



MEADOWBANK DIVISION

Monitoring Program Summary Report
January 2014

Type A Water License 2AM-MEA0815

Table of Contents

SECTION 1 • BACKGROUND..... 3

SECTION 2 • WATER MANAGEMENT 4

2.1 WATER USAGE4

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE4

2.3 ASSAY ROAD SEEPAGE4

2.4 SEWAGE TREATMENT PLANTS.....5

2.5 PORTAGE ATTENUATION POND EFFLUENT6

2.6 VAULT DEWATERING EFFLUENT6

2.7 EAST DIKE SEEPAGE EFFLUENT.....6

2.8 NON CONTACT WATER.....6

SECTION 3 • SPILL MANAGEMENT 7

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. 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

2.1 WATER USAGE

Freshwater usage for January 2014 is summarized in Table 2.1 below. Total freshwater used for the month was 55,722 m³. The total amount of reclaim water used in the mill for January was 246,784 m³.

On April 23rd, 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 16th and 17th. Final written hearing was held on January 17th, 2014. On January 24th, 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.

Table 2-1: Freshwater Usage (m³)

	January
Freshwater Storage Tank	55,548
Emulsion Plant	174
Water Truck	0
Total	55,722
Year to date total	55,722

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

The RSF seepage has been frozen since October 5th, 2013. In January, weekly inspections were completed at RSF and NP-2 Lake and a monthly sample was taken in NP-2 Lake. On January 29th, a meeting was held with KIA and their consultant in Rankin Inlet to discuss about RSF seepage. KIA requested additional monitoring at NP-1, Dogleg and Second Portage Lake. AEM take note of this requirement and will start monitoring at freshet.

2.3 ASSAY ROAD SEEPAGE

No more seepage has been visible since November 24th. Samples are taken in TPL monthly and to date no contaminants have been detected. AEM has engaged EBA to perform an assessment and provide recommendations for 2014. The report is due in February. EBA will provide recommendations for additional boreholes to delineate the plume, assist in the design and construction of an appropriate containment system before freshet and provide suggestions for the location of groundwater wells downstream of the seepage area. It is AEM's intent to follow the recommendations of EBA. 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 January.

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	January 8, 2014
Ammonia	mg N/L	<0.01
Ammonia-Ammonium	mg N/L	7.2
Total Kjeldahl Nitrogen	mg N/L	10
BOD-5	mg/L	5
COD	mg/L	74
Total Suspended Solids	mg/L	41
Nitrate	mg N/L	30.4
Nitrite	mg N/L	0.01
pH *	Units	3.70
Fecal Coliform	UFC/100 mL	36
Total Coliform	UFC/100 mL	900

*Parameter measured by STP operators

Table 2.3.2: LJ-Mix Effluent Results

Parameters	Units	January 8, 2014
Ammonia	mg N/L	<0.01
Ammonia-Ammonium	mg N/L	20.9
Total Kjeldahl Nitrogen	mg N/L	24.2
BOD-5	mg/L	10
COD	mg/L	95
Total Suspended Solids	mg/L	43
Nitrate	mg N/L	46.2
Nitrite	mg N/L	0.28
pH *	Units	5.30
Fecal Coliform	UFC/100 mL	9
Total Coliform	UFC/100 mL	30

*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 January.

2.6 VAULT DEWATERING EFFLUENT

In January, no water was discharged to Wally Lake.

2.7 EAST DIKE SEEPAGE EFFLUENT

East Dike Discharge started on January 6th. During the month, a total of 11,779 m³ was discharged thru a diffuser into Second Portage Lake. 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	7-Jan-14	14-Jan-14	20-Jan-14	27-Jan-14	Maximum Average Concentration
Total Suspended Solids	mg/L	19	11	20	5	13.75

2.8 NON CONTACT WATER

In January, 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. Seven (7) spills occurred on site and two (2) were 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
2014-01-02	Diesel	80	Meadowbank Fuel Farm Fueling Area	O rings on the fuel farm at the fueling station shrunk in the extreme cold weather, causing the diesel to leak out of the joints of the fueling arm.	Site Services to have plumber on site January 8th to replace O-rings. In the meantime a new flexible hose is put in place to stop the leaking. Contaminated soil cleaned up.	No
2014-01-14	Hydraulic oil	96	Vault Pit Blast #5137825	Rock fell off the face of wall and came in contact with Hydraulic Tank - causing Hydraulic line to break and spill.	Hydraulic line was replaced. 980 Loader collected contaminated snow. Contaminated snow was picked up and brought to contaminated soil pad.	No
2014-01-16	Glycol	40	Vault 6182GEN01-02	Cold leak on Genset 6182GEN01-02	Electric/Powerhouse will monitor the Genset. No present solution. Genset will leak until part can be replaced - estimate of 3 - 6 month before job will be completed. Containment placed. App 40L/month leak rate.	No
2014-01-17	Cyanide	30	Outside Reagent Sea-Can at Mill	Operator was using telehandler try and remove the HCN Box from the sea-can, but in the process he punctured one cyanide box.	Immediately briquettes were safely removed off the ground. No residual cyanide was left outside the sea can, as a skid steer was used to remove the snow in the area of the spill. All of the briquettes and snow were placed in the mixing circuit for reuse. Reported	Yes
2014-01-20	Transmission oil	5	Incinerator Parking	Cold weather blocked filter and the oil overflow by the breather on the Fork Hyster.	Stop the equipment and let the machine warm up longer. Bring the loader and cleaned up the spill with the bucket and put the contaminated product inside the yellow bin.	No
2014-01-22	Raw Sewage	300	Incinerator Parking	The operator of the sewage truck left the valve slightly open after checking to see if it was frozen. After he noticed that sewage was spilling on the ground he went to shut it completely.	After Operator noticed that sewage was spilling on the ground he went to shut it completely. Operator was met and reminded of operating procedures to prevent any future reoccurrences. Contaminated material was collected and disposed of at the Stormwater management pond. There was no off site impact or discharge to any receiving watercourses. Reported.	Yes

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

2014-01-27	Power Steering	2	Site Services Parking	During Pre-operation inspection, operator noticed a small leak under the truck. The power steering hose was leaking fluid.	Spill was cleaned up and put into yellow roll-off. Maintenance was notified and pick-up was brought to maintenance for repair during night shift.	No
------------	----------------	---	-----------------------	--	---	----