

October 29, 2010

Via Email and Xpresspost

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

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

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

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MEADOWBANK GOLD PROJECT

Monitoring Program Summary Report

September 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 September 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 $95,228~\text{m}^3$ and is summarized in Table 2.1 below. The consumption of fresh water for the mill and dust control was $91,838~\text{m}^3$ and the consumption of reclaim water was $187,311~\text{m}^3$.

Table 2-1: September 2010 Freshwater Usage

	Water usage (m ³)
Batch Plant (m ³)	0
Water Treatment Plant (m ³)	3,214
Mill and Dust Control (m ³)	91,838
Emulsion plant (m ³)	176
Total for the month (m ³)	95,228
Year to date (m ³)	903,824
Maximum Allowable Limit	
(m³/year)	700,000

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: September 2010 STP Effluent Results

Parameter	06-Sep-10	13-Sep-10	20-Sep-10	27-Sep-10
NH3-NH4 (mg/L)	24.0	23.3	25.4	23.9
BOD-5 (mg/L)	7	8	8	32
COD (mg/L)	73	69	49	98
TSS (mg/L)	16	15	10	7
NO2-NO3 (mg N/L)	48.7	49.7	50.2	39.2
pH (mg/L)	5.10	4.22	4.06	6.56
P tot (mg P/L)	13.2	12.6	14.1	14.5
Fecal Coliform (UFC/100mL)	32	< 4	< 4	152
Total Coliform (UFC/100mL)	200	< 100	200	1,200
Atypical Colony (UFC/100mL)	1,600	200	300	6,000

2.3 DEWATERING OF SECOND PORTAGE ARM

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

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

- pH 24 hour minimum/maximum: 6.37/6.63 units (Limit is 6-9 units)
- Al 24 hour maximum concentration: 1.25 mg/L (Limit is 1.5 mg/L)

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

Table 2-3: September 2010 Dewatering Monitoring - pH and Al

	DD-V	VTP-01	DD-V	VTP-02	Both WTP Outlets				
Date	рН	Total Al	рН	Total Al	pH 24- hour Mean	Al 24- hour Mean			
	units	mg/L	units	mg/L	units	mg/L			
2010-09-06	6.63	1.20			6.63	1.20			
2010-09-08	6.37				6.37				
2010-09-13	6.59	1.10			6.59	1.10			
2010-09-15	6.44				6.44				
2010-09-20	6.64	1.25			6.64	1.25			
2010-09-22	6.55				6.55				

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: 5.9 NTU (Maximum Limit is 30 NTU)
- TSS 24 hour mean maximum concentration: 14 mg/L (Maximum Limit is 22.5 mg/L)
- NTU 30 days mean concentration: 6.0 NTU (Maximum Limit is 15 NTU)
- TSS 30 days mean concentration: 13 mg/L (Maximum Limit is 15 mg/L)

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

Table 2-4: September 2010 Dewatering Monitoring – TSS and Turbidity

	DD-WTF	P-01(Out)	DD-WTF	P-02(Out)		Both WTP	Outlets	
	24-hour		24-hour		NTU 24-	TSS 24-	NTU 30-	TSS 30-
Date	Mean	Lab TSS	Mean	Lab TSS	hour Mean	hour Mean	day Mean	day Mean
	NTU	mg/L	NTU	mg/L	NTU	mg/L	NTU	mg/L
2010-09-01	5.0	9	Not in c	peration	5.0	9	5.3	13
2010-09-02	5.7	12		operation	5.7	12	5.3	13
2010-09-03	5.2	10		operation	5.2	10	5.3	13
2010-09-04	5.1	10	Not in c	pperation	5.1	10	5.3	13
2010-09-05	5.8	7	Not in c	peration	5.8	7	5.4	13
2010-09-06	5.9	11	Not in c	peration	5.9	11	5.5	12
2010-09-07	5.6	13	Not in c	peration	5.6	13	5.5	13
2010-09-08	5.6	8	Not in c	peration	5.6	8	5.6	13
2010-09-09	5.8	8	Not in c	peration	5.8	8	5.7	13
2010-09-10	5.1	8	Not in c	peration	5.1	8	5.7	13
2010-09-11	5.8	8	Not in c	peration	5.8	8	5.8	13
2010-09-12	5.6	7	Not in c	peration	5.6	7	5.8	12
2010-09-13	5.4	8	Not in c	peration	5.4	8	5.9	12
2010-09-14	5.0	7	Not in c	peration	5.0	7	5.9	12
2010-09-15	4.3	10	Not in c	peration	4.3	10	6.0	12
2010-09-16	Not in c	peration	Not in c	peration				
2010-09-17	5.1	8	Not in c	peration	5.1	8	6.0	12
2010-09-18	4.8	14	Not in c	peration	4.8	14	6.0	12
2010-09-19	4.8	8	Not in c	peration	4.8	8	5.9	12
2010-09-20	4.8	9	Not in c	peration	4.8	9	6.0	10
2010-09-21	4.5	11		peration	4.5	11	5.8	10
2010-09-22	4.7	10		peration	4.7	10	5.7	10
2010-09-23	4.6	11		peration	4.6	11	5.4	10
2010-09-24	4.4	12		peration	4.4	12	5.5	10
2010-09-25		peration		peration				
2010-09-26		peration		peration				
2010-09-27		peration		peration				
2010-09-28		peration		peration				
2010-09-29		peration		peration				
2010-09-30	Not in c	peration	Not in c	peration				

2.4 DIKE CONSTRUCTION MONITORING

Construction and monitoring of Bay Goose dike continued throughout September 2010

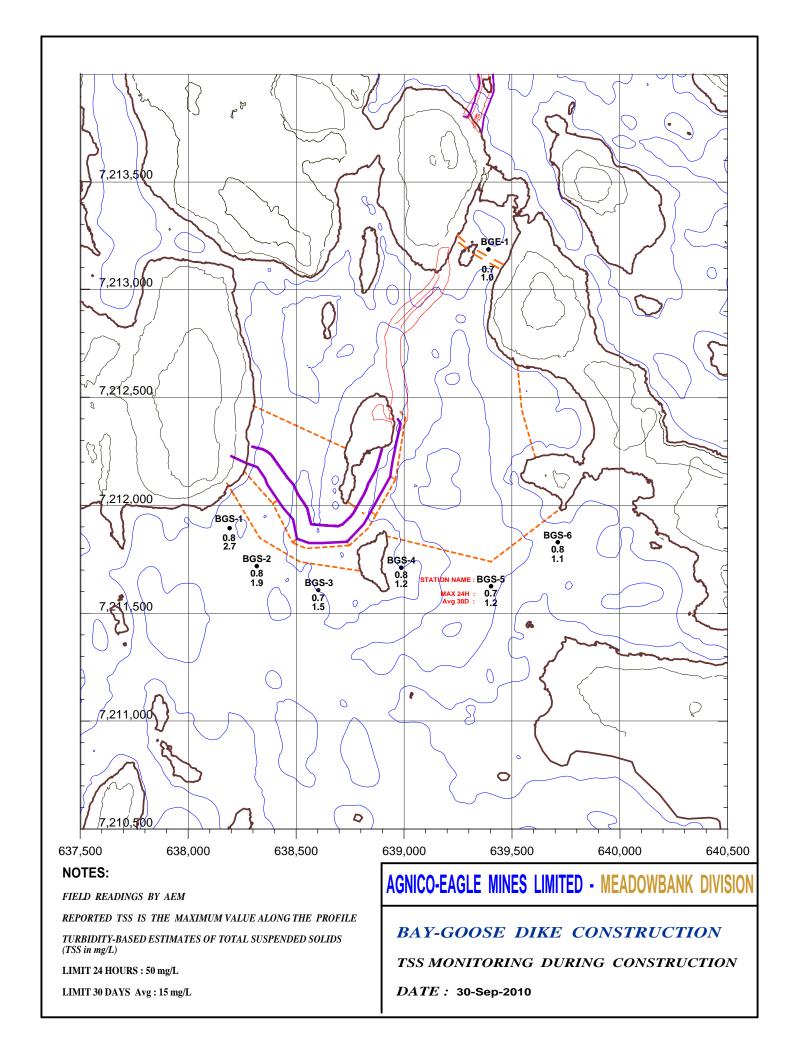
The TSS concentrations for the Bay Goose dike construction were as follows:

- 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 6.7 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 3.4 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 6.0 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 1.8 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 September 2010 dike construction monitoring results are provided in Table 2.5 and the station locations are shown on Figure 1.

Table 2.5: September 2010 Dike Construction Monitoring Results

	I	BGE-1		Coor	dinates		BGS-1		Cool	rdinates		BGS-2		Coor	dinates		BGS-3		Coor	dinates	1	BGS-4		Coor	dinates		BGS-5		Coord	dinates	I	BGS-6		Coordinates
	Max NTU	Max TSS	TSS 30 day			Max NTU	Max TSS	TSS 30 day			Max NTU		TSS 30 day			Max NTU	Max TSS	TSS 30 da	v		Max NTU	Max TSS	TSS 30 da	ıv		Max NTU	Max TSS	TSS 30 day	v		Max NTU	Max TSS	TSS 30 day	,
Date	of day	of day	Mean	Easting	Northing	of day	of day	Mean	Easting	Northing	of day	of day	Mean	Easting	Northing	of day	of day	Mean	Easting	Northing	of day	of day	Mean	⁹ Easting	Northing	of day	of day	Mean	' Easting	Northing	of day	of day	Mean	Easting Northing
	NTU	ma/L	ma/L			NTU	ma/L	ma/L			NTU	ma/L	mg/L			NTU	ma/L	ma/L			NTU	ma/L	ma/L			NTU	ma/L	ma/L			NTU	ma/L	ma/L	
2010-09-01	6.2	1.5	1.5	639,391	7,213,184	22.5	5.8	5.2	638,192	7,211,894	8.0	2.0	1.4	638,318	7,211,718	6.6	1.6	1.3	638,603	7,211,607	6.2	1.5	1.4	638,987	7,211,711	6.6	1.6	2.2	639,403	7,211,625	6.5	1.6	1.3	639,712 7,211,828
2010-09-02	5.9	1.4	1.5	639,391	7,213,184	10.5	2.6	5.2	638,192	7,211,894	9.4	2.3	1.5	638,318	7,211,718	9.9	2.5	1.3	638,603	7,211,607	6.4	1.6	1.4	638,987	7,211,711	6.3	1.5	2.2	639,403	7,211,625	6.3	1.5	1.4	639,712 7,211,828
2010-09-03	5.7	1.4	1.6	639,391	7,213,184	18.9	4.8	5.4	638,192	7,211,894	7.9	1.9	1.5	638,318	7,211,718	5.5	1.3	1.4	638,603	7,211,607	6.3	1.5	1.5	638,987	7,211,711	6.3	1.5	2.3	639,403	7,211,625	6.1	1.5	1.4	639,712 7,211,828
2010-09-04	5.1	1.2	1.6	639,391	7,213,184	15.3	3.9	5.5	638,192	7,211,894	7.0	1.7	1.6	638,318	7,211,718	6.8	1.7	1.4	638,603	7,211,607	5.7	1.4	1.5	638,987	7,211,711	5.9	1.4	2.3	639,403	7,211,625	5.5	1.3	1.5	639,712 7,211,828
2010-09-05	5.0	1.2	1.7	639,391	7,213,184	25.7	6.7	5.7	638,192	7,211,894	9.9	2.5	1.7	638,318	7,211,718	6.3	1.5	1.5	638,603	7,211,607	5.0	1.2	1.5	638,987	7,211,711	5.7	1.4	2.2	639,403	7,211,625	5.1	1.2	1.5	639,712 7,211,828
2010-09-06	4.5	1.1	1.7	639,391	7,213,184	19.0	4.9	5.8	638,192	7,211,894	14.2	3.6	1.8	638,318	7,211,718	7.1	1.7	1.5	638,603	7,211,607	5.3	1.3	1.6	638,987	7,211,711	5.1	1.2	2.1	639,403	7,211,625	5.2	1.3	1.5	639,712 7,211,828
2010-09-07	4.7	1.1	1.7	639,391	7,213,184	15.4	3.9	5.9	638,192	7,211,894	15.5	3.9	1.9	638,318	7,211,718	10.5	2.6	1.6	638,603	7,211,607	5.0	1.2	1.6	638,987	7,211,711	5.1	1.2	2.0	639,403	7,211,625	4.6	1.1	1.6	639,712 7,211,828
2010-09-08	4.6	1.1	1.6	639,391	7,213,184	14.2	3.6	6.0	638,192	7,211,894	13.2	3.3	2.0	638,318	7,211,718	13.6	3.4	1.7	638,603	7,211,607	5.0	1.2	1.6	638,987	7,211,711	5.9	1.4	1.9	639,403	7,211,625	5.2	1.3	1.5	639,712 7,211,828
2010-09-09	4.2	1.0	1.6	639,391	7,213,184	11.9	3.0	5.9	638,192	7,211,894	11.2	2.8	2.1	638,318	7,211,718	5.0	1.2	1.7	638,603	7,211,607	5.1	1.2	1.6	638,987	7,211,711	4.7	1.1	1.9	639,403	7,211,625	5.0	1.2	1.5	639,712 7,211,828
2010-09-10	3.7	0.9	1.6	639,391	7,213,184	10.0	2.5	5.5	638,192	7,211,894	9.8	2.4	2.1	638,318	7,211,718	6.6	1.6	1.8	638,603	7,211,607	4.6	1.1	1.6	638,987	7,211,711	4.5	1.1	1.8	639,403	7,211,625	4.4	1.1	1.5	639,712 7,211,828
2010-09-11	3.5	0.8	1.6	639,391	7,213,184	10.0	2.5	5.2	638,192	7,211,894	6.7	1.6	2.2	638,318	7,211,718	4.2	1.0	1.8	638,603	7,211,607	4.3	1.0	1.6	638,987	7,211,711	4.3	1.0	1.7	639,403	7,211,625	4.2	1.0	1.5	639,712 7,211,828
2010-09-12	3.4	0.8	1.5	639,391	7,213,184	7.4	1.8	4.8	638,192	7,211,894	6.7	1.6	2.2	638,318	7,211,718	8.7	2.1	1.8	638,603	7,211,607	4.1	1.0	1.6	638,987	7,211,711	4.5	1.1	1.6	639,403	.,,	4.5	1.1	1.5	639,712 7,211,828
2010-09-13	3.7	0.9	1.5	639,391	7,213,184	6.4	1.6	4.3	638,192	7,211,894	6.2	1.5	2.2	638,318	7,211,718	4.5	1.1	1.8	638,603	7,211,607	4.3	1.0	1.6	638,987	7,211,711	5.8	1.4	1.6	639,403	7,211,625	4.6	1.1	1.5	639,712 7,211,828
2010-09-14	3.4	0.8	1.5	639,391	7,213,184	9.7	2.4	3.7	638,192	7,211,894	5.6	1.4	2.2	638,318	7,211,718	4.7	1.1	1.8	638,603	7,211,607	4.8	1.2	1.6	638,987	7,211,711	4.6	1.1	1.6	639,403	7,211,625	4.3	1.0	1.5	639,712 7,211,828
2010-09-15	3.5	0.8	1.5	639,391	7,213,184	11.9	3.0	3.6	638,192	7,211,894	7.9	1.9	2.3	638,318	7,211,718	4.5	1.1	1.8	638,603	7,211,607	4.2	1.0	1.6	638,987	7,211,711	4.4	1.1	1.6	639,403	7,211,625	4.0	1.0	1.5	639,712 7,211,828
2010-09-16	2.9	0.7	1.5	639,391	7,213,184	10.9	2.7	3.6	638,192	7,211,894	11.7	2.9	2.3	638,318	7,211,718	7.0	1.7	1.8	638,603	7,211,607	3.9	0.9	1.6	638,987	7,211,711	4.2	1.0	1.6	639,403	.,,	3.7	0.9	1.5	639,712 7,211,828
2010-09-17	3.2	0.8	1.4	639,391	7,213,184	8.8	2.2	3.6	638,192	7,211,894	8.7	2.1	2.3	638,318	7,211,718	8.6	2.1	1.8	638,603	7,211,607	3.6	0.9	1.6	638,987	7,211,711	4.5	1.1	1.6	639,403	7,211,625	3.7	0.9	1.5	639,712 7,211,828
2010-09-18		No (data - too w	indy			N	lo data - too v	windy			No	o data - too v	vindy			No o	data - too w				No	o data - too v				No	data - too w				No	data - too w	
2010-09-19	3.3	0.8	1.4	639,391	7,213,184	5.4	1.3	3.5	638,192	7,211,894	5.3	1.3	2.3	638,318	7,211,718	5.4	1.3	1.8	638,603	7,211,607	3.4	0.8	1.5	638,987	7,211,711	4.1	1.0	1.5	,	7,211,625	3.7	0.9	1.4	639,712 7,211,828
2010-09-20	3.5	0.8	1.4	639,391	7,213,184	4.8	1.2	3.5	638,192	7,211,894	4.8	1.2	2.3	638,318	7,211,718	3.6	0.9	1.8	638,603	7,211,607	4.0	1.0	1.5	638,987	7,211,711	4.1	1.0	1.5	639,403	7,211,625	3.9	0.9	1.4	639,712 7,211,828
2010-09-21	3.6	0.9	1.3	639,391	7,213,184	4.6	1.1	3.4	638,192	7,211,894	4.7	1.1	2.3	638,318	7,211,718	4.7	1.1	1.8	638,603	7,211,607	4.0	1.0	1.4	638,987	7,211,711	4.0	1.0	1.5	639,403		4.0	1.0	1.4	639,712 7,211,828
2010-09-22	3.8	0.9	1.2	639,391	7,213,184	4.7	1.1	3.3	638,192	7,211,894	4.5	1.1	2.2	638,318	7,211,718	4.5	1.1	1.7	638,603	7,211,607	3.9	0.9	1.4	638,987	7,211,711	3.9	0.9	1.4	639,403	7,211,625	4.0	1.0	1.3	639,712 7,211,828
2010-09-23	3.5	0.8	1.2	639,391	7,213,184	4.2	1.0	3.2	638,192	7,211,894	3.8	0.9	2.2	638,318	7,211,718	3.6	0.9	1.7	638,603	7,211,607	3.7	0.9	1.3	638,987	7,211,711	3.9	0.9	1.4	639,403	7,211,625	3.8	0.9	1.3	639,712 7,211,828
2010-09-24	3.4	0.8	1.2	639,391	7,213,184	3.9	0.9	3.0	638,192	7,211,894	3.8	0.9	2.1	638,318	7,211,718	3.5	0.8	1.7	638,603	7,211,607	3.7	0.9	1.3	638,987	7,211,711	3.9	0.9	1.3	639,403	7,211,625	3.6	0.9	1.3	639,712 7,211,828
2010-09-25	3.0	0.7	1.1	639,391	7,213,184	3.6	0.9	3.0	638,192	7,211,894	3.6	0.9	2.0	638,318	7,211,718	3.3	0.8	1.6	638,603	7,211,607	3.6	0.9	1.3	638,987	7,211,711	3.5	0.8	1.3	639,403	7,211,625	3.4	0.8	1.2	639,712 7,211,828
2010-09-26		No	data - too w		7010101		N	lo data - too v		7044004			data - too v		7044740		No o	data - too v		7044007		No	data - too v		7011711		No	data - too w		7044005		No	data - too w	
2010-09-27	3.3	0.8	1.1	639,391	7,213,184	3.3	0.8	2.9	638,192	7,211,894	3.3	0.8	2.0	638,318	7,211,718	3.2	0.8	1.6	638,603	7,211,607	3.5	0.8	1.2	638,987	7,211,711	3.6	0.9	1.3		7,211,625	3.7	0.9	1.2	639,712 7,211,828
2010-09-28		No e	data - too w	- /	7010101		N	lo data - too v		7044004		NO.	data - too v		7044740		No o	data - too v	- /	7044007		NO	data - too	-,	7011711		No	data - too w	- /	7044005		No	data - too w	
2010-09-29	2.8	0.7	1.0	639,391	7,213,184	2.9	0.7	2.8	638,192	7,211,894	3.3	0.8	1.9	638,318	7,211,718	3.0	0.7	1.6	638,603	. ,= ,	3.8	0.9	1.2	000,001	7,211,711	3.5	0.8	1.2		7,211,625	3.2	0.8	1.2	639,712 7,211,828
2010-09-30	3.0	0.7	1.0	639,391	7,213,184	3.3	0.8	2.7	638,192	7,211,894	3.3	8.0	1.9	638,318	7,211,718	3.0	0.7	1.5	638,603	7,211,607	3.2	0.8	1.1	638,987	7,211,711	3.1	0.7	1.2	639,403	7,211,625	3.2	0.8	1.1	639,712 7,211,828



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 September. No spills were reported to the GN spill hotline.

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

Date of Spill	Hazardous Material	Quantity	Location	Cause of spill	Clean-up action taken	Reported to Spill HotLine
Since August 3, 2010	Fuel	5 drops/min	Emulsion plant	Broken gas line	The gas line was fixed; contaminated soil was taken to Quarry 22	N
2010-09- 03	Oil	~ 5 to 10 L	North pit Crusher	Human Error	Contaminated soil was taken to Quarry 22	N
2010-09- 03	Fuel	~ 5 to 10 L	Bay Goose Island	Human Error	Contaminated soil was taken to Quarry 22	N
2010-09- 03	Oil & Grease & Fuel	~ 1 to 2 L	Emulsion plant	Equipment leak	Contaminated soil was taken to Quarry 22	N
Unknown; Unreported spill	Grease	~ 1 to 2 L	Fresh water barge parking lot	Equipment maintenance	Contaminated soil was taken to Quarry 22	N
Unknown; Unreported spill	Grease & Fuel	~ 5 to 10 L	Quarry 23	Equipment maintenance	Contaminated soil was taken to Quarry 22	N
Unknown; Unreported spill	Fuel & Oil	< 15L	New truck shop parking lot	Machinery leak	Contaminated soil was taken to Quarry 22	N
Unknown; Unreported spill	Fuel & Oil & Radiator fluid	< 15 L	Old construction parking lot	Leaking pick- up(s)	Contaminated soil was taken to Quarry 22	N
2010-09- 05	Hydraulic oil	~ 20 to 30 L	In front of the cold storage	Equipment maintenance	Contaminated soil was taken to Quarry 22	N
2010-09- 10	Oil	20 L	Lay down operation 7	Fork lift damaged tote	Absorbent pads used to clean area	N

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2010-09- 14	Emulsifier N59-45	< 40L	Lay down transit	A small hole in the bottom of a drum caused a leak inside the seacan	Emptied the seacan and used absorbent pads to clean up spill	N
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