the northwest arm of Second Portage Lake continued through December. 1,058,224 m³ of water was discharged during the month. The Total Suspended Solids (TSS) and turbidity values at the outlet of TSS Water Treatment Plants (WTP) 1 and 2 are as follows:

TSS 30 days mean: 10.4 mg/L (limit 15 mg/L)
NTU 30 days mean: 4.5 NTU (limit 15 NTU)

The maximum 24 hour TSS limit was exceeded on December 12 (42 vs. 22.5 mg/L). In response to this exceedance, the following procedures were implemented to avoid high suspended solids levels in the water treatment plant:

- 1. A pipe extension for the water hose was fabricated to enable the operator to clean the laminar plates daily on each actiflow unit. The cleaning is done while the diesel supply pump is shut down for its daily inspection.
- 2. Every Saturday the water level in each actiflow unit is lowered to the level of the laminar plates and a thorough cleaning takes place.
- 3. All cleaning activities are recorded in a log book to ensure that the cleanings are being completed as scheduled.
- 4. Sampling procedures have been modified; technicians allow the sampling valve to run for 3 minutes to ensure build-up in the sampling valve is not contaminating the sample.

Tables 2.3 and 2.4 summarize the December monitoring results.

Table 2.3: December 2009 Dewatering Monitoring - TSS and turbidity

	DD-WTP	-01(Out)	DD-WTP-02(Out)		Both WTP Outlets				
Date	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		mg/L		mg/L	
2009-12-01	3.34	5	3.19	3	3.27	4.00	4.62	6.15	
2009-12-02	5.19	14	3.51	12	4.35	13.00	4.65	6.49	
2009-12-03	3.21	15	4.20	14	3.71	14.50	4.60	6.79	
2009-12-04	2.75	4	2.41	24	2.58	14.00	4.50	7.09	
2009-12-05	-	-	-	-	-	-	4.49	7.19	
2009-12-06	3.54	21	2.82	2	3.18	11.50	4.28	7.35	
2009-12-07	3.74	16	3.66	4	3.70	10.00	4.26	7.50	
2009-12-08	3.78	12	3.87	5	3.83	8.50	4.18	7.63	
2009-12-09	3.20	12	3.88	9	3.54	10.50	4.00	7.70	
2009-12-10	4.31	18	3.46	6	3.89	12.00	3.99	7.93	
2009-12-11	2.57	18	3.60		3.09	18.00	3.89	8.08	
2009-12-12	3.78	50	4.23	34	4.01	42.00	3.89	9.26	

2009-12-13	3.88	23	4.02	20	3.95	21.50	3.92	9.77
2009-12-14	3.87	18	2.94	12	3.41	15.00	3.98	10.00
2009-12-15	6.59	23	4.79	2	5.69	12.50	4.08	10.23
2009-12-16	6.18	7	8.13	10	7.16	8.50	4.21	10.38
2009-12-17	4.31	4	5.62	3	4.97	3.50	4.21	10.45
2009-12-18	5.69	6	8.31	6	7.00	6.00	4.30	10.40
2009-12-19	4.18	7	4.82	9	4.50	8.00	4.33	10.47
2009-12-20	4.41	4	4.38	5	4.40	4.50	4.35	10.40
2009-12-21	3.81	3	5.83	4	4.82	3.50	4.38	10.26
2009-12-22	3.32	2	5.61	3	4.47	2.50	4.34	10.15
2009-12-23	3.80	2	6.97	3	5.39	2.50	4.40	10.15
2009-12-24	4.61	3	6.71	17	5.66	10.00	4.33	10.11
2009-12-25	4.91	1	6.33	3	5.62	2.00	4.32	10.04
2009-12-26	4.16	18	5.42	9	4.79	13.50	4.38	10.47
2009-12-27	5.12	3	5.10	2	5.11	2.50	4.43	10.38
2009-12-28	2.53	1	6.90	2	4.72	1.50	4.44	10.05
2009-12-29	-	-	-	-	-	-	4.47	10.06
2009-12-30	5.05	-	3.99	-	4.52	-	4.47	10.06
2009-12-31	2.67	2	3.00	2	2.84	2.00	4.46	9.98

Table 2.4: December 2009 Dewatering Monitoring – pH and Al

	DD-WTP	9-01(Out)	DD-WTP-02(Out)			Both WTP Outlets		
Date	рН	Total Al	рН	Total Al		pH 24-hour Mean	Al 24-hour Mean	
	units	mg/L	units	mg/L		units	mg/L	
12/1/2009	7.34	0.117	7.30	0.125		7.32	0.121	
12/8/2009	6.88	0.337	6.90	0.200		6.89	0.269	
12/14/2009	6.73	0.350	6.72	0.477		6.73	0.414	
12/21/2009	7.12	0.281	7.15	0.273		7.14	0.277	

SECTION 3 • SPILL MANAGEMENT SUMMARY

During the construction phase AEM is developing a system of tracking spills on-site. Table 3.1 summarizes the AEM internal spill reports for December.

Table 3.1: Summary of December 2009 AEM Internal Spill Reports

Date of Spill	Hazardous Material (Fuel, Oil, etc.)	Quantity	Location	Cause of Spill	Clean-up Action Taken	Reported to Spill Hotline
2009-12-15	Engine oil	20 L	AWPAR (crossing of the fresh water intake road)	The truck left the road and hit a rock	Excavator and a truck used to collect and transport the soil to Quarry 22	N
2009-12-19	Diesel Fuel	30 L	Powerhouse fuel tanks	Overfilling of the tank while transferring fuel from the main tank. Problems with the gauge.	Shoveled and collected the contaminated soil and snow and then disposed of it in the proper area	N
2009-12-24	Fuel	10 L	Fuel station	Nozzle failure	Applied absorbent pads and transported material to the hazmat area	N
2009-12-18	Hydraulic oil	10 m ²	North Portage Pit	Leak from a hose on the RBDO5 drill	Contaminated material taken to Quarry 22	N
2009-12-21	Fuel	15 L	Powerhouse fuel tanks	Transferring fuel from main tank. Shut off transfer at 90% day tank level. After shut off, fuel level jumped to 98%. Operator immediately shut off main valve to tanks	Verified proper tank level calibration and that all valves were functioning correctly. Contaminated material removed and taken to the hazmat area	N
2009-12-27	Hydraulic oil	45 L	AEM Crusher	Hose burst	Contaminated soil taken to Quarry 22	N