



MEADOWBANK DIVISION

**Monitoring Program Summary Report**  
**February 2014**

Type A Water License 2AM-MEA0815

Table of Contents

SECTION 1 • BACKGROUND..... 3

SECTION 2 • WATER MANAGEMENT ..... 4

2.1 WATER USAGE .....4

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE .....4

2.3 ASSAY ROAD SEEPAGE .....4

2.4 SEWAGE TREATMENT PLANTS.....4

2.5 PORTAGE ATTENUATION POND EFFLUENT .....5

2.6 VAULT DEWATERING EFFLUENT .....5

2.7 EAST DIKE SEEPAGE EFFLUENT.....6

2.8 NON CONTACT WATER.....6

SECTION 3 • SPILL MANAGEMENT ..... 7

## **SECTION 1 • BACKGROUND**

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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. This includes water usage, Portage Attenuation Pond discharge water quality, Vault Dewatering water quality, East Dike Seepage Discharge and sewage treatment plant discharge water quality (to onsite storm water management pond).

In addition, a summary of spills/actions for the month is included.

## **SECTION 2 • WATER MANAGEMENT**

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### **2.1 WATER USAGE**

Freshwater usage for February 2014 is summarized in Table 2.1 below. Total freshwater used for the month was 78,053 m<sup>3</sup>. The total amount of reclaim water used in the mill for February was 183,938 m<sup>3</sup>.

On April 23<sup>rd</sup>, 2013 Agnico Eagle Mines (AEM) Meadowbank Division submitted a request to the Nunavut Water Board for an amendment to increase the freshwater use rate at the Meadowbank Gold Project. Water license amendment pre-hearing conference and technical meeting was held in Baker Lake on October 16<sup>th</sup> and 17<sup>th</sup>. Final written hearing was held on January 17<sup>th</sup>, 2014. On January 24<sup>th</sup>, AEM received correspondence from NWB advising that hearing record is closed and the Panel will issue, in due time, a decision report to AANDC regarding whether or not to issue the requested amendment, to the Type A Water License, to the Applicant. AEM is still waiting for the final decision.

**Table 2-1: Freshwater Usage (m<sup>3</sup>)**

	<b>February</b>
Freshwater Storage Tank	77,913
Emulsion Plant	140
Water Truck	0
<b>Total</b>	<b>78,053</b>
<b>Year to date total</b>	<b>133,775</b>

### **2.2 WASTE ROCK STORAGE FACILITY SEEPAGE**

The RSF seepage has been frozen since October 5<sup>th</sup>, 2013. In February, weekly inspections were completed at RSF and NP-2 Lake. No more monthly sample was taken in NP-2 Lake as the ice is thicker than 5 feet. AEM is working on a freshet action plan.

### **2.3 ASSAY ROAD SEEPAGE**

No more seepage has been visible since November 24<sup>th</sup>. Samples are taken in TPL monthly and to date no contaminants have been detected. AEM has engaged EBA to perform an assessment and provide a report with recommendations in early 2014. Repairs of the containment systems in the mill have commenced and the intent is to have this completed prior to freshet.

### **2.4 SEWAGE TREATMENT PLANTS**

One (1) effluent wastewater sample was taken from the onsite sewage treatment plant (STP's) in February.

The Seprotech STP results are shown in Table 2.3.1 below; the LJ-Mix STP results are shown in Table 2.3.2. The results of the discharge indicate the system was working well. The effluent is discharged to the onsite storm water pond and is not discharged to the natural environment.

**Table 2.3.1: Seprotech Effluent Results**

Parameters	Units	February 17, 2014
Ammonia	mg N/L	<0.01
Ammonia-Ammonium	mg N/L	10.9
Total Kjeldahl Nitrogen	mg N/L	11.1
BOD-5	mg/L	1
COD	mg/L	51
Total Suspended Solids	mg/L	11
Nitrate	mg N/L	28.9
Nitrite	mg N/L	0.04
pH*	Units	4.0
Fecal Coliform	UFC/100 mL	11
Total Coliform	UFC/100 mL	400

\*Parameter measured by STP operators

**Table 2.3.2: LJ-Mix Effluent Results**

Parameters	Units	February 17, 2014
Ammonia	mg N/L	<0.01
Ammonia-Ammonium	mg N/L	22.7
Total Kjeldahl Nitrogen	mg N/L	20.4
BOD-5	mg/L	2
COD	mg/L	54
Total Suspended Solids	mg/L	12
Nitrate	mg N/L	42
Nitrite	mg N/L	0.07
pH*	Units	4.1
Fecal Coliform	UFC/100 mL	6
Total Coliform	UFC/100 mL	100

\*Parameter measured by STP operators

## 2.5 PORTAGE ATTENUATION POND EFFLUENT

There was no Portage Attenuation Pond Discharge thru Actiflo Water Treatment Plant (ST-9) in February.

## 2.6 VAULT DEWATERING EFFLUENT

In February, no water was discharged to Wally Lake.

## 2.7 EAST DIKE SEEPAGE EFFLUENT

East Dike Discharge started on January 6<sup>th</sup>. During the month, a total of 12,729 m<sup>3</sup> was discharged thru a diffuser into Second Portage Lake for a total year to date of 24,508m<sup>3</sup>. Monitoring results are shown in Table 2.7.1 below.

TSS results didn't exceed the maximum average concentration (15 mg/L) and maximum allowable grab sample concentration (30 mg/L) permitted by the Water License, Part F, Item 4.

**Table 2.7.1: East Dike Seepage Discharge Results**

Parameters	Units	4-Feb-14	10-Feb-14	18-Feb-14	27-Feb-14	Maximum Average Concentration
Total Suspended Solids	mg/L	13	3	13	10	9.75

## 2.8 NON CONTACT WATER

In February, there was no water discharged through the non-contact water diversion ditches due to freezing conditions

## SECTION 3 • SPILL MANAGEMENT

AEM has developed a system of tracking spills on-site. Table 3.1 summarizes the AEM spill reports for the month. Fourth (4) spills occurred on site and none was reported to the GN spill hotline. AEM contained and cleaned up all the spills.

**Table 3-1: Summary of AEM Internal Spill Reports**

Date of Spill	Hazardous Material	Quantity (L/Kg)	Location	Cause of spill	Clean-up action taken	Reported to Spill Hot Line
2014-02-09	Fuel	25	Vault Fuel Farm	Air vent on haul truck #29 did not work properly.	Cleaned fuel with rags, contained with snow. Contaminated snow brought at tailings pond (1 yard) Rags brought at incinerator.	No
2014-02-12	Hydraulic Oil	95	Pushback Blast #5067413	Haul truck broken bolt on an hydraulic hose and pump.	Clean up the spill the Bac 06, put it in the HTR 08 and bring it to the landfarm (pile #00007, app. 25m3).	No
2014-02-14	Motor Oil	5	Incinerator	Broken seal from the filter on incinerator.	Stop the equipment, call mechanics, clean the spill. Contaminated material disposed in yellow bin.	No
2014-02-15	Glycol	70	Reclaim Road	Glycol tote with glycol and ice split open when lifting it.	Empty the tote, scrape the contaminated snow and put it in the tailings pond.	No