

#### AGNICO-EAGLE MEADOWBANK

555 Burrard Street, Suite 375 Box 209, Two Bentall Centre Vancouver, British Columbia V7X 1M8 Tel. 604.608.2557 Fax. 604.608.2559

agnico-eagle.com

June 30, 2009

Via email and Xpresspost

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

Dear Mr. Dwyer,

### Re: May 2009 Monitoring Program Summary Report

As required by Water license 2AM-MEA0815 Part I Item 25, please find enclosed the May 2009 Monitoring Program Summary Report.

Should you have any questions regarding this submission, please contact me directly at 819-759-3700 ext. 814 or via email at <a href="mailto:stephane.robert@agnico-eagle.com">stephane.robert@agnico-eagle.com</a>.

Regards,

Stéphane Robert,

**Environment Superintendent** 

Encl (1)



## MEADOWBANK GOLD PROJECT

# Monitoring Program Summary Report May 2009

Type A Water License 2AM-MEA0815

## **TABLE OF CONTENTS**

SECTIO	ON 1 •	BACKGROUND	1
SECTIO	ON 2 •	WATER QUALITY MONITORING	2
2.1	Dewaterin	ng of Second Portage Lake	2
SECTIO	ON 3 •	WATER MANAGEMENT	6
3.1	Water Usa	age	6
3.2		reatment Plant Monitoring	
SECTIO	ON 4 •	SPILL MANAGEMENT SUMMARY	8
		LIST OF TABLES	
Table 2 Table 3 Table 3	2.2: Monitor 3.1: May 20 3.2: May 20	ring Results Dewatering at TPL May 1 – 31, 2009	6 6

#### 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 along the Meadowbank All Weather Private Access Road (AWPAR) and mine site for the month of May 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 monitoring points covered by this monthly report will expand as the facilities are constructed.

The dewatering of the northwest arm of Second Portage Lake continued through May. 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). Additionally, for the NWB to review, Section 4 summarizes the AEM internal spill reporting for May.

#### SECTION 2 • WATER QUALITY MONITORING

In May, no monitoring or sampling was completed along the AWPAR or at the mine site due to ice conditions. No water was discharged around the mine site, rather all the water (ie. Sewage Treatment Plant, construction pumping) was directed to the Storm Water Management Pond.

#### 2.1 DEWATERING OF SECOND PORTAGE ARM

The dewatering of the northwest arm of Second Portage Arm began on March 17. Total Suspended Solids (TSS) and turbidity are monitored daily at each of the five intake pumps (ST-DD-1) and once per week in Third Portage Lake (TPL) and Second Portage Lake (SPL) near the receiving outlets. The results respect the maximum monthly mean effluent quality limits (15 mg/L for TSS, 15 NTU for turbidity, 1.5 mg/l for Aluminum and 6 to 9 for pH). May monitoring results are included in Tables 2.1 and 2.2. In mid-May, the turbidity levels at the two pumps at the East dike increased and reached the daily limit. The pumps were shut down and reinstalled in deeper water.

Table 2.1: Monitoring Results Dewatering at TPL May 1 – 31, 2009

	Inta	ke 1	Inta	ke 2	Inta	ke 3	TPL C	Outlet	All	TPL Water	ntake Pum <sub>l</sub>	ps
Date	24-hour Mean	Lab TSS	24-hour Mean	Lab TSS	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				
5/1/2009	Pump s	stopped	Pump s	stopped	Pump s	stopped					4	1.9
5/2/2009	Pump s	stopped	Pump s	stopped	Pump s	stopped	0.83	2			4	1.9
5/3/2009	Pump s	stopped	Pump s	stopped	Pump s	stopped					4	1.8
5/4/2009	3.2	1	3.5	1	3.5	1			3	1.0	4	1.8
5/5/2009	3.3	1	3.6	2	3.7	4			4	2.3	4	1.9
5/6/2009	3.4	1	3.7	11	3.7	18			4	10.0	4	2.2
5/7/2009	3.5		3.5		3.4				3		4	2.3
5/8/2009	3.5	4	3.4	4	3.5	4			3	4.0	4	2.3
5/9/2009	3.9	4	3.9	4	3.7	4			4	4.0	4	2.4
5/10/2009	3.1	3	3.2	6	3.2	3	0.41	6	3	4.0	4	2.5
5/11/2009	3.2	1	3.5	2	3.4	1			3	1.3	4	2.5
5/12/2009	3.1	1	3.2	1	3.1	1			3	1.0	4	2.4
5/13/2009	3.3	1	3.2	2	3.4	1			3	1.3	4	2.4
5/14/2009	3.3	2	3.4	1	3.2	1			3	1.3	4	2.3
5/15/2009	3.8	1	3.7	1	3.6	2			4	1.3	4	2.3
5/16/2009	3.1	2	3.6	3	3.0	3	0.51	1	3	2.7	4	2.4
5/17/2009	3.0	1	3.0	3	2.9	4			3	2.7	4	2.4
5/18/2009	3.9	2	4.1	2	3.8	1			4	1.7	4	2.4
5/19/2009	5.0	2	4.1	3	3.2	2			4	2.3	4	2.4
5/20/2009	3.9	2	4.7	2	4.9	2			4	2.0	4	2.4
5/21/2009	3.3	1	3.3	3	3.4	3			3	2.3	4	2.3
5/22/2009	3.2	1	3.1	1	3.5	1			3	1.0	4	2.3
5/23/2009	3.5	2	3.3	2	3.3	3			3	2.0	4	2.3
5/24/2009	3.1	2	2.8	2	3.3	1	0.53	4	3	1.7	4	2.3
5/25/2009	3.2	1	3.4	1	3.7	1			3	1.0	4	2.2
5/26/2009	3.3	1	3.4	2	3.3	2			3	1.7	3	2.2
5/27/2009	3.5	1	3.9	2	3.6	1		-	4	1.3	3	2.1

5/28/2009	4.2	1	4.7	1	4.9	1		5	1.0	4	2.1
5/29/2009	5.2	1	5.8	2	5.8	2		6	1.7	4	2.1
5/30/2009	5.9	2	6.9	2	7.0	2		7	2.0	4	2.2
5/31/2009	4.7	2	6.0	1	6.1	2		6	1.7	4	2.2

Table 2.2: Monitoring Results Dewatering at SPL May 1 – 31, 2009

	Inta	ke 1	Inta	ke 2	SPL (	Outlet	All	SPL Water	Intake Pur	ıps
Date	24-hour Mean	Lab TSS	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				
5/1/2009	3.7	1	2.9	1			3	1.00	3	1.75
5/2/2009	2.8	1	3.4	2	0.88	2	3	1.50	3	1.73
5/3/2009	4.6	1	3.6	2			4	1.50	3	1.71
5/4/2009	2.9	1	3.5	1			3	1.00	3	1.65
5/5/2009	3.5	1	3.4	5			3	3.00	3	1.75
5/6/2009	2.9	13	3.7	1			3	7.00	3	2.10
5/7/2009	3.2		3.8				3		3	2.10
5/8/2009	3.9	5	3.9	4			4	4.50	3	2.25
5/9/2009	3.8	3	3.8	5			4	4.00	3	2.35
5/10/2009	Pump s	stopped	Pump s	stopped	1.9	13			3	2.35
5/11/2009	Pump s	stopped	Pump s	stopped					3	2.35
5/12/2009	3.1	6	Pump s	stopped			3	6.00	3	2.46
5/13/2009	3.2	1	3.2	1			3	1.00	3	2.38
5/14/2009	3.5	1	4.0	4			4	2.50	3	2.38
5/15/2009	4.9	3	6.5	8			6	5.50	4	2.54
5/16/2009	3.9	4	13.6	14	2.8	8	9	9.00	4	2.84
5/17/2009	4.4	4	9.6	6			7	5.00	4	2.93
5/18/2009	10.0	7	32.7	21	_		21	14.00	5	3.40
5/19/2009	Pump s	stopped	Pump s	stopped	26.9				5	3.40
5/20/2009	Pump s	stopped	Pump s	stopped	15.76	19			5	3.40

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

5/21/2009	Pump s	topped	Pump s	stopped					5	3.40
5/22/2009	Pump s	topped	Pump s	Pump stopped		2			5	3.40
5/23/2009	Pump s	topped	Pump s	stopped					5	3.40
5/24/2009	Pump s	topped	Pump s	stopped					5	3.40
5/25/2009	Pump s	topped	Pump s	Pump stopped					5	3.40
5/26/2009	Pump s	topped	Pump s	stopped					5	3.40
5/27/2009	Pump s	topped	Pump s	stopped					5	3.40
5/28/2009	Pump s	topped	Pump s	stopped					5	3.40
5/29/2009	Pump s	topped	Pump s	stopped					5	3.40
5/30/2009	Pump s	topped	Pump s	Pump stopped					5	3.43
5/31/2009	6.5	1	8.7		2.23		8	1.00	5	3.41

#### SECTION 3 • WATER MANAGEMENT

#### 3.1 WATER USAGE

Under Water License 2AM-MEA0815, the total water consumption limit for the Meadowbank Project is 700,000 m³/year or 58,333 m³/month or for the batch plant, domestic and milling water use. During the month, the number of people on site by day was 372. The total consumption of water for the camp, the batch plant and the mine site was 2,624 m³ for the month, an average of 84 m³ per day.

Table 3.1: May 2009 Water Consumption

	Water Usage (m <sup>3</sup> )
Batch Plant	570
Water Treatment Plant	2,054
Total for the site	2,624

#### 3.2 SEWAGE TREATMENT PLANT MONITORING

Two systems are now in operation at the sewage treatment plant (STP), the Seprotech L333 and the two Little John LJ100s. The Little Johns were in recirculation mode for the last week of May. Four water samples were taken at the two effluents. The results show that the two sewage treatment plants are working well.

Table 3.2: May 2009 STP Effluent Results

Station: STP-OUT				
Parameter	5/4/2009	5/11/2009	5/18/2009	5/25/2009
NH3-NH4(mg/L)	33.3	26.7	24.7	27.9
BOD-5 (mg/L)	6	9	11	17
COD (mg/L)	107	134	43	62
TSS (mg/L)	12	20	23	37
NO2-NO3 (mg N/L)	49.8	55.5	45.1	49.8
рН	4.49	5.82	5.81	5.01
P tot (mg P/L)	15.3	17.6	17.1	14.4
Fecal Coliform (UFC/100mL)	10	8	1	20
Total Coliform (UFC/100mL)	< 100	100	< 100	< 1,000
Atypical Colony (UFC/100mL)	3,800	> 20,000	> 20,000	38,000
Station: Little John				
Parameter	5/4/2009	5/11/2009	5/18/2009	5/25/2009
NH3-NH4 (mg/L)	11.8	11.2	24.1	27.6
BOD-5 (mg/L)	13	16	12	16
COD (mg/L)	117	157	60	65
TSS (mg/L)	15	11	24	38

NO2-NO3 (mg N/L)	29.7	33.1	48.1	45
рН	6.05	6.04	5.7	5.36
P tot (mg P/L)	15.9	17.6	18	14.6
Fecal Coliform (UFC/ 100mL)	10	4	8	128
Total Coliform (UFC /100mL)	< 1,000	1,000	< 1,000	< 1,000
Atypical Colony (UFC /100mL)	49,000	> 200,000	> 74,000	91,000

## SECTION 4 • SPILL MANAGEMENT SUMMARY

During the construction phase, as part of the Environmental Management System, AEM has developed a system of tracking on-site spills. Table 4.1 summarizes the AEM internal spill reports for May.

Table 4.1: Summary of May 2009 AEM Internal Spill Reports

AEM Internal #	Date of Spill	Hazardous Material (Fuel, Oil, etc.)	Quantity	Location	Cause of Spill	Clean-up Action Taken	Reported to Spill GN HotLine
05-2009-01	5/14/2009	Hydraulic oil	25 L	South Camp Dike	Hydraulic oil break	All contaminated rock was removed with the excavator and taken to Quarry 22	No
05-2009-02	5/19/2009	Diesel fuel	25 L	Waste Dump	Fuel nozzle failed to shut off	Absorbent material was used to recover fuel on surface and the soil was scrapped with a backhaul.	No
	5/25/2009	Jet B	205 L	Km 89 AWPAR	Crack in the bottom of the drum	Soil was removed and taken to Quarry 22	Yes
05-2009-03	Unknown	Oil	3 m² area	Toromont Pad	Unknown	All contaminated rock was removed with the excavator and taken to Quarry 22	No
05-2009-04	5/27/2009	Diesel fuel	20 L	Km 103 AWPAR	Fuel drum not closed	Absorbent was used to contain the leak, pick up contaminated soil with shovel and back haul	No
05-2009-05	5/27/2009	Diesel fuel	20 L	Construction site	Leak from a light plant	The generator was stop and the soil shovel up with an excavator	No
05-2009-06	5/28/2009	Hydraulic oil	50 L	Dewatering Road and Saddle Dam road	Hose busted	Cleaned and contaminated soil bring to the hazardous materials storage area	No
05-2009-07	Unknown	Diesel fuel	1 m² area	TCG Area	Possible over flow when refuelling	The area was cleaned up and contaminated soil was taken to the hazardous materials storage area	No
05-2009-08	Unknown	Oil	1 m x 0.75 m	TCG Area	Possibly back haul	The area was cleaned up and contaminated soil was taken to the hazardous materials storage area	No
05-2009-09	Unknown	Diesel fuel	1 m²	TCG Area	Possibly fuel truck	The area was cleaned up and contaminated soil was taken to the hazardous materials storage area	No
05-2009-10	Unknown	Coolant	~ 10 L	Cold Storage	777 Haul trucks	The area was cleaned up and contaminated soil was taken to the hazardous materials storage area	No
05-2009-11	Unknown	Diesel fuel	5 m² area	In front of White Coverall	Fuel truck	All contaminated rock was removed with the excavator and taken to Quarry 22	No

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

05-2009-12	5/31/2009	Diesel fuel	2 m² area	Dewatering area between the pumps and the shelter	Unknown	All contaminated rock was removed with the excavator and taken to Quarry 22	No
05-2009-13	Unknown	Grease and oil	4 m² area	AWPAR along the airstrip	Unknown	All contaminated rock was removed with the excavator and taken to Quarry 22	No