

July 5, 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 May Monitoring Program Summary Report

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

Should you require any further information, 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 Bryan Rayner, Indian and Northern Affairs Canada

Stephen Hartman, Kivallig Inuit Association



MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

May 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 May 2010. This activity includes: water usage and sewage treatment plant, dewatering and dike construction monitoring.

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

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

During May, the daily average number of people on site was 462. Freshwater usage for the month totals 85,288 m³ and is summarized in Table 2.1 below. The consumption of fresh water for the mill was 77,589 m³ and the consumption of reclaim water was 232,620 m³.

Table 2-1: May 2010 Freshwater Usage

	Water usage (m ³)
Camp	2,397
Batch Plant	40
Mill	77,589
Water for dust control	5,262
Emulsion Plant	0
Total for the site	85,288

2.2 SEWAGE TREATMENT PLANT MONITORING

Four water samples were taken at the effluent of the sewage treatment plants (STP). Samples could not be collected and sent to the laboratory on May 10 due to bad weather. The results showed the two systems are working well.

Table 2-2: May 2010 STP Effluent Results

Parameter	03-May-10	10-May-10	17-May-10	24-May-10	31-May-10
NH3-NH4 (mg/L)	21.8	*	25.8	22.5	17.4
BOD-5 (mg/L)	9		8	12	8
COD (mg/L)	88		82	71	66
TSS (mg/L)	28		29	35	96
NO2-NO3 (mg N/L)	48.4		50.9	46.4	43.7
pH (mg/L)	3.89		3.63	4.05	3.90
P tot (mg P/L)	18.0		16.0	17.0	17.1
Fecal Coliform (UFC/100mL)	12		< 4	20	28
Total Coliform (UFC/100mL)	200		700	300	700
Atypical Colony (UFC/100mL)	8,800		2,000	8,200	8,700

2.3 DEWATERING OF SECOND PORTAGE ARM

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

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

- pH 24 hour minimum/maximum: 6.89/7.47 units (Limit is 6-9 units)
- Al 24 hour maximum concentration: 0.814 mg/L (Limit is 1.5 mg/L)

On May 5, 2010, in the receiving environment, a pH of 5.83 was measured in the laboratory. This pH result is lower than the site average (6.5 - 7.8); however, the result is believed to be non-mine related, as no other monitoring results indicate any disturbance.

The outlet monitoring results demonstrate that the limits of the license were respected. Table 2.3 summarizes the May dewatering monitoring results for pH and Aluminum.

Table 2-3: May 2010	Dewatering	Monitoring –	pH and Al
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	DD-V	VTP-01	DD-V	VTP-02	Both WT	TPL - ENV	
Date	рН	Total Al	рН	Total Al	pH 24- hour Mean	AI 24- hour Mean	рН
	units	mg/L	units	mg/L	units	mg/L	units
2010-05-03	7.47	0.440	7.16	0.387	7.32	0.414	
2010-05-05							5.83*
2010-05-10	7.00	0.554	7.05	0.478	7.03	0.516	
2010-05-12							6.94
2010-05-19							6.54
2010-05-24	7.09	0.814			7.09	0.814	
2010-05-26							6.57
2010-05-28	6.91		6.92		6.92		
2010-05-29	6.89				6.89		
2010-05-30	6.94		7.01		6.98		
2010-05-31	6.90	0.369	6.94	0.380	6.92	0.375	

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: 9.6 NTU (Maximum Limit is 30 NTU)
- TSS 24 hour mean maximum concentration: 14 mg/L (Maximum Limit is 22.5 mg/L)
- NTU 30 days mean concentration: 6.7 NTU (Maximum Limit is 15 NTU)
- TSS 30 days mean concentration: 7 mg/L (Maximum Limit is 15 mg/L)

The results demonstrate that the limits of the license were respected. Table 2.4 summarizes the May dewatering monitoring results for turbidity and TSS.

Table 2-4: May 2010 Dewatering Monitoring – TSS and Turbidity

	DD-WT	P-01(Out)	DD-WTF	P-02(Out)	Both WTP Outlets					
	24-		24-hour		NTU 24-	TSS 24-	NTU 30-	TSS 30-		
Date	hour	Lab TSS	Mean	Lab TSS	hour	hour	day	day		
	Mean				Mean	Mean	Mean	Mean		
	NTU	mg/L	NTU	mg/L	NTU	mg/L	NTU	mg/L		
2010-05-01	5.8	7	5.7	5	5.8	6	6.3	7		
2010-05-02	6.7	6	9.8	9	8.3	8	6.4	7		
2010-05-03	6.7	6	6.9	8	6.8	7	6.5	7		
2010-05-04	9.1	NA	8.8	8	8.9	8	6.6	7		
2010-05-05	6.7	3	6.1	3	6.4	3	6.7	7		
2010-05-06	4.9	4	4.4	2	4.7	3	6.7	7		
2010-05-07	6.2	5	5.4	5	5.8	5	6.7	7		
2010-05-08	6.1	4	5.2	7	5.7	6	6.7	7		
2010-05-09	2.3	1	1.5	2	1.9	2	6.6	7		
2010-05-10	8.7	8	8.1	6	8.4	7	6.7	6		
2010-05-11	7.0	6	12.2	14	9.6	10	6.7	7		
2010-05-12	6.4	11	8.4	12	7.4	12	6.7	7		
2010-05-13	Bad weather		Bad w	eather/						
2010-05-14	Bad	weather	Bad w	eather/						
2010-05-15	7.3	14	Not in o	peration	7.3	14	6.7	7		
2010-05-16	Not in	operation	Not in o	peration						
2010-05-17	Not in	operation	Not in o	peration						
2010-05-18	Not in	operation	Not in o	peration						
2010-05-19	Not in	operation	Not in o	peration						
2010-05-20	Not in	operation	Not in o	peration						
2010-05-21	Not in	operation	Not in o	peration						
2010-05-22	Not in	operation		peration						
2010-05-23		operation		peration						
2010-05-24	6.3	. 8		peration	6.3	8	6.8	7		
2010-05-25	6.8	3	9.7	4	8.2	4	6.9	7		
2010-05-26	Not in	operation	Not in o	peration						
2010-05-27	6.8	· 7	7.7	7	7.2	7	6.9	7		
2010-05-28	3.4	7	5.2	6	4.3	7	6.8	7		
2010-05-29	7.6	7	6.8	4	7.2	6	6.8	7		
2010-05-30	6.4	NA	7.0	14	6.7	14	6.7	7		
2010-05-31	6.0	15	6.6	11	6.3	13	6.7	7		

2.4 DIKE CONSTRUCTION MONITORING

The monitoring of the causeway for the Bay Goose dike continued throughout May.

Monitoring was conducted on the east and west sides of the causeway up to May 20th. After this date, the two sides of the causeway were close enough together that the number of monitoring stations was reduced to three. On May 31, the number of monitoring stations was reduced to two; it was too dangerous to continue monitoring the center station due to unsafe ice conditions. The station locations are illustrated on Figure 1.

On May 22 the maximum TSS concentration reached 25 mg/L at station BGC-1. Construction of the causeway was suspended pending further monitoring. The maximum TSS concentration on May 23 was 37 mg/L, also at station BGC-1. Regulators were notified of this situation on May 24 via email. The TSS plume was confined to the bottom of the water column between 8 and 10 m depth. The highest TSS concentration for the first 7 m was 1.1 mg/L. TSS concentrations significantly decreased to 6 mg/L on May 24. Consequently, construction of the causeway resumed on May 25.

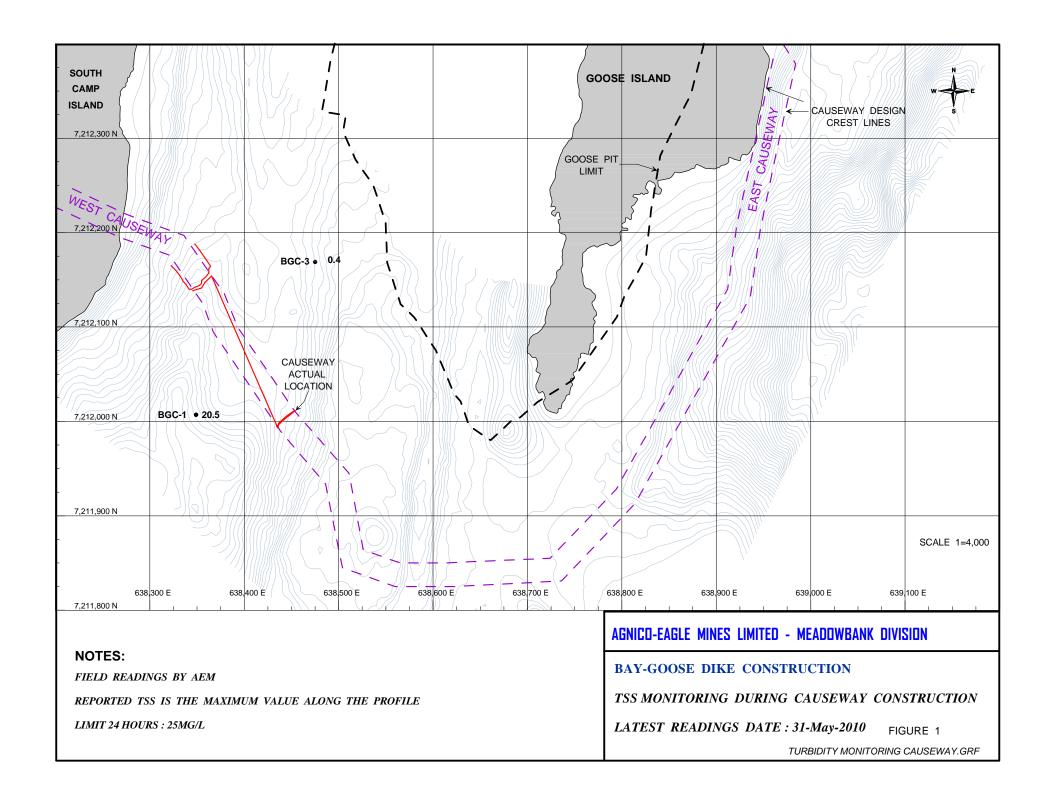
The TSS concentrations for the Bay Goose dike construction were as follows:

- Maximum short-term (24 hour) TSS concentration from the 3 causeway monitoring stations (BGC1, BGC2, BGC3) on the Bay Goose dike East side was 37 mg/L (Maximum Limit is 25 mg/L)
- Maximum short-term (24 hour) TSS concentration from the 3 causeway monitoring stations (BGC4, BGC5, BGC6) on the Bay Goose dike West side was 5.7 mg/L (Maximum Limit is 25 mg/L)

The May 2010 dike construction monitoring results are provided in Table 2.5 and the station locations are shown on Figure 1.

Table 2.5: May 2010 Dike Construction Monitoring Results

	BG	C-1	Coord	dinates	BG	GC-2	Coord	linates	BG	C-3	Coord	dinates	BG	iC-4	Coord	dinates	BG	C-5	Coord	dinates	BG	C-6	Coord	dinates
Date	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing
	NTÚ	mg/L			NTU	mg/Ĺ			NTÚ	mg/Ĺ			NTU	mg/L			NTÚ	mg/L			NTÚ	mg/Ĺ		
2010-05-01	0.1	0.0	638,619	7,211,942	0.5	0.1	638,698	7,211,777	28.8	7.5	638,979	7,211,988	1.7	0.4	638,398	7,212,051	1.9	0.4	638,426	7,212,162	1.7	0.4	638,443	7,212,234
2010-05-02	0.1	0.0	638,619	7,211,942	0.3	0.1	638,698	7,211,777	24.9	6.5	638,979	7,211,988	1.8	0.4	638,398	7,212,051	1.7	0.4	638,426	7,212,162	1.8	0.4	638,443	7,212,234
2010-05-03	0.6	0.1	638,619	7,211,942	0.5	0.1	638,698	7,211,777	18.5	4.7	638,979	7,211,988	1.8	0.4	638,398	7,212,051	1.5	0.3	638,426	7,212,162	1.9	0.4	638,443	7,212,234
2010-05-04	0.1	0.0	638,619	7,211,942	0.2	0.0	638,729	7,211,679	6.9	1.7	638,947	7,211,956	1.6	0.4	638,398	7,212,051	1.8	0.4	638,426	7,212,162	1.7	0.4	638,443	7,212,234
2010-05-05	0.2	0.0	638,619	7,211,942	0.3	0.1	638,729	7,211,679	10.4	2.6	638,947	7,211,956	1.5	0.3	638,398	7,212,051	1.2	0.3	638,426	7,212,162	1.4	0.3	638,443	7,212,234
2010-05-06	0.1	0.0	638,619	7,211,942	0.1	0.0	638,487	7,211,844	0.1	0.0	638,575	7,211,675	2.1	0.5	638,398	7,212,051	1.5	0.3	638,426	7,212,162	1.5	0.3	638,443	7,212,234
2010-05-07	0.1	0.0	638,619	7,211,942	1.9	0.4	638,487	7,211,844	0.2	0.0	638,575	7,211,675	2.1	0.5	638,398	7,212,051	1.1	0.2	638,426	7,212,162	1.5	0.3	638,443	7,212,234
2010-05-08	0.3	0.1	638,619	7,211,942	0.1	0.0	638,487	7,211,844	1.1	0.2	638,575	7,211,675	1.4	0.3	638,398	7,212,051	1.1	0.2	638,426	7,212,162	1.5	0.3	638,443	7,212,234
2010-05-09	0.1	0.0	638,619	7,211,942	0.1	0.0	638,487	7,211,844	0.1	0.0	638,575	7,211,675	1.5	0.3	638,398	7,212,051	1.2	0.3	638,426	7,212,162	1.6	0.4	638,443	7,212,234
2010-05-10	15.6	4.0	638,602	7,211,993	0.1	0.0	638,487	7,211,844	0.1	0.0	638,575	7,211,675	2.4	0.6	638,398	7,212,051	1.7	0.4	638,426	7,212,162	1.4	0.3	638,443	7,212,234
2010-05-11	0.5	0.1	638,510	7,211,961	12.5	3.1	638,484	7,211,869	1.1	0.2	638,464	7,211,777	2.5	0.6	638,398	7,212,051	1.5	0.3	638,426	7,212,162	1.6	0.4	638,443	7,212,234
2010-05-12	0.4	0.1	638,510	7,211,961	3.8	0.9	638,484	7,211,869	1.2	0.3	638,464	7,211,777	2.4	0.6	638,398	7,212,051	1.5	0.3	638,426	7,212,162	1.7	0.4	638,443	7,212,234
2010-05-15	0.1	0.0	638,510	7,211,961	0.2	0.0	638,484	7,211,869	0.1	0.0	638,476	7,211,769	3.7	0.9	638,398	7,212,051	2.6	0.6	638,426	7,212,162	1.0	0.2	638,443	7,212,234
2010-05-16	0.1	0.0	638,510	7,211,961	0.1	0.0	638,484	7,211,869	0.1	0.0	638,476	7,211,769	3.1	0.7	638,398	7,212,051	1.4	0.3	638,426	7,212,162	2.9	0.7	638,443	7,212,234
2010-05-17	0.2	0.0	638,510	7,211,961	1.3	0.3	638,448	7,211,954	0.1	0.0	638,476	7,211,769	5.0	1.2	638,398	7,212,051	2.3	0.5	638,426	7,212,162	2.1	0.5	638,443	7,212,234
2010-05-18	0.1	0.0	638,497	7,212,088	1.5	0.3	638,441	7,212,010	12.7	3.2	638,392	7,211,924	18.3	4.7	638,386	7,211,957	2.1	0.5	638,398	7,212,051	1.2	0.3	638,426	7,212,162
2010-05-19	0.1	0.0	638,497	7,212,088	1.8	0.4	638,441	7,212,010	13.4	3.4	638,392	7,211,924	18.9	4.8	638,386	7,211,957	1.9	0.4	638,398	7,212,051	1.2	0.3	638,426	7,212,162
2010-05-20	0.1	0.0	638,497	7,212,088	14.3	3.6	638,441	7,212,010	41.7	11.1	638,392	7,211,924	22.2	5.7	638,386	7,211,957	1.9	0.4	638,398	7,212,051	1.6	0.4	638,426	7,212,162
2010-05-21	39.5	10.5	638,386	7,211,957	4.6	1.1	638,398	7,212,051	1.8	0.4	638,426	7,212,162	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010-05-22	91.8	25	638,313	7,212,050	18.1	4.6	638,398	7,212,051	4.5	1.1	638,426	7,212,162	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010-05-23	133.5	37	638,313	7,212,050	1.3	0.3	638,389	7,212,117	1.3	0.3	638,441	7,212,204	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010-05-24	23.2	6.0	638,313 638,313	7,212,050	0.9	0.2	638,389 638,389	7,212,117 7,212,117	1.5	0.3	638,441 638,441	7,212,204 7,212,204	NA NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA NA	NA	NA
2010-05-25	6.9	1.7	638,313	7,212,050	1.3	0.3		, ,	1.3	0.3	,		NA NA	NA	NA	NA NA	NA	NA NA	NA	NA NA	NA	NA	NA	NA
2010-05-26	90.5	24.9		7,212,050	3.0	0.7	638,389	7,212,117	1.6	0.4	638,441	7,212,204	NA NA	NA	NA		NA		NA		NA	NA	NA	NA
2010-05-27	43.4 39.1	11.5	638,313 638,313	7,212,050	3.0 1.6	0.7	638,389 638,389	7,212,117 7,212,117	1.0	0.4	638,441 638,441	7,212,204 7,212,204	NA NA	NA	NA	NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA	NA
2010-05-28 2010-05-29	83.5	10.3	638.313	7,212,050 7,212,050		0.4 7.8	638,389	7,212,117	1.0	0.3	638,441	7,212,204	NA NA	NA NA	NA NA	NA NA	INA NA		NA NA	NA NA	NA NA	INA NA	NA NA	NA NA
2010-05-29	83.5 24.9	22.9 6.5	638,313	7,212,050	29.7 2.1	7.8 0.5	638,389	7,212,117	2.2 2.2	0.5 0.5	638,441	7,212,204	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
2010-05-30	75.2	20.5	638.349	7,212,030	Ζ. 1 ΝΔ	O.S NIA	030,309 NA	1,∠1∠,111 NΔ	1.6	0.5	638.475	7,212,204	NA NA	NA NA	NA NA	NΛ	NA NA	NA NA	NA NA	NA NA	NA NA	NΛ	NΛ	NA NA
2010-05-31	10.2	20.0	000,049	1,212,007	INA	INA	INA	INA	1.0	0.4	000,470	1,212,109	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA



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

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

Date of Spill	Hazardous Material	Quantity	Location	Cause of spill	Clean-up action taken	Reported to Spill HotLine
2010- 05-14	Oil	900 L	Seacan	Fork lift pierced tote with fork	Placed peat moss absorbent on ground; contaminated soil and contaminated peat moss taken to Quarry 22	Υ
2010- 05-26	Oil	approximately 30 L	Road between Service building and terminal pad	Broken hose on equipment	Contaminated soil taken to Quarry 22	N