

November 24, 2010

Via Email

Richard Dwyer
Licensing Administrator
Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0B 1J0
Phone: (867) 360-6338

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

As required by Water license 2AM-MEA0815 Part I Item 25, please find the October 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

cc: Lou-Ann Cornacchio, INAC
David Abernethy, INAC
Bryan Rainer, INAC
Stephen Hartman, KIA



MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

October 2010

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 of October 2010. This activity includes: water usage and sewage treatment plant, dewatering and dike construction monitoring.

Additionally, a summary of the AEM internal spill reporting for the month is included.

SECTION 2 • WATER MANAGEMENT

2.1 WATER USAGE

Freshwater usage for the month totals 88,495 m³ and is summarized in Table 2.1 below. The consumption of fresh water for the mill and dust control was 85,176 m³ and the consumption of reclaim water was 171,929 m³.

Table 2-1: October 2010 Freshwater Usage

	Water usage (m ³)
Camp	3,035
Batch Plant	85
Mill & Dust control	85,176
Emulsion Plant	199
Total for the site	88,495

2.2 SEWAGE TREATMENT PLANT MONITORING

Four 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: October 2010 STP Effluent Results

Parameter	04-Oct-10	13-Oct-10	18-Oct-10	25-Oct-10
NH3-NH4 (mg/L)	19.7	34.9	20.5	27.1
BOD-5 (mg/L)	8	11	4	4
COD (mg/L)	73	107	52	54
TSS (mg/L)	14	27	10	7
NO2-NO3 (mg N/L)	42.7	34.2	46.5	49.5
pH (mg/L)	4.83	7.09	3.96	3.76
P tot (mg P/L)	15.1	15.8	15.4	14.5
Fecal Coliform (UFC/100mL)	12	330	< 10	< 4
Total Coliform (UFC/100mL)	300	2 900	< 100	100
Atypical Colony (UFC/100mL)	600	12 700	< 100	< 100

2.3 DEWATERING OF SECOND PORTAGE ARM

Water quality monitoring for the Second Portage Arm dewatering project continues. Water treatment plant WTP-02 was shut down for the entire month, and WTP-01 was shut down from October 1 to 15, 2010. No TSS exceedences were reported.

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

- pH 24 hour minimum/maximum: 6.75 units (Limit is 6-9 units)
- Al 24 hour maximum concentration: 1.04 mg/L (Limit is 1.5 mg/L)

Table 2.3 summarizes the October dewatering monitoring results for pH and Aluminum.

Table 2-3: October 2010 Dewatering Monitoring – pH and Al

Date	DD-WTP-01		DD-WTP-02		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
2010-10-18	6.75	0.41			6.75	0.41
2010-10-25		1.04				1.04

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: 6.6 NTU (Maximum Limit is 30 NTU)
- TSS 24 hour mean maximum concentration: 10 mg/L (Maximum Limit is 22.5 mg/L)
- NTU 30 days mean concentration: 5.2 NTU (Maximum Limit is 15 NTU)
- TSS 30 days mean concentration: 7 mg/L (Maximum Limit is 15 mg/L)

Table 2.4 summarizes the October dewatering monitoring results for turbidity and TSS.

Table 2-4: October 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
2010-10-01	Not in operation		Not in operation					
2010-10-02	Not in operation		Not in operation					
2010-10-03	Not in operation		Not in operation					
2010-10-04	Not in operation		Not in operation					
2010-10-05	Not in operation		Not in operation					
2010-10-06	Not in operation		Not in operation					
2010-10-07	Not in operation		Not in operation					
2010-10-08	Not in operation		Not in operation					
2010-10-09	Not in operation		Not in operation					
2010-10-10	Not in operation		Not in operation					
2010-10-11	Not in operation		Not in operation					
2010-10-12	Not in operation		Not in operation					
2010-10-13	Not in operation		Not in operation					
2010-10-14	Not in operation		Not in operation					
2010-10-15	Not in operation		Not in operation					
2010-10-16	5.9	5	Not in operation		5.9	5	5.5	10
2010-10-17	3.9	10	Not in operation		3.9	10	5.3	10
2010-10-18	5.8	6	Not in operation		5.8	6	5.2	9
2010-10-19	6.6	4	Not in operation		6.6	4	5.3	9
2010-10-20	5.9	4	Not in operation		5.9	4	5.4	9
2010-10-21	5.4	9	Not in operation		5.4	9	5.3	9
2010-10-22	5.3	7	Not in operation		5.3	7	5.3	9
2010-10-23	6.4	5	Not in operation		6.4	5	5.3	9
2010-10-24	6.1	3	Not in operation		6.1	3	5.3	8
2010-10-25	6.3	2	Not in operation		6.3	2	5.3	8
2010-10-26	3.5	4	Not in operation		3.5	4	5.3	8
2010-10-27	4.8	3	Not in operation		4.8	3	5.3	8
2010-10-28	4.8	5	Not in operation		4.8	5	5.2	8
2010-10-29	5.1	6	Not in operation		5.1	6	5.2	7
2010-10-30	5.5	2	Not in operation		5.5	2	5.2	7
2010-10-31	5.5	3	Not in operation		5.5	3	5.2	7

2.4 DIKE CONSTRUCTION MONITORING

Monitoring of the Bay Goose dike construction was completed on October 5, 2010.

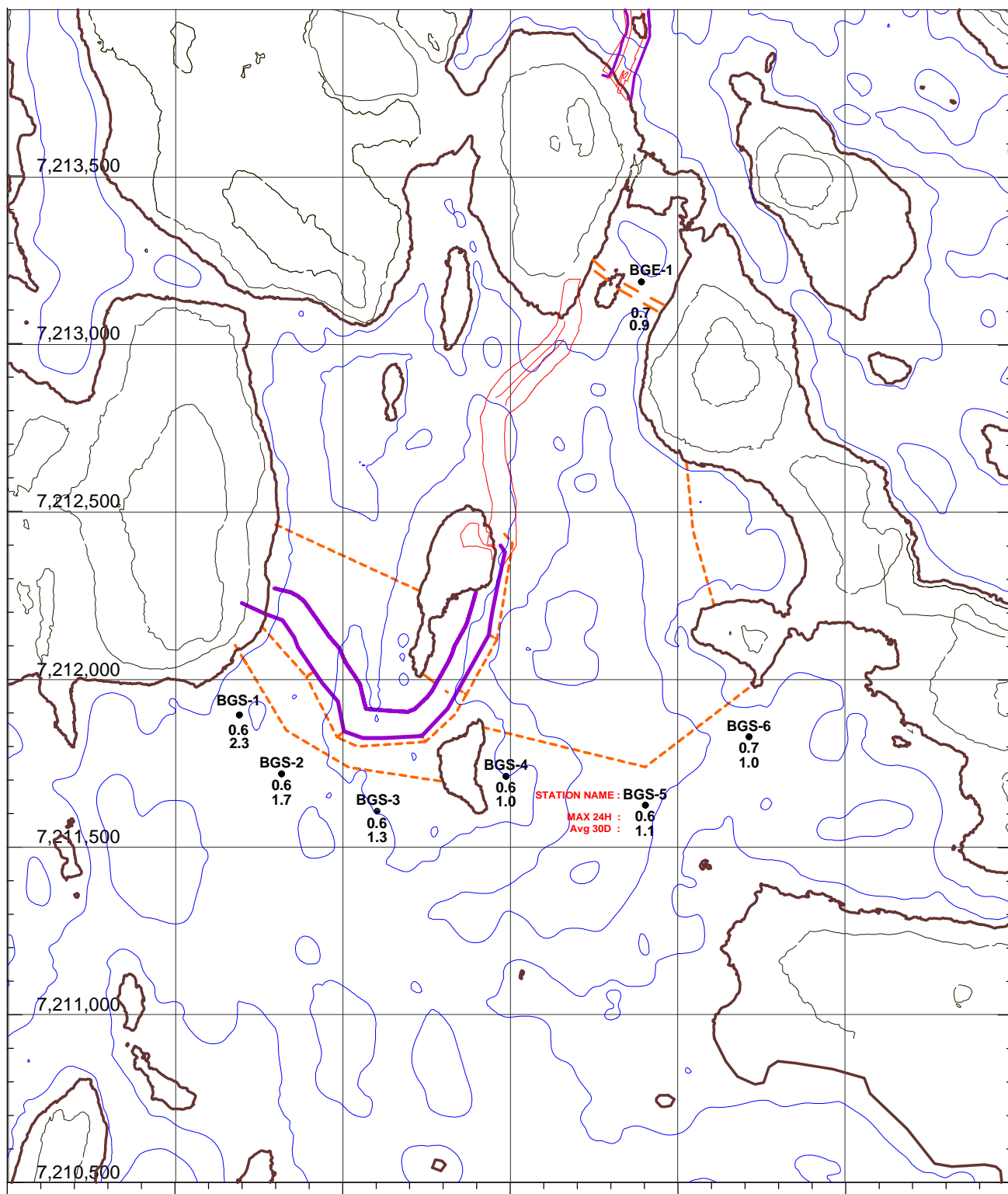
The TSS concentrations for the Bay Goose dike construction were as follows:

- Maximum short-term (24 hour) TSS concentration from monitoring stations BGE-1, BGS-1, BGS-2, BGS-5 and BGS-6 on the Bay Goose dike was 0.9 mg/L (Maximum Limit is 50 mg/L)
- Maximum short-term (24 hour) TSS concentration from monitoring stations BGS-3 and BGS-4 on the Bay Goose dike was 0.8 mg/L (Maximum Limit is 50 mg/L, after September 1 the Maximum Limit is 25 due to the proximity of High Value Habitat)
- Maximum 30 day mean TSS concentration from monitoring stations BGE-1, BGS-1, BGS-2, BGS-5 and BGS-6 on the Bay Goose dike was 2.5 mg/L (Maximum Limit is 15 mg/L)
- Maximum 30 day mean TSS concentration from monitoring stations BGS-3 and BGS-4 on the Bay Goose dike was 1.4 mg/L (Maximum Limit is 15 mg/L, after September 1 the Maximum Limit is 6 due to the proximity of High Value Habitat)

The October 2010 dike construction monitoring results are provided in Table 2.5 and the station locations are shown on Figure 1.

Table 2.5: October 2010 Dike Construction Monitoring Results

Date	BGE-1			Coordinates		BGS-1			Coordinates		BGS-2			Coordinates		BGS-3			Coordinates		BGS-4			Coordinates		BGS-5			Coordinates		BGS-6			Coordinates	
	Max NTU of day NTU	Max TSS of day mg/L	TSS 30 day Mean mg/L	Easting	Northing	Max NTU of day NTU	Max TSS of day mg/L	TSS 30 day Mean mg/L	Easting	Northing	Max NTU of day NTU	Max TSS of day mg/L	TSS 30 day Mean mg/L	Easting	Northing	Max NTU of day NTU	Max TSS of day mg/L	TSS 30 day Mean mg/L	Easting	Northing	Max NTU of day NTU	Max TSS of day mg/L	TSS 30 day Mean mg/L	Easting	Northing	Max NTU of day NTU	Max TSS of day mg/L	TSS 30 day Mean mg/L	Easting	Northing	Max NTU of day NTU	Max TSS of day mg/L	TSS 30 day Mean mg/L	Easting	Northing
2010-10-01	2.9	0.7	1.0	639,391	7,213,184	3.5	0.8	2.5	638,192	7,211,894	3.3	0.8	1.8	638,318	7,211,718	3.1	0.7	1.4	638,603	7,211,607	3.5	0.8	1.1	638,987	7,211,711	3.7	0.9	1.1	639,403	7,211,625	3.0	0.7	1.1	639,712	7,211,828
2010-10-02	3.1	0.7	0.9	639,391	7,213,184	3.3	0.8	2.4	638,192	7,211,894	2.8	0.7	1.8	638,318	7,211,718	2.8	0.7	1.4	638,603	7,211,607	3.1	0.7	1.1	638,987	7,211,711	3.0	0.7	1.1	639,403	7,211,625	3.0	0.7	1.1	639,712	7,211,828
2010-10-03	2.7	0.6	0.9	639,391	7,213,184	3.1	0.7	2.3	638,192	7,211,894	2.8	0.7	1.7	638,318	7,211,718	2.9	0.7	1.4	638,603	7,211,607	3.2	0.8	1.0	638,987	7,211,711	2.8	0.7	1.1	639,403	7,211,625	2.8	0.7	1.0	639,712	7,211,828
2010-10-04	No data - too windy					No data - too windy					No data - too windy					No data - too windy					No data - too windy					No data - too windy					No data - too windy				
2010-10-05	2.9	0.7	0.9	639,391	7,213,184	2.7	0.6	2.1	638,192	7,211,894	2.4	0.6	1.6	638,318	7,211,718	2.5	0.6	1.3	638,603	7,211,607	2.5	0.6	1.0	638,987	7,211,711	2.5	0.6	1.0	639,403	7,211,625	2.8	0.7	1.0	639,712	7,211,828



637,500

638,000

638,500

639,000

639,500

640,000

640,500

NOTES:

FIELD READINGS BY AEM

REPORTED TSS IS THE MAXIMUM VALUE ALONG THE PROFILE

TURBIDITY-BASED ESTIMATES OF TOTAL SUSPENDED SOLIDS
(TSS in mg/L)

LIMIT 24 HOURS : 50 mg/L

LIMIT 30 DAYS Avg : 15 mg/L

AGNICO-EAGLE MINES LIMITED - MEADOWBANK DIVISION

BAY-GOOSE DIKE CONSTRUCTION

TSS MONITORING DURING CONSTRUCTION

DATE : 5-Oct-2010

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 October. All three spills were reported to the GN spill hotline.

Table 3-1: Summary of October 2010 AEM Internal Spill Reports

Date of Spill	Hazardous Material	Quantity	Location	Cause of spill	Clean-up action taken	Reported to Spill HotLine
2010-10-06	Fuel	3 000 L	Km 22	Fuel truck went off the road	See appendix A	Y
2010-10-11	Propylene glycol	1 800 L	Main Camp	One of the propylene glycol lines for the heat system broke in one of the rooms in wing 5. Glycol leaked on the ground underneath the camp.	The contaminated soil was removed and taken to Quarry 22.	Y
2010-10-29	Fuel	200 L	Km 101	Fuel truck went off the road	Environmental staff responded immediately. AEM contained the area with peat moss and absorbents pads. All the fuel in the main tank was recovered. Contaminated soil was taken to Quarry 22.	Y

Appendix A

Spill report

DATE: October 28, 2010

SUBJECT: October 6th Fuel Tanker Accident

By: AEM Environmental department

Background/ Event

Wednesday, October 16 at 4:45 AM, due to slippery condition on the road, a tanker truck hauling fuel from Baker Lake to Meadowbank mine site rolled over off the road (Photo No 1) just after bridge #3 and just before Quarry 3 at KM 22 (N 64 30 019, W 096 07 451, IOL land parcel BL 18). The tanker truck was hauling 40,000L of diesel fuel to site. The vehicle is owned by AEM however the drivers are under contract with Arctic Fuels in Baker Lake. The tank was damaged on a rock and the fuel was leaking on the ground.

Spill occurred approximately 80 meters north of unnamed river on a hillside with a downward slope of 10-15% towards the river.



AEM emergency response team and the environmental staff arrived immediately on-site (7:00 am) to contain the spill. AEM caught the diesel building a berm and with two ponds lined with tarps (photo No 2). One pond to recover the fuel directly where is escaping from the tank and another at 35 meters down

slope from the leak before it can reach the water in the river. Booms were installed in the river, five meters from the shore by prevention (photo No 4). We installed two pumps, one in each pond. The liquid pumped from both ponds was transfer directly in another tanker truck of 40,000 L (photo No 3). With this method, we estimate that 37,000 L of fuel was recovered. Therefore approximately 3,000 L were spill in the environment. We begun to excavate the contaminated soil during the afternoon and 210 tons of material was removed and store in the quarry #6. We observed then we have around 30 to 60 centimetres of overburden and the contamination run directly under the soil to infiltrate the fractured bedrock. A fault caught the majority of the product. The second pond was made to stop the progression of the fuel in that fault. In total 48,000 litres of fuel and water has been pumped during that first day of intervention (photo No 6). The tanker was moved from the accident site around 18:00.

Thursday, October 7, The first pond (used to recover the fuel escaping from the tanker) was empty but we had contaminated water in the second (natural water drainage). We pumped approx 500 litres from the second pond to the white reservoir. To reduce the risk to have the diesel in the river, we made the emphasis to excavate the contaminated soil during that day (photo No 6). The work was difficult because the excavation was directly in the fractured bedrock. We didn't have enough room in the quarry #6 and we needed to use the quarry #5 to store the contaminated soil. This quarry is dry and nearer from the spill site. That will help to make the excavation faster and automatically reduce the risk to provide the contamination in the river. We removed 810 tons of material during that day. The soil was disposed on blue tarps to avoid contaminating the ground of the bottom of the quarry. We left the site at 8h30 PM and the situation was under control, no contamination in the water.

Friday, October 8, AEM environmental department arrived on the spill site a 7h00 AM. We immediately noticed sheen on the surface on the water between the boom and the shore. We realized then the booms saturated by fuel let's a small sheen going in the river and we observed a little bit of sheen under the bridge, caught in the rock and the material in the shallow water. We immediately installed three maritime barriers. The first one at five meters from the shore and two others on each side of the bridge (east and west) (photo No 7). We placed more booms and absorbent pads inside the barriers and under the bridge by prevention to catch any potential contamination going in the water. The excavation started at 7h00 AM recovered 810 tons of contaminated rocks. In the afternoon, we used a canoe to inspect the river trying to find out if the contamination going further. No contamination was found. We applied a boom in a channel located approximately at 200 meters from the bridge for a prevention measure. Two trenches of 5 meters wide has been dig at 7.5 meters to the shore to catch the contamination before it can reach the water. The water from the river entered inside them, reversing the water gradient, a supplementary security to avoid contamination in the river. Fuel (limited amount of free phase product) was immediately observed on the surface of the water inside the trenches. Those trenches will be keeping like observation wells. We did not observed any dead fish in the stream. Also no birds were affected by the spill.

Saturday October 9, on the spill site at 7H00 the ice covered the water surface. We broke the ice close to the shore and under the bridge and we observed a small sheen inside our maritime barriers.

We changed the booms and absorbents who trap the contamination the day before. The excavation continued, 885 tons of contaminated rock was removed.

Sunday October 10, we still needed to break the ice to see if we have contamination in the water. Small sheen was found under the bridge inside our maritime barriers. We changed all the booms and absorbents. The excavation continued, 1200 tons of contaminated rock was removed.

Monday October 11, The excavation area is defined following the contamination external limit (Photo No 8). We cannot go deeper (deepest place is 21 feet). We still have sheen in the water in the bottom of the excavation. 895 tons of rock was excavated.

Tuesday October 12, because the weather, the road was close and nobody can go on the spill site.

Wednesday October 13, sheen was observed in the river along north shore and under bridge and changed all the boom and absorbents inside the maritime barrier. We had the visit of INAC (Henry Kablalik lands inspector), GN (Russel Toolooktook) and KIA (Stephen Hartman, Jeff Tulugak and Simeon Miggunkwak). One test pits was excavated along river edge and directly down gradient of spill site near the abutment of the bridge. No odours in the soils however free phase product accumulated on the surface of the water. More excavation will have to be done between the abutment of the bridge and the first ditch.

Thursday October 14, we began to remove the material in the area near the abutment of the Bridge 1 (Photo No 9). The material not contaminated was put back into the Northeast wall of the large excavation. A ditch was done between the abutment of the bridge and the first ditch. We began to excavate and reach the water, odours of fuel are noted. A small sheen is noted under the bridge, recuperated with booms.

Friday October 15, we continued the excavation of the contaminated soil (75 tons was removed) (Photo No 10). Odours of fuel are still noted. A small sheen was observed under the bridge, recuperated with booms. Visit of the KIA (Simeon Miggunkwak).

Saturday October 16, we finish the excavation to the bedrock and pump 5250 litres of contaminated water at the surface of the water. We continued to backfill the Northeast wall of the large excavation with rock from the quarry 3. No sheen was noted on the river. Small odours of fuel near the excavation.

Sunday October 17, 16,850 liters of water has been pumped in the pond inside the large excavation and 1000 litres of water in the trench near the abutment of the bridge. We block the channel between the North pond and the South pond to avoid the movement between the two ponds. No sheen was noted on the river. No odours of fuel near the excavation.

October 18 and 19. Because the excavation is done and a lot of water has been pumped out of trenches and ponds, AEM stopped the work to analyse the situation, trying to find the appropriate solution to conclude and how to manage the contamination still in the area of the spill.

Wednesday October 20, Visit of the KIA (Simeon Miggunkwak and Stephen Hartman). A decision was made to pump and treat the water presents in the trenches and ponds.

Thursday October 21 to Monday 25, AEM work to build a water treatment. An oil separator installed inside a heated seacan will recover the contamination (photo No 11). To avoid having an effluent, the water needs to be conserving inside the excavation done. The water will be pump in recirculation, passing through the oil separator and returning inside the ponds.

We completed the excavation work on October 23 and 24. We remove the pad we did for the fuel pumping and transfer and the accident area (where the tractor was). 225 tons was recovered.

On Monday we observed that the treatment of the water is slow but efficient. We apply absorbents pads inside the oil separator and in the ponds inside the excavation to accelerate the recovery (photo No12 and No 13).

KIA asked to dig another test pit on the east side of the bridge. This pit will conclude on the limit of contamination. Also, KIA and AEM established 4 sampling station on the river. This sampling was completed October 22.

Some facts:

After the decantation in the tanker truck used to recover the contamination during the first intervention, we are able to evaluate then a total of 37,000 liters of diesel was recovered.

During the first week, around 25 peoples were involved in the clean-up (AEM: 6 Emergency Response members, 1 road supervisor, 2 road workers, 4 environment members BLCS: 2 shovel operators, 5 labors, 6 trucks drivers). During the second week, around 11 peoples were involved in the clean-up (AEM: 1 road supervisor, 1 shovel operator, 4 environment members BLCS: 1 shovel operators, 2 labors, 2 trucks drivers). For the third week, two persons from the environmental department, two labors from BLCS, 1 shovel operator and 2 trucks drivers were involved.

We pumped 34,100 litres of fuel and contaminated water. The water and fuel pumped from the different ponds and ditches were sending in 1,050 litres totes to Meadowbank to be treated.

The fuel with a little bit of water was send to BLCS to be recovered and will be reuse by BLCS.

The quantity of soil removed and send to quarry 5 and 6 is estimated at 5050 t.

Conclusion and recommendations:

Sheen of fuel is still observed in the water presents in the ponds and trench. We dug the ground until the possible limit. After an analysed of the situation with KIA, we concluded that the only solution was to pump and treat the water in close circuit. The plan now is to continue the water treatment and observing the efficiency until the weather will permits. When the treatment will stop an evaluation with the KIA will be done on the next steps.



Photo No 1: Accident of a tanker truck of 40,000L of fuel. The truck rolled over on the road's side.



Photo No 2 : General view of the first intervention. We can see the two ponds.



Photo No 3 : View of the first pond where the fuel leaching from the tanker was pumped directly in another 40,000 L tanker truck.



Photo No 4 : Booms installed in the river to prevent the river contamination.



Photo No 5 : General view at the end of the first day of the intervention. The area of the spill was secured.



Photo No 6 : Excavation during October 7.



Photo No 7 : Maritime barriers were installed under the bridge.



Photo No 8 : Reach the bottom of the excavation .



Photo No 9 : Beginning of the excavation between the bridge abutment and the first ditch.



Photo No 10 : Excavation between the abutment of the bridge and the first ditch.



Photo No 11 : Inside the heated seacan where the oil separator is installed.



Photo No 12: Absorbents pads placed in the oil separator to help the contamination recovery.



Photo No 13 : Spill area on October 25. Water is treating in recirculation.