

November 30, 2009

Via Email and Xpresspost

Mr. Richard Dwyer
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Dear Mr. Dwyer,

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

As required by Water license 2AM-MEA0815 Part I Item 25, please find the October 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: Ian Rumbolt, Indian and Northern Affairs Canada
David Abernethy, Indian and Northern Affairs Canada
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Stephen Hartman, Kivalliq Inuit Association



MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

October 2009

Type A Water License 2AM-MEA0815

TABLE OF CONTENTS

SECTION 1 •	BACKGROUND	1
SECTION 2 •	WATER QUALITY MONITORING.....	2
2.1	Dewatering of Second Portage Arm.....	2
2.2	Dike Monitoring.....	2
SECTION 3 •	WATER MANAGEMENT	6
3.1	Water Usage.....	6
3.2	Sewage Treatment Plant Monitoring	6
SECTION 4 •	SPILL MANAGEMENT SUMMARY	7

LIST OF TABLES

Table 2.1: Bay-Goose TSS Monitoring – Routine Stations October 2009	3
Table 2.2: Bay-Goose TSS Monitoring – High Value Habitat Stations October 2009	4
Table 3.1: October 2009 Water Usage.....	6
Table 3.2: October 2009 STP Effluent Results	6
Table 4.1: Summary of October 2009 AEM Internal Spill Reports.....	7

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 mine site for the month of October 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.

Installation of the two Total Suspended Solids (TSS) treatment plants (actiflo) was completed near the end of the October. Dewatering of the northwest arm of Second Portage Lake restarted at the end of the month. 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, section 4 summarizes the AEM internal spill reporting for October.

SECTION 2 • WATER QUALITY MONITORING

2.1 DEWATERING OF SECOND PORTAGE ARM

Installation of the two TSS treatment plants (actiflo) was completed near the end of October. Discharge from the northwest arm of Second Portage Lake to the Third Portage Lake began on October 25 and 118,705 m³ of water was discharged by the end of the month.

The Turbidity and the TSS values at the outlet of the TSS treatment plants are as follows:

- TSS 30 days mean for outlet of Treatment Plants 1 and 2: 6.5 mg/L (limit 15 mg/L)
- NTU 30 days mean for outlet of Treatment Plants 1 and 2: 5 NTU (limit 15 NTU)

2.2 DIKE MONITORING

TSS concentrations continued to decrease, as expected, with concentrations less than 6 mg/L at most stations. Monitoring stopped on October 7 because of ice conditions on the lake.

The average TSS concentrations for the Bay-Goose dike construction monitoring stations were:

- Short-term (24-hr): 5.4 mg/L (2.8 to 6.2 mg/L) - Limit is 50 mg/L. TSS triggers were not exceeded at any stations.
- Monthly mean (30 days): 8.96 mg/L (7.9 to 11.4 mg/L) - Limit is 15 mg/L. TSS concentrations still exceeded the 6 mg/L trigger for all High Value Habitat (HVV) stations; however, 7-day average TSS concentrations no longer exceeded this trigger for any HVV stations.

Tables 2.1 and 2.2 summarize the October results for the Routine and HVV Monitoring Stations.

A workshop will be held with the regulators on November 4 to present AEM's action plan for 2010 dike construction. The principal objectives are to:

- Review the fundamental causes of TSS and the TSS control performance of the Phase 1 Bay-Goose dike construction activities;
- Review possible actions; and
- Present an action plan/strategy for the phase 2 construction activities.

Type A Water License 2AM-MEA0815
Monitoring Program Summary Report October 2009

Table 2.1: Bay-Goose TSS Monitoring – Routine Stations October 2009

	Station	BGW1				BGW2				BGW3			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
1-Oct-09	16:00	5.91	no data	5.75	8.61	6.03	no data	6.14	13.85	5.62	no data	6.51	11.45
2-Oct-09	17:29	5.12	no data	5.71	8.48	4.99	no data	5.92	13.51	5.24	no data	6.01	11.20
3-Oct-09	17:38	4.96	no data	5.55	8.19	4.99	no data	5.76	12.86	5.24	no data	5.80	10.07
4-Oct-09	16:37	4.96	4.87	5.38	8.03	5.15	5.07	5.60	12.19	5.66	5.45	5.61	9.48
5-Oct-09	16:45	4.33	no data	5.22	7.58	4.70	no data	5.44	9.00	4.66	no data	5.48	8.67
6-Oct-09	15:09	4.53	4.43	4.92	7.49	5.12	4.91	5.11	8.88	5.12	4.89	5.25	8.56
7-Oct-09	11:12	4.83	4.68	4.89	7.20	5.12	4.97	5.09	8.44	5.12	4.78	5.19	8.23

	Station	BGE1				BGE2				BGE3			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
1-Oct-09	16:00	7.84	no data	7.60	10.39	7.37	no data	7.66	12.68	6.95	no data	7.53	16.62
2-Oct-09	17:29	6.64	no data	7.52	10.23	6.46	no data	7.51	12.44	6.40	no data	7.35	16.22
3-Oct-09	17:38	6.06	no data	7.33	10.09	5.91	no data	7.26	11.79	6.40	no data	7.12	14.55
4-Oct-09	16:37	6.06	5.98	7.00	9.95	6.06	5.98	6.93	11.52	6.40	6.20	6.87	13.85
5-Oct-09	16:45	5.91	5.69	6.76	9.81	6.18	no data	6.69	10.72	6.40	no data	6.67	11.99
6-Oct-09	15:09	5.47	3.07	6.59	9.74	6.18	3.47	6.54	10.64	6.40	3.59	6.53	11.90
7-Oct-09	11:12	5.24	no data	5.43	8.99	6.15	no data	5.53	10.23	6.18	no data	5.57	11.44

	Station	BGE4				BGE5				BGE6			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
1-Oct-09	16:00	7.66	no data	7.68	11.72	6.98	no data	7.58	13.03	6.64	no data	7.17	10.10
2-Oct-09	17:29	6.37	no data	7.54	11.52	6.40	no data	7.39	12.77	6.22	no data	7.02	9.94
3-Oct-09	17:38	6.18	no data	7.24	10.80	6.09	no data	7.11	10.75	5.75	no data	6.71	9.65

Type A Water License 2AM-MEA0815
Monitoring Program Summary Report October 2009

4-Oct-09	16:37	6.18	6.09	6.90	10.57	6.09	6.09	6.78	10.48	5.87	5.81	6.32	9.50
5-Oct-09	16:45	6.22	no data	6.73	9.66	6.15	no data	6.59	9.67	5.53	no data	6.16	9.04
6-Oct-09	15:09	6.22	3.49	6.58	9.60	6.15	3.45	6.45	9.60	5.53	5.20	5.87	8.92
7-Oct-09	11:12	6.06	no data	5.58	9.24	5.97	no data	5.49	9.25	4.99	4.92	5.74	8.76

Notes:

1. TSS concentrations (mg/L) are calculated from a TSS-turbidity regression equation, which is updated as new TSS data are generated.
2. If a cell has "n/a" after the number, this means that sampling has not yet covered the specified period (24h or 7-d), but the average up to that date and time is still calculated.
3. "NS" = not sampled that day
4. "no data" is listed for the 24-hr Avg value for cases where only one data point was collected in the past 24hrs; the 24hr Max value applies.
5. Red cells are exceedances of licenced 24hr Avg or 30-d Avg TSS thresholds for a particular station at a particular time; yellow cells highlight exceedances of 24hr Max or 7-d Avg TSS management levels.
6. TSS thresholds are as follows (mg/L): (a) 24-h at BG-HVH (high value habitat) stations after Sept 1 = 25 (b) all other cases 24-h threshold = 50 (c) 30-d at BGH stations after Sept 1 = 6 (d) all other cases 30-d threshold = 15.

Table 2.2: Bay-Goose TSS Monitoring – High Value Habitat Stations October 2009

	Station	BG-HVH1				BG-HVH2				BGH3 (full depth profile; HVH thresholds do not apply)			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
1-Oct-09	16:00	5.24	no data	6.70	8.80	6.22	no data	7.09	9.93	6.95	no data	7.69	10.77
2-Oct-09	17:29	6.28	no data	6.27	8.67	6.09	no data	6.90	9.77	6.34	no data	7.47	10.60
3-Oct-09	17:38	5.81	no data	6.08	8.33	5.59	no data	6.60	9.50	6.06	no data	7.22	10.31
4-Oct-09	16:37	5.81	5.70	5.89	8.18	6.00	5.80	6.27	9.34	6.06	6.03	6.95	10.16
5-Oct-09	16:45	4.99	no data	5.75	8.05	5.59	no data	6.09	8.92	6.22	no data	6.70	9.53
6-Oct-09	15:09	5.18	5.08	5.59	7.96	5.59	5.51	5.84	8.81	6.22	3.49	6.56	9.47
7-Oct-09	11:12	5.18	4.74	5.48	7.86	5.59	5.51	5.80	8.67	5.87	no data	5.45	9.13

	Station	BG-HVH3 (0 to 8m depths only)				BG-HVH4				BGH5 (full depth profile; HVH thresholds do not apply)			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis												
1-Oct-09	16:00	6.95	no data	7.25	10.42	7.63	no data	7.45	11.04	7.34	no data	7.37	10.03

Type A Water License 2AM-MEA0815
Monitoring Program Summary Report October 2009

2-Oct-09	17:29	6.34	no data	7.12	10.26	5.87	no data	7.30	10.86	6.25	no data	7.25	9.89
3-Oct-09	17:38	6.06	no data	6.92	9.98	5.72	no data	7.04	10.50	5.59	no data	6.97	9.69
4-Oct-09	16:37	6.06	5.87	6.64	9.84	6.09	5.91	6.75	10.33	5.59	5.58	6.68	9.55
5-Oct-09	16:45	5.87	no data	6.43	9.20	5.66	no data	6.54	9.57	5.72	no data	6.45	9.03
6-Oct-09	15:09	5.87	3.30	6.30	9.14	5.66	3.17	6.39	9.51	5.72	5.31	5.91	8.91
7-Oct-09	11:12	5.87	no data	5.36	8.80	5.66	no data	5.30	9.18	5.05	4.97	5.79	8.75

	Station	BG-HVH5 (0 to 8m depths only)			
	Time Period	24h Max	24h Avg	7-d Ave	30-d Avg
Date of Analysis	Time of Analysis				
1-Oct-09	16:00	6.34	no data	6.97	9.78
2-Oct-09	17:29	6.25	no data	6.83	9.63
3-Oct-09	17:38	5.56	no data	6.60	9.43
4-Oct-09	16:37	5.56	5.56	6.28	9.30
5-Oct-09	16:45	5.72	no data	6.10	8.76
6-Oct-09	15:09	5.72	3.21	5.41	8.59
7-Oct-09	11:12	5.05	2.84	5.09	8.39

Notes:

1. TSS concentrations (mg/L) are calculated from a TSS-turbidity regression equation, which is updated as new TSS data are generated.
2. If a cell has "n/a" after the number, this means that sampling has not yet covered the specified period (24h or 7-d), but the average up to that date and time is still calculated.
3. "NS" = not sampled that day
4. "no data" is listed for the 24-hr Avg value for cases where only one data point was collected in the past 24hrs; the 24hr Max value applies.
5. Red cells are exceedances of licenced 24hr Avg or 30-d Avg TSS thresholds for a particular station at a particular time; yellow cells highlight exceedances of 24hr Max or 7-d Avg TSS management levels.
6. TSS thresholds are as follows (mg/L): (a) 24-h at BG-HVH (high value habitat) stations after Sept 1 = 25 (b) all other cases 24-h threshold = 50 (c) 30-d at BGH stations after Sept 1 = 6 (d) all other cases 30-d threshold = 15.

SECTION 3 • WATER MANAGEMENT

3.1 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 October, the number of people on site by day was 510. The total consumption of water for the camp, the batch plant and the mine site was 2,544 m³ for the month, an average of 82.1 m³ a day.

Table 3.1: October 2009 Water Usage

	Water Usage (m ³)
Batch Plant	90
Water Treatment Plant	2,454
Water for Dust Control	0
Total for the site	2,544

3.2 SEWAGE TREATMENT PLANT MONITORING

At the sewage treatment plant, two systems are now in operation (the Seprotech L333 and the two Little John LJ100s). Four water samples were taken at the effluent. The results showed the two sewage treatment plants are working well.

Table 3.2: October 2009 STP Effluent Results

Station: STP-OUT				
Parameter	10/5/2009	10/12/2009	10/19/2009	10/26/2009
NH3-NH4 (mg/L)	28.5	33.3	37.1	34.3
BOD-5 (mg/L)	14	12	23	15
COD (mg/L)	120	95	144	156
TSS (mg/L)	38	44	46	40
NO2-NO3 (mg N/L)	49.0	2.4	63.3	57.2
pH	5.52	5.83	6.16	5.38
P tot (mg P/L)	17.7	21.3	23.8	22.4
Fecal Coliform (CFU/100mL)	<100	<10	300	<10
Total Coliform (CFU/100mL)	<1,000	200	3,000	<1,000
Atypical Colony (CFU/100mL)	31,000	4,600	83,000	2,000

SECTION 4 • SPILL MANAGEMENT SUMMARY

During the construction phase as part of the global Environmental Management System, AEM is developing a system of tracking spills on-site. Table 4.1 summarizes the AEM Internal spill reports for October.

Table 4.1: Summary of October 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
10/1/2009	Hydraulic oil	90 m ²	AWPAR between km 10 and 20, left side of the road south bound	Broken hose	Backhoe and front shovel used to excavate the contaminated soil. Three loads of contaminated soil taken to Quarry 6	N
10/7/2009	Hydraulic oil	200 L	Between Stormwater dike and the pit	Busted hose	Driver went directly to the garage for repairs when broken hose was noticed. Oil was spread all along the muddy road. The oil was mixed with the muddy soil and nothing could be recovered. Operation department supervisor revised the procedure in case of spill.	Y
10/11/2009	Diesel Fuel	200 L	Baker Lake Refueling station	Driver overfilled the tanker truck	Contaminated material was recovered and taken to Quarry 6	Y
10/14/2009	Oil and Glycol	25 L	Construction genset	Motor failure	Applied absorbent to spill and repaired the broken part. Contaminated soil picked up and taken to the hazmat storage area	N
10/21/2009	coolant	6-8 L	Dewatering tanks	Unknown, possibly a leak in the radiator on the IT 14 or the CM 785 drill	Contaminated soil picked up and taken to the hazmat storage area	N
10/21/2009	Oil	3 L	Laydown 2	Forklift punctured drum resulting in a small hole	Immediately repositioned drum. Contaminated soil and snow placed in a pail and taken to the hazmat storage area. Oil to be burned at the incinerator	N
10/24/2009	Diesel Fuel	1 m ²	East Dike (generator)	Vent on the generator not working properly	Secondary containment placed under generator	N

Type A Water License 2AM-MEA0815
Monitoring Program Summary Report October 2009

10/24/2009	Diesel Fuel	7 m ²	Pit (South Entrance)	Unknown	Area scraped with grader blade. Contaminated snow and soil picked up with loader and taken to the snow cell and hazmat storage area	N
10/24/2009	Antifreeze or oil	1 m ²	Waste rock Pad	Leak from drill # RBD05	Contaminated soil picked up and taken to hazmat storage area	N
10/24/2009	Oil	less than 1 m ²	Saddle Dam	Broken hose	Shoveled the contaminated soil into the roll-off bin	N
10/24/2009	Antifreeze	1 m ²	Quarry 23	Anti-freeze leaked while RH-120 shovel was being assembled	Contaminated snow and soil picked up and taken to the snow cell and hazmat storage area	N
10/25/2009	Coolant	1 m ²	Bay Goose Island	Leak from Geopac compactor	Put secondary containment under the compactor to contain the leak. Compactor can only be moved in spring so the contaminated soil will be recovered that time	N
10/25/2009	Diesel Fuel	2 m ²	TCG pad	Compressor fuel tank moved when fuel tank was full	Contaminated soil picked up and taken to hazmat storage area	N
10/25/2009	Diesel Fuel	2 m ²	Truck shop	Overfilling of the frost fighters	Secondary containment placed under every frost fighter	N
10/25/2009	Diesel Fuel	2 m ²	Nahanni Maintenance shop	Unknown	Contaminated soil picked up and taken to hazmat storage area	N
10/25/2009	Oil	less than 1 m ²	Construction office parking	Mechanical problem on the drill	Applied absorbent to spill and repaired the broken part. Contaminated soil picked up and taken to hazmat storage area	N
10/27/2009	Diesel Fuel	3 L	Truck shop	While moving a frost fighter into a secondary containment, some fuel leaked from the cap of the frost fighter	Contaminated soil picked up and taken to hazmat storage area	N
10/29/2009	Oil	5 L	Pit	Drill - Usage of summer oil instead of winter oil, it expanded and overflowed	Put secondary containment under it. Contaminated soil/snow collected and taken to hazmat storage area. Drill taken in for maintenance	N
10/31/2009	Diesel Fuel	3 L	Dewatering tanks	Overfilling of the generator	Contaminated material will be recovered when genset is relocated	N
10/31/2009	Transmission fluid	Unknown	AWPAR km 70 and 71	Transmission breaks on the Hyster lift	Contaminated soil collected	N
10/31/2009	Oil	2 L	Saddle dam dike	Fill the oil tank without putting the plug at the bottom	Replaced plug. Contaminated soil picked up and taken to hazmat storage area	N