AGNICO EAGLE

MEADOWBANK DIVISION

Monitoring Program Summary Report

September 2015

Type A Water License 2AM-MEA1525

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SECTION 1 • BACKGROUND

As required under Part I, Item 20 of Type A Water License 2AM-MEA1525, this report documents the water management and monitoring activities at the mine site for the month. This includes water usage, Vault Attenuation Pond discharge water quality, East Dike Seepage discharge water quality, RSF Seepage, Assay Road Seepage and sewage treatment plant discharge water quality (which is directed to the onsite storm water management pond).

In addition, a summary of spills/actions for the month are reported.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Freshwater usage for September 2015 is summarized in Table 2.1 below. The total freshwater consumption for the month was 41,167 m^3. The total amount of reclaim water used in the mill for September was 226,636 m^3. Reclaim water is supplied by the TSF South Cell.

Table 2-1: Freshwater Usage (m^3)

	September
Freshwater Storage Tank	41,025
Emulsion Plant	142
Water Truck	0
Total	**41,167**
Year to date total	**681,841**

2.2 WASTE ROCK STORAGE FACILITY SEEPAGE

In September a total of 2,403 m^3 was pumped back to the North Cell TSF from the ST-16 sump. Total year to date is 20,029 m^3.

As per the Freshet Action Plan, AEM continued the daily visual inspections at the RSF and NP-2 Lake. To date, the water level in ST-16 area has been very low preventing any possible seepage through the till plug. It should be noted that AEM conducts a comprehensive sample monitoring program at NP-2 Lake as well as downstream lakes to confirm no impacts. In 2015 results indicate that no seepage has occurred into NP-2 Lake.

2.3 ASSAY ROAD SEEPAGE

In September, water in the interception trench and the original containment berm and sumps was pumped back to the mill. The total volume pumped was 4,584m^3. Total year to date pumped from MW-203, the interception trench and containment is 29,192m^3. AEM is conducting daily visual inspections as well as conducting a comprehensive sample monitoring program as per the Freshet Action Plan of these areas and to date no impact to Third Portage Lake has been observed.

2.4 SEWAGE TREATMENT PLANT

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

The Seprotech STP results are shown in Table 2.4.1 below; the LJ-Mix STP results are shown in Table 2.4.2. There are no results for fecal and total coliforms at LJ-Mix because samples were lost during shipping or at the lab. When AEM received the notification from the lab as to the fact that they did not have the bottles, it was too late to take another sample for this month. The results of the discharge indicate the system is working well. The effluent is discharged to the stormwater management pond and is pumped to the TSF (2x/year). This water becomes part of the reclaim pond. There is no discharge to the receiving environment.

Table 2.4.1: Seprotech Effluent Results

Parameters	Units	September 7, 2015
Ammonia	mg N/L	0.38
Ammonia-Nitrogen	mg N/L	48.2
Total Kjeldahl Nitrogen	mg N/L	51.3
BOD-5	mg/L	10
COD	mg/L	64
Total Suspended Solids	mg/L	16
Nitrate	mg N/L	6.41
Nitrite	mg N/L	1.74
pH*	Units	7.1
Fecal Coliform	UFC/100 mL	56
Total Coliform	UFC/100 mL	2700

Table 2.4.2: LJ-Mix Effluent Results

Parameters	Units	September 7, 2015
Ammonia	mg N/L	<0.01
Ammonia-Nitrogen	mg N/L	4.7
Total Kjeldahl Nitrogen	mg N/L	7.23
BOD-5	mg/L	8
COD	mg/L	58
Total Suspended Solids	mg/L	16
Nitrate	mg N/L	24.1
Nitrite	mg N/L	0.05
pH*	Units	5.6
Fecal Coliform	UFC/100 mL	-
Total Coliform	UFC/100 mL	-

*Parameter measured by STP operators

- Samples were lost during shipping or at the lab.

2.5 VAULT ATTENUATION POND EFFLUENT

Discharge from the Vault Attenuation Pond occurred until September 10th. The discharge has been stopped for the year. During the month, a total of 118,957 m^3 was discharged thru the diffusor into Wally Lake. Total year to date discharged is 1,065,433 m^3.

Two weekly effluent samples were collected at ST-10 in September. No Actiflo Water Treatment Plant was necessary during the month as the TSS levels were below the effluent criteria stated in Part F, Item 4 of the Water License.

The sample results are shown in Table 2.5.1 below. All results meet Water license and MMER criteria and are demonstrated to be non-Acutely Lethal.

Table 2.5.1: ST-10 Effluent Results

Date Parameters	Units	Max. grab conc.	1-Sept-15	8-Sept-15	Monthly Average	Max. avg. conc.
pH*	-	6.0-9.0	7.4	7.7	7.5	6.0-9.0
TSS	mg/L	30	10	1	5.5	15
TDS	mg/L	1400	135	132	133.5	1400
Turbidity*	NTU	15	6.54	2.25	4.4	15
Aluminium	mg/L	3.0	0.1	0.06	0.08	1.5
Dissolved Aluminium	mg/L	2.0	<0.006	<0.006	<0.006	1.0
Arsenic	mg/L	0.2	<0.0005	<0.0005	<0.0005	0.1
Cadmium	mg/L	0.004	<0.00002	<0.00002	<0.00002	0.002
Copper	mg/L	0.2	0.003	0.003	0.003	0.1
Mercury	mg/L	0.008	<0.00001	<0.00001	<0.00001	0.004
Ammonia nitrogen	mg N/L	40	1.7	0.9	1.3	20
Nickel	mg/L	0.4	0.0029	0.0019	0.0024	0.2
Nitrate	mg N/L	100	3.95	3.74	3.85	50
Lead	mg/L	0.2	0.0095	<0.0003	0.0048	0.1
Phosphorus	mg/L	3.0	<0.01	<0.01	<0.01	1.5
Zinc	mg/L	0.4	<0.001	<0.001	<0.001	0.2
Chloride	mg/L	1000	6.7	5.7	6.2	500
Acute Toxicity – Daphnia Magna	LC50%	-	-	>100	-	-
Acute Toxicity – Rainbow Trout	LC50%	-	-	>100	-	-

*Parameters measured by technician on the field
- Not applicable or no data

2.6 EAST DIKE SEEPAGE EFFLUENT

Discharge from the East Dike Seepage occurred for the whole month. A total of 18,810 m^3 was discharged into Second Portage Lake during the month. Total year to date discharged is 114,115 m^3.

Five weekly effluent samples were collected at ST-8 in September. TSS results did not 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 6. Monitoring results are shown in Table 2.6.1 below. Regular sampling pursuant to MMER is also conducted at this location. There have been no exceedances of MMER criteria.

Table 2.6.1: East Dike Seepage Discharge Results

Parameters	Units	1-Sept-15	8-Sept-15	16-Sept-15	22-Sept-15	28-Sept-15	Average Concentration
Total Suspended Solids	mg/L	5	<1	4	6	2	3.5

2.7 NON CONTACT WATER

Portage Area East diversion ditch (ST-5) results are shown in Table 2.7.1 below and Portage Area West diversion ditch (ST-6) results are shown in Table 2.7.2. 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 6.

Table 2.7.1: Portage Area East Diversion Ditch (ST-5) Results

Parameters	Units	15-Sept-15
Total Suspended Solids	mg/l	8

Table 2.7.2: Portage Area West Diversion Ditch (ST-6) Results

Parameters	Units	15-Sept-15
Total Suspended Solids	mg/l	7

SECTION 3 • SPILL MANAGEMENT

AEM has developed a thorough internal system of tracking spills on-site. Table 3.1 summarizes the AEM spill reports for the month. Nine (9) spills occurred on site and two (2) were reportable to the GN spill hotline. AEM contained, cleaned up and disposed of the spill material adequately. The majority of the clean-up material was taken to the AEM Landfarm. Absorbent pads are disposed of at the on-site incinerator.

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
2015/09/02	Hydraulic Oil	30L	Winter Parking	During cleaning activities, hydraulic oil leaked out.	Contaminated material cleaned up and adequately disposed of in the yellow roll-off bin.	No
2015/09/02	Hydraulic Oil	55L	Winter Parking	During maintenance work on cylinder, oil leaked out.	Contaminated material cleaned up and adequately disposed of in the yellow roll-off bin.	No
2015/09/02	Hydraulic Oil	25L	Winter Parking	During cleaning activities, hydraulic oil leaked out.	Contaminated material cleaned up and adequately disposed of in the yellow roll-off bin.	No
2015/09/04	Waste oil	160L	Oil filtering trailer	While moving the waste oil tote, the forks of a loader hit the outlet valve.	A worker nearby noted that it was leaking and asked the loader operator to lift it on its side to prevent further spilling. Waste oil in the tote that was leaking was pumped into another one. Contaminated material was cleaned up and put in a roll off bin to be sent to the landfarm.	Yes
2015/09/04	Hydraulic Oil	15L	Vault Parking Area	A leak occurred during maintenance activities on a stick cylinder.	Contaminated material cleaned up and adequately disposed of in the yellow roll-off bin.	No
2015/09/05	Diesel	15L	Maintenance Shop outside of Bay 1	Overfilling a piece of equipment	Contaminated material cleaned up and adequately disposed of in the yellow roll-off bin.	No
2015/09/16	Hydraulic Oil	50L	Winter parking	A hydraulic hose burst causing leakage	Contaminated material cleaned up and adequately disposed of in the yellow roll-off bin.	No
2015/09/18	Glycol	900L	Along Arctic Corridor and the Dome warehouse	While moving a pallet a glycol pipe was struck by a loader.	The valve was shut off immediately to prevent further spillage. Contaminated material was cleaned up and adequately disposed of in the yellow roll-off bin.	Yes
2015/09/27	Hydraulic Oil	20L	Winter Parking	When doing maintenance on hydraulic hose, hydraulic oil was spilled on the ground.	Secondary containment was used to contain most of the spill. Contaminated material was cleaned up and adequately disposed of in the yellow roll-off bin.	No