



MEADOWBANK DIVISION

Monitoring Program Summary Report

April 2014

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. 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 April 2014 is summarized in Table 2.1 below. Total freshwater used for the month was 169,885 m³. The total amount of reclaim water used in the mill for April was 125,766 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. The 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. AEM is still waiting for the final decision.

Table 2-1: Freshwater Usage (m³)

	April
Freshwater Storage Tank	169,673
Emulsion Plant	212
Water Truck	0
Total	169,885
Year to date total	449,535

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

The RSF seepage has been frozen since October 5th, 2013. In April, weekly inspections were completed at RSF and NP-2 Lake. No more monthly sample has been taken in NP-2 Lake as the ice is thicker than 5 feet (safety issue). AEM completed a freshet action plan to prepare for the annual thaw. This will include pumping any seepage water from ST-16 to the North Cell TSF and continuing the previous monitoring program. In April, the pipes for the pumping system were installed.

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 (CN) have been detected. AEM engaged Tetra Tech (formerly EBA) to perform an assessment, drilling delineation program and to provide a report with recommendations in early 2014. In April, a design for an interception trench was approved by Tetra Tech. Construction of the trench was started in April (should be complete beginning of May). Repairs to the containment systems in the mill have commenced and are well progressing well.

2.4 SEWAGE TREATMENT PLANTS

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

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	April 7, 2014
Ammonia	mg N/L	<0.01
Ammonia-Ammonium	mg N/L	3.3
Total Kjeldahl Nitrogen	mg N/L	4.2
BOD-5	mg/L	2
COD	mg/L	48
Total Suspended Solids	mg/L	<1
Nitrate	mg N/L	24.8
Nitrite	mg N/L	0.06
pH*	Units	4.40
Fecal Coliform	UFC/100 mL	<4
Total Coliform	UFC/100 mL	10

*Parameter measured by STP operators

Table 2.3.2: LJ-Mix Effluent Results

Parameters	Units	April 7, 2014
Ammonia	mg N/L	<0.01
Ammonia-Ammonium	mg N/L	16.1
Total Kjeldahl Nitrogen	mg N/L	25.2
BOD-5	mg/L	11
COD	mg/L	68
Total Suspended Solids	mg/L	3
Nitrate	mg N/L	39.5
Nitrite	mg N/L	0.10
pH*	Units	5.40
Fecal Coliform	UFC/100 mL	32
Total Coliform	UFC/100 mL	400

*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 April.

2.6 VAULT DEWATERING EFFLUENT

In April, no water was discharged to Wally Lake.

2.7 EAST DIKE SEEPAGE EFFLUENT

During the month, a total of 10,737 m³ was discharged thru a diffuser into Second Portage Lake for a total year to date of 48,217m³. 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

Parameter	Units	1-Apr-14	8-Apr-14	15-Apr-14	19-Apr-14	22-Apr-14	29-Apr-14	Maximum Average Concentration
Total Suspended Solids	mg/L	30	14	12	10	8	12	14.33

2.8 NON CONTACT WATER

In April, 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. Fourteen (14) spills occurred on site and one (1) 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
2014-04-01	Coolant	60	End of Maintenance Shop	Backhoe was brought outside and parked at the end of the Maintenance Shop. When operator came to pick up machine, he noticed a coolant leak.	Containment drum was placed under the backhoe. Site Services was called to remove contaminated snow and material.	No
2014-04-06	Hydraulic oil	340	Vault pit	Failure on stick cylinder.	Pick up oil with absorbant pad, pick up contaminated soil and sent it to the landfarm.	Yes
2014-04-08	Hydraulic oil	50	Behind white coverall	Hydraulic reservoir flows on the ground on lift due to mechanical issue.	Call site services for cleanup, call mechanical shop for repair. Contaminated material disposed of in the yellow roll off bin.	No
2014-04-13	Glycol	10	Genset #7	While filling Genset with Glycol, a failure caused glycol to spill through the air vents.	Contaminated snow was picked up and taken to yellow roll off container. Operator will close air vent prior to refilling.	No
2014-04-18	Hydraulic oil	20	Quarry 19 at AWP/AR KM 85	Hydraulic hose on loader broke while removing snow from Quarry 19.	Spill Rags were placed on the ground. Oily rags were brought to the incinerator. Contaminated snow was scraped up and brought to the yellow roll off for disposal in the tailings pond.	No
2014-04-20	Diesel	40	Vault Genset #1	Genset was not working. Electrician went to repair and noticed a gasket on the fuel flange broke. The pipe emptied itself due to the broken gasket.	Gasket was replaced on the flange. Contaminated snow and gravel will be collected with loader.	No
2014-04-25	Diesel	30	Goose Pit	While refueling, fuel came out of breather.	Absorbant pads were placed on the ground and contaminated soil was collected.	No
2014-04-25	Diesel	50	Between tank farm and incinerator	Unreported spill so unknown.	Scraped the contaminated material and brought it to the landfarm	No
2014-04-25	Diesel	50	South pit view point	Unreported spill so unknown.	Scraped the contaminated soil and brought it to the landfarm	No
2014-04-27	Diesel Fuel, Engine Coolant, Oil and Grease	20	Vault Coverall	Minor leaks from equipment being parked in this garage.	Pump Crew cleaned up contaminated gravel on the floor with hand shovels and pales filling a 45 gallon steel drum.	No

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2014-04-27	Diesel	30	Mbk fuel farm	Did not release the pump leaver on time.	Put some absorbant pads and disposed of them at the maintenance hazmat area.	No
2014-04-28	Diesel	30	Vault Pit	Fuel vent on RBD01 is defective, when wigging gun reach pressure it shut off like usual and pressure in the fuel tank releases through the fuel vent on top of the tank.	Clean it all out with absorbant pads and dispose of the pads in the waste management drum at the main shop. Contaminated soil disposed of at the yellow roll off then to the tailings pond. Mechanics have been trying to fix the problem on dayshift and on nightshift prior to the spill and continue trying to fix the issue with the vent.	No
2014-04-28	Diesel	50	Vault Pit	Breather on RBD01 is defective. When refueling - fuel spill out of breather.	Spill pads were placed on the ground. Contaminated soil was scraped up with loader. Spill Pads were placed in oily rag drum at the maintenance shop and contaminated soil was put in yellow roll off.	No
2014-04-29	Lime	< 5 Kg	Reagent Laydown	Operator went to bring quicklime into mill and noticed the bag was torn in the sea can.	Material was shoveled into a skid steer bucket and brought into the Mill.	No