

April 28, 2010

Via Email and Xpresspost

Mr. Richard Dwyer
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Phone: (867) 360-6338
licensingadmin@nunavutwaterboard.org

Dear Mr. Dwyer,

Re: Water License 2AM-MEA0815 March Monitoring Program Summary Report

As required by Water License 2AM-MEA0815 Part I Item 25, please find the March 2010 Monitoring Program Summary Report enclosed.

Should you have any questions regarding this submission, please contact me directly at 819-763-0229 or via email at stephane.robert@agnico-eagle.com.

Regards,



Stéphane Robert
Environment Superintendent

Encl (1)

cc: Lou-Ann Cornacchio, Indian and Northern Affairs Canada
David Abernethy, Indian and Northern Affairs Canada
Andrew Keim, Indian and Northern Affairs Canada
Stephen Hartman, Kivalliq Inuit Association



MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

March 2010

Type A Water License 2AM-MEA0815

TABLE OF CONTENTS

SECTION 1 •	BACKGROUND	1
SECTION 2 •	WATER MANAGEMENT	2
2.1	Water Usage	2
2.2	Sewage Treatment Plant Monitoring	2
2.3	Dewatering of Second Portage Arm	3
2.4	Dike Construction Monitoring	5
SECTION 3 •	SPILL MANAGEMENT SUMMARY	8

LIST OF TABLES

Table 2.1: March 2010 Freshwater Usage	2
Table 2.2: March 2010 STP Effluent Results	2
Table 2.3: March 2010 Dewatering Monitoring – pH and Al	3
Table 2.4: March 2010 Dewatering Monitoring – TSS and turbidity	4
Table 2.5: March 2010 Dike Construction Monitoring Results	6
Table 3.1: Summary of March 2010 AEM Internal Spill Reports	8

LIST OF FIGURES

Figure 1: Dike Construction Monitoring Stations	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 of March 2010. This activity includes: water usage and sewage treatment plant, dewatering and dike construction monitoring.

The dewatering of the northwest arm of Second Portage Lake continued throughout the month. No other water has been pumped, discharged or transferred; all site contact run-off water is contained and directed to the Stormwater Management Pond #1 (Tear Drop Lake).

Additionally, for the NWB to review, Section 3 summarizes the AEM internal spill reporting for the month.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

During March, the daily average number of people on site was 469. The consumption of freshwater for the camp and the batch plant was 2,560 m³ for the month. Water usage for the mill was 228,786 m³ of fresh water and 227,000 m³ of reclaim water. A water balance review will be done at the mill and an action plan put in place to reduce consumption of fresh water.

Table 2.1: March 2010 Freshwater Usage

	Water Usage (m ³)
Camp	2,503
Batch Plant	57
Mill	228,786
Water for dust control	0
Total for the site	231,346

2.2 SEWAGE TREATMENT PLANT MONITORING

Five water samples were taken at the effluent of the sewage treatment plants (STP). The results showed the two systems are working well.

Table 2.2: March 2010 STP Effluent Results

Station: STP-OUT					
Parameter	2010-03-01	2010-03-08	2010-03-15	2010-03-22	2010-03-29
NH3-NH4 (mg/L)	16.7	15.7	16.8	16.6	32.8
BOD-5 (mg/L)	9	5	19	10	36
COD (mg/L)	54	53	77	112	88
TSS (mg/L)	29	21	48	20	20
NO2-NO3 (mg N/L)	42.0	40.8	3.6	44.2	54.1
pH	4.20	4.12	5.86	4.41	6.60
P tot (mg P/L)	16.3	16.5	19.5	15.9	15.3
Fecal Coliform (CFU/100mL)	30	12	200	40	800
Total Coliform (CFU/100mL)	2,000	2,000	1,000	2,000	10,000
Atypical Colony (CFU/100mL)	43,000	115,000	77,000	23,000	350,000

2.3 DEWATERING OF SECOND PORTAGE ARM

Water quality monitoring for the Second Portage Arm dewatering project continued throughout March.

The pH and Aluminum concentrations at the outlet of the TSS treatment plants were as follows:

- pH 24 hour maximum: 7.48 units (Limit is 6-9 units)
- Al 24 hour maximum concentration: 0.521 mg/L (Limit is 1.5 mg/L)

The results demonstrate that the limits of the license were respected. Table 2.3 summarizes the March dewatering monitoring results for pH and Aluminum.

Table 2.3: March 2010 Dewatering Monitoring – pH and Al

Date	DD-WTP-01(Out)		DD-WTP-02(Out)		Both WTP Outlets	
	pH	Total Al	pH	Total Al	pH 24-hour Mean	Al 24-hour Mean
	units	mg/L	units	mg/L	units	mg/L
2010-03-01	6.95	0.416	7.03	0.580	6.99	0.498
2010-03-08	7.03	0.306	7.09	0.836	7.06	0.571
2010-03-15	7.51	0.318	7.44	0.724	7.48	0.521
2010-03-22	7.15	0.388	7.05	0.535	7.10	0.462
2010-03.-29	7.21	0.445	7.17	0.589	7.19	0.517

The turbidity and Total Suspended Solids (TSS) concentrations at the outlet of the TSS treatment plants were as follows:

- NTU 24 hour mean maximum concentration: 18.7 NTU (Maximum Limit is 30 NTU)
- TSS 24 hour mean maximum concentration: 17 mg/L (Maximum Limit is 22.5 mg/L)
- NTU 30 days mean concentration: 6.4 NTU (Maximum Limit is 15 NTU)
- TSS 30 days mean concentration: 8.6 mg/L (Maximum Limit is 15 mg/L)

The results demonstrate that the limits of the license were respected. Table 2.4 summarizes the March dewatering monitoring results for turbidity and TSS.

Table 2.4: March 2010 Dewatering Monitoring – TSS and turbidity

Date	DD-WTP-01(Out)		DD-WTP-02(Out)		Both WTP Outlets			
	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
2010-03-01	7.52	7	14.81	16	11.17	12	5.38	6.87
2010-03-02	3.70	3	4.66	22	4.18	12	5.34	7.11
2010-03-03	2.71	3	3.13	8	2.92	5.5	5.32	7.15
2010-03-04	4.16	3	4.97	5	4.57	4	5.38	6.66
2010-03-05	3.95	4	6.51	9	5.23	6	5.49	6.83
2010-03-06	8.19	8	6.46	*	7.33	8	5.64	6.85
2010-03-07	Not in operation		7.22	5	7.22	5	5.63	6.89
2010-03-08	3.36	8	7.68	20	5.52	14	5.74	7.02
2010-03-09	3.28	2	8.12	15	5.7	9	5.86	7.23
2010-03-10	3.35	5	4.04	7	3.7	6	5.89	7.40
2010-03-11	8.62	8	4.32	22	6.47	15	5.82	7.64
2010-03-12	7.87	7	5.45	11	6.66	9	5.88	7.47
2010-03-13	4.18	7	5.06	12	4.62	10	5.87	7.57
2010-03-14	8.48	13	Not in operation		4.24	13	5.85	7.91
2010-03-15	4.53	7	3.82	18	4.18	13	5.77	8.28
2010-03-16	5.78	2	7.09	6	6.44	4	5.80	8.10
2010-03-17	9.71	4	7.17	9	8.44	7	5.90	8.06
2010-03-18	7.28	8	7.45	8	7.37	8	5.95	8.00
2010-03-19	6.24	6	12.90	27	9.57	17	5.94	8.33
2010-03-20	8.20	6	9.91	6	9.06	6	6.01	8.35
2010-03-21	Not in operation				NA	NA	6.05	8.49
2010-03-22	6.05	6	5.73	9	5.89	8	6.07	8.53
2010-03-23	10.23	7	9.17	8	9.7	8	6.10	8.55
2010-03-24	30.50	*	6.83	*	18.67	NA	6.55	8.76
2010-03-25	4.69	3	5.55	2	5.12	3	6.59	8.49
2010-03-26	6.23	9	7.21	18	6.72	14	6.61	8.70
2010-03-27	6.64	8	4.08	8	5.36	8	6.65	8.67
2010-03-28	5.60	16	4.17	6	4.89	11	6.69	8.92
2010-03-29	3.41	4	4.51	4	3.96	4	6.59	8.73
2010-03-30	Blizzard Conditions				NA	NA	6.59	8.73
2010-03-31	4.96	*	7.89	*	6.43	NA	6.42	8.61

* Data not available

2.4 DIKE CONSTRUCTION MONITORING

The monitoring of the causeway for the Bay Goose dike continued throughout March. From March 14 onward the work alternated between the East and the West side of the dike, dependent on TSS results.

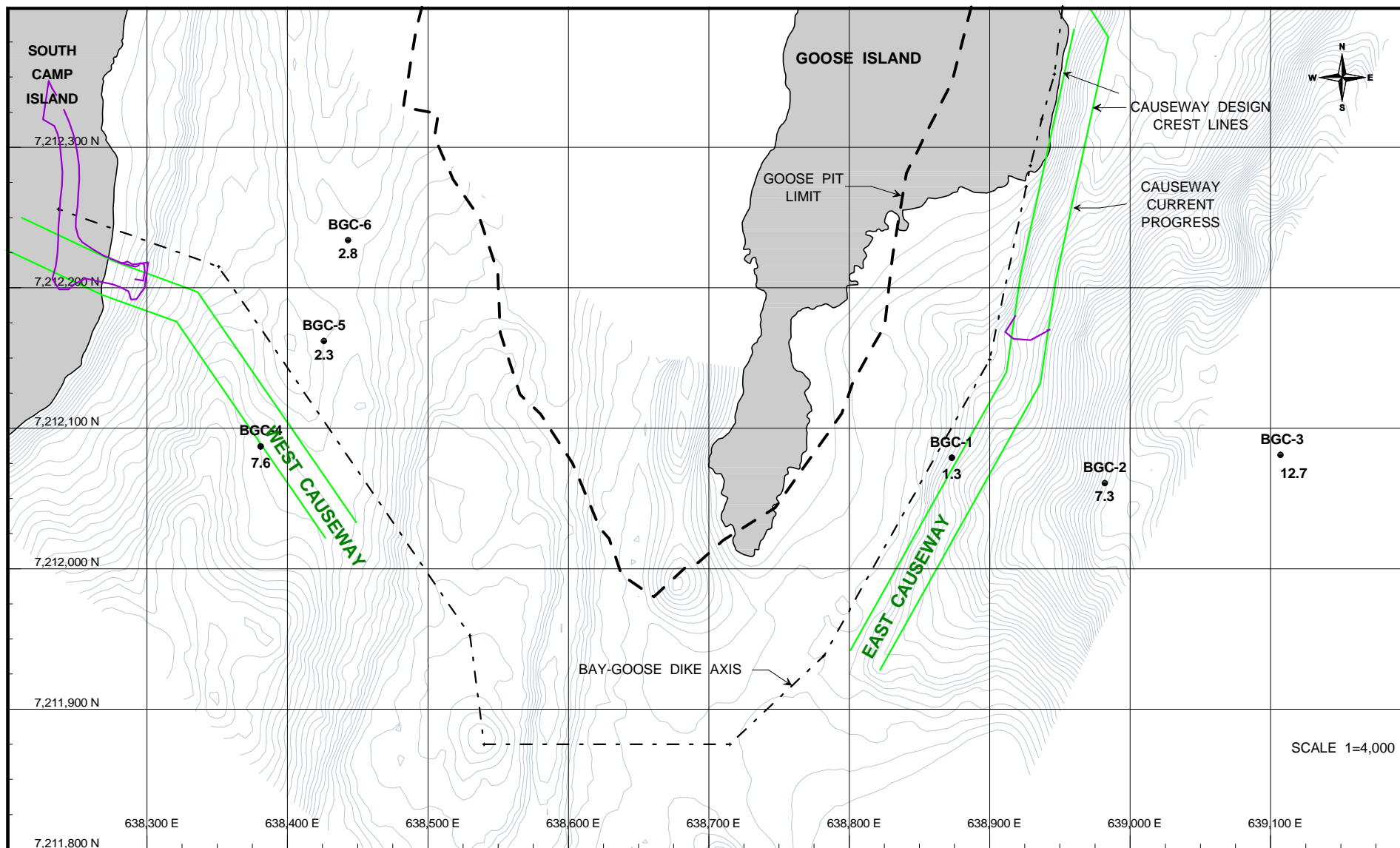
The TSS concentrations for the Bay Goose dike construction were as follows:

- Maximum short-term (24 hour) TSS concentration from the 3 causeway monitoring stations (BGC1, BGC2, BGC3) on the Bay Goose dike East side was 18.4 mg/L (Maximum Limit is 25 mg/L)
- Maximum short-term (24 hour) TSS concentration from the 3 causeway monitoring stations (BGC4, BGC5, BGC6) on the Bay Goose dike West side was 17.9 mg/L (Maximum Limit is 25 mg/L)

The results demonstrate that the TSS limit was respected. The March 2010 dike construction monitoring results are provided in Table 2.5 and the station locations are shown on Figure 1.

Table 2.5: March 2010 Dike Construction Monitoring Results

Date	BGC-1		Coordinates		BGC-2		Coordinates		BGC-3		Coordinates		BGC-4		Coordinates		BGC-5		Coordinates		BGC-6		Coordinates	
	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing	Max NTU of day	Max TSS of day	Easting	Northing
	NTU	mg/L			NTU	mg/L			NTU	mg/L			NTU	mg/L			NTU	mg/L			NTU	mg/L		
2010-03-01	2.4	0.6	638,894	7,212,160	13.2	3.3	638,983	7,212,172	14.1	3.6	639,041	7,212,230												
2010-03-02	2.6	0.6	638,909	7,212,134	21.5	5.5	638,961	7,212,133	9.1	2.3	639,027	7,212,196												
2010-03-03	8.5	2.1	638,977	7,212,095	6.5	1.6	639,052	7,212,104	14.4	3.6	639,090	7,212,165												
2010-03-04	9.5	2.4	638,904	7,212,106	8.9	2.2	638,997	7,212,057	11.3	2.8	639,107	7,212,079												
2010-03-05	3.0	0.7	638,904	7,212,106	9.7	2.4	638,997	7,212,057	7.3	1.8	639,107	7,212,079												
2010-03-06	21.1	5.4	638,904	7,212,106	9.4	2.3	638,997	7,212,057	6.7	1.6	639,107	7,212,079												
2010-03-07	7.8	1.9	638,872	7,212,066	5.0	1.2	638,974	7,212,050	8.3	2.0	639,107	7,212,079												
2010-03-08	9.6	2.4	638,872	7,212,066	4.3	1.0	638,974	7,212,050	9.3	2.3	639,107	7,212,079												
2010-03-09	7.9	1.9	638,872	7,212,066	9.5	2.4	638,974	7,212,050	21.2	5.5	639,107	7,212,079												
2010-03-10	3.6	0.9	638,857	7,212,045	7.5	1.8	638,946	7,211,993	44.0	11.7	639,127	7,212,025												
2010-03-11	4.7	1.1	638,872	7,212,066	4.4	1.1	638,974	7,212,050	23.0	5.9	639,107	7,212,079												
2010-03-12	6.4	1.6	638,872	7,212,066	6.0	1.5	638,974	7,212,050	35.0	9.2	639,107	7,212,079												
2010-03-13	11.6	2.9	638,872	7,212,066	5.5	1.3	638,974	7,212,050	61.3	16.6	639,107	7,212,079												
2010-03-14	6.3	1.5	638,872	7,212,066	23.2	6.0	638,974	7,212,050	67.9	18.4	639,107	7,212,079	2.8	0.7	638,309	7,212,133	20.2	5.2	638,344	7,212,191	2.5	0.6	638,373	7,212,239
2010-03-15	6.2	1.5	638,872	7,212,066	20.0	5.1	638,974	7,212,050	50.1	13.4	639,107	7,212,079	11.6	2.9	638,309	7,212,133	2.3	0.5	638,366	7,212,184	2.9	0.7	638,373	7,212,239
2010-03-16	6.9	1.7	638,872	7,212,066	22.6	5.8	638,974	7,212,050	65.5	17.7	639,107	7,212,079	11.1	2.8	638,353	7,212,136	8.3	2.0	638,364	7,212,190	3.6	0.9	638,356	7,212,242
2010-03-17	4.3	1.0	638,873	7,212,079	12.8	3.2	638,982	7,212,061	38.6	10.2	639,107	7,212,081	30.2	7.9	638,354	7,212,128	17.5	4.5	638,365	7,212,184	3.3	0.8	638,360	7,212,244
2010-03-18	4.3	1.0	638,873	7,212,079	12.8	3.2	638,982	7,212,061	38.6	10.2	639,107	7,212,081	13.4	3.4	638,362	7,212,119	14.3	3.6	638,381	7,212,163	15.6	4.0	638,383	7,212,222
2010-03-19	4.8	1.2	638,873	7,212,079	16.7	4.2	638,982	7,212,061	37.3	9.8	639,107	7,212,081	11.6	2.9	638,362	7,212,119	12.0	3.0	638,381	7,212,163	8.5	2.1	638,390	7,212,208
2010-03-20	11.5	2.9	638,873	7,212,079	14.2	3.6	638,982	7,212,061	44.3	11.8	639,107	7,212,081	9.7	2.4	638,354	7,212,128	9.0	2.2	638,365	7,212,184	6.0	1.5	638,360	7,212,244
2010-03-21	5.6	1.4	638,873	7,212,079	12.0	3.0	638,982	7,212,061	48.8	13.0	639,107	7,212,081	8.3	2.0	638,354	7,212,128	3.2	0.8	638,365	7,212,184	4.5	1.1	638,360	7,212,244
2010-03-22	2.7	0.6	638,873	7,212,079	13.4	3.4	638,982	7,212,061	43.7	11.6	639,107	7,212,081	66.1	17.9	638,354	7,212,128	44.3	11.8	638,365	7,212,184	13.1	3.3	638,360	7,212,244
2010-03-23	6.6	1.6	638,873	7,212,079	13.4	3.4	638,982	7,212,061	55.7	15.0	639,107	7,212,081	9.0	2.2	638,381	7,212,087	9.7	2.4	638,426	7,212,162	8.3	2.0	638,443	7,212,234
2010-03-24	10.9	2.7	638,873	7,212,079	19.2	4.9	638,982	7,212,061	40.2	10.6	639,107	7,212,081	14.2	3.6	638,381	7,212,087	37.7	10.0	638,426	7,212,162	10.2	2.5	638,443	7,212,234
2010-03-25	10.3	2.6	638,873	7,212,079	12.4	3.1	638,982	7,212,061	39.8	10.5	639,107	7,212,081	52.9	14.2	638,381	7,212,087	55.1	14.8	638,426	7,212,162	5.2	1.3	638,443	7,212,234
2010-03-26	19.6	5.0	638,873	7,212,079	23.5	6.1	638,982	7,212,061	30.9	8.1	639,107	7,212,081	17.3	4.4	638,381	7,212,087	21.8	5.6	638,426	7,212,162	26.5	6.9	638,443	7,212,234
2010-03-27	33.4	8.8	638,873	7,212,079	20.5	5.3	638,982	7,212,061	24.5	6.3	639,107	7,212,081	15.1	3.8	638,381	7,212,087	15.7	4.0	638,426	7,212,162	9.1	2.3	638,443	7,212,234
2010-03-28	36.4	9.6	638,873	7,212,079	23.6	6.1	638,982	7,212,061	33.4	8.8	639,107	7,212,081	11.2	2.8	638,381	7,212,087	14.3	3.6	638,426	7,212,162	8.3	2.0	638,443	7,212,234
2010-03-29	24.5	6.3	638,873	7,212,079	31.2	8.2	638,982	7,212,061	53.6	14.4	639,107	7,212,081	13.2	3.3	638,381	7,212,087	8.2	2.0	638,426	7,212,162	9.7	2.4	638,443	7,212,234
2010-03-30	Blizzard		638,873	7,212,079	Blizzard		638,982	7,212,061	Blizzard		639,107	7,212,081	Blizzard		638,381	7,212,087	Blizzard		638,426	7,212,162	Blizzard		638,443	7,212,234
2010-03-31	5.3	1.3	638,873	7,212,079	28.2	7.3	638,982	7,212,061	47.7	12.7	639,107	7,212,081	29.1	7.6	638,381	7,212,087	9.2	2.3	638,426	7,212,162	11.3	2.8	638,443	7,212,234



NOTES:

FIELD READINGS BY AEM

REPORTED TSS IS THE MAXIMUM VALUE ALONG THE PROFILE

LIMIT 24 HOURS : 25MG/L

AGNICO-EAGLE MINES LIMITED - MEADOWBANK DIVISION

BAY-GOOSE DIKE CONSTRUCTION

TSS MONITORING DURING CAUSEWAY CONSTRUCTION

LATEST READINGS DATE : 31-Mar-2010

FIGURE 1

TURBIDITY MONITORING CAUSEWAY.GRF

SECTION 3 • SPILL MANAGEMENT SUMMARY

AEM has developed a system of tracking spills on-site. Table 3.1 summarizes the AEM internal spill reports for March. No spills were reported to the GN spill hotline.

Table 3.1: Summary of March 2010 AEM Internal Spill Reports

Date of Spill	Hazardous Material (Fuel, Oil, etc.)	Quantity	Location	Cause of Spill	Clean-up Action Taken	Reported to Spill Hotline
2010-03-05	Diesel fuel	3 L	North portage pit	Over filled tank	Removed contaminated soil and brought to hazmat area	N
2010-03-11	Oil	8 L	Outside the Dome	Broken hydraulic hose	Removed contaminated soil and brought to hazmat area	N
2010-03-17	Hydraulic oil	2 L	Bay Goose Dike	Broken hydraulic hose	Put down absorbent sheets; removed contaminated snow and brought to snow cells	N
2010-03-18	Transmission oil	0.5 L	Operation parking lot	Unplugged hose to the radiator	Put down absorbent sheets; removed contaminated snow and brought to snow cells	N
2010-03-22	Jet-A-Fuel	less than 50 L	Airport	Automatic vent failed to open and when it did, the pressure built up causing the overflow	Put down absorbent sheets; removed contaminated snow and brought to snow cells	N
2010-03-19	Leaching mud	No estimate provided	Leaching cell	Over flowed	Spill was contained in secondary containment berm; removed contaminated material and brought to hazmat area	N