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July 11, 2007

Mr. Glenn May, C.P.G.
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203

Subject: Semiannual Monitoring Report, April 2007 - Scajaquada Creek Site (#915141B), Buffalo, NY

Dear Mr. May,

As required by the Operation and Maintenance (O&M) Plan, dated February 8, 2005, this report provides a semiannual summary of operations, maintenance, and field observations made by ENSR Corporation (dba The RETEC Group, Inc. [RETEC]) and National Fuel Gas (NFG) at the Scajaquada Creek site. The period discussed herein is from October 2006 through April 2007.

Constructed Sediment Cap Observations

During the field observations, the creek water was typically of low clarity, though no erosion of the sediment cap was evident. The armored expressway runoff channels were also all intact.

As noted in the semiannual report dated November 10, 2006, several square feet of white geofabric had become exposed at the toe of the north bank near the North DNAPL System and Pier 23. NFG and their contractor subsequently re-armored the exposed fabric with stone and no further repairs appear necessary.

During this reporting period, NYSDOT contractors continued to perform repairs to the overhead Scajaquada Expressway.

Previous Period's DNAPL Systems Operations

DNAPL recovery continued uninterrupted until March 2, 2007, at which time the South System tank became full and the system was shut down. The North System continued to operate uninterrupted during the reporting period. Both tanks are scheduled to be emptied as soon as access can be arranged with Sherwin Williams, owner of the property between the North System and Niagara Street.

The volumes of DNAPL recovered this period (71 gallons in the South System and 28 gallons in the North System) are visual estimates only because the oil/water interface probe readings taken during the site visit were inconclusive. The volumes of DNAPL recovered to date appear to be approximately 1254 gallons by the South System and 340 gallons by the North System. System monitoring logs are attached.

Conclusions

The constructed sediment cap appears intact. Repairs have been completed to the previously reported exposures of cap fabric and degradation of runoff channels.

The DNAPL recovery program continues, though the South System tank is currently full. Both tanks will be emptied as soon as possible.

Please call me at (607) 277-5716 if you have any questions or comments.

Sincerely yours,

Mark Hofferbert, P.E.
Project Engineer

Attachments: South DNAPL System Monitoring Log
North DNAPL System Monitoring Log

cc: B. Sadowski, K. Roblee – NYSDEC, Buffalo
C. Dowd – NYSDEC, Albany
P. McCarthy, Esq. – NYSOAG Environmental Crimes Unit
G. Litwin – NYSDOH Bureau of Environmental Exposure Investigation
J. Clark, T. Alexander – NFG
K. Hogan – PLHB&B
J. Finn – RETEC
File: NFGD1 02111-750

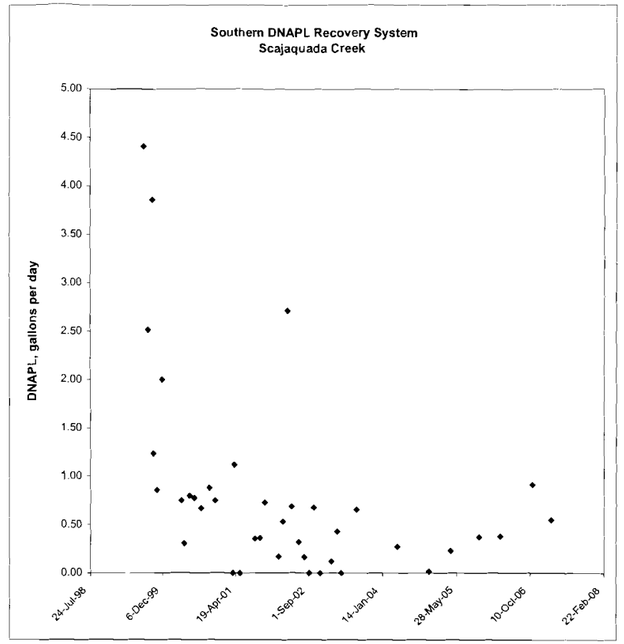
Scajaquada Creek DNAPL System Monitoring Log

National Fuel Gas
The RETEC Group
NFGD 1-02111-750

SOUTHERN SYSTEM

Date	Initials	Field Measurements (by OWI probe)				Calculations (total tank contents) *				Calculations (this period recovery)					Operator's Notes	Transporter	Disposal Facility
		Manhole rim to top of LNAPL (ft)	Manhole rim to top of Water (ft) (estimated)	Manhole rim to top of DNAPL (ft)	Manhole rim to bottom of Tank (ft)	LNAPL (gal)	Water (gal)	DNAPL (gal)	Total (gal)	Water Increase (gal)	NAPL Increase (gal)	% NAPL	NAPL (gpd)	Total Flow (gpd)			
24-Jun-99	mrh	9.05	9.05	9.05	9.05	0	0	0	0	0	0	0%		0	90% construction complete, begin initial testing	---	---
29-Jun-99	mrh/day	6.80	6.80	9.05	9.05	0	695	0	695	695	0	0%		139	Complete initial system test, PW2003 has silt damage	---	---
23-Jul-99	mrh/day	6.80	6.80	9.05	9.05	0	695	0	695	0	0	0%		0	Recommence shakedown with peristaltic pump	---	---
30-Jul-99	day	6.34	6.34	8.95	9.05	0	806	31	837	111	31	22%	4.41	20	Shakedown, flow adjustment	---	---
26-Aug-99	jhe	5.90	5.90	8.73	9.05	0	874	99	973	68	68	50%	2.52	5	Routine system check, slow drip from tank bung noted (0.5 gpd?)	---	---
16-Sep-99	mrh/bdc	5.79	5.80	8.75	9.05	3	911	93	1007	37	-3	---		2	Significant (2 gpd?) DNAPL loss through bung drip, PW2003 reinstalled	---	---
28-Sep-99	mrh/cc	3.30	3.32	8.61	9.05	6	1633	136	1775	723	46	6%	3.86	64	Tank emptied (was full, pump off), bung replaced,	IWR / BFC	Research Oil
28-Sep-99	mrh/cc	9.05	9.05	9.05	9.05	0	0	0	0	0	0	0%		0	vault cleaned, flow setting reduced to 4.5		
3-Oct-99	mrh	8.75	8.75	9.03	9.05	0	86	6	93	86	6	7%	1.24	19	Measurements are visual estimates only, flow setting reduced to 3.5	---	---
11-Oct-99	cc	8.75	8.75	9.03	9.05	0	86	6	93	0	0	0%		0	No flow observed, flow setting increased to 5.0	---	---
29-Oct-99	cc	6.81	6.81	8.98	9.05	0	670	22	692	584	15	3%	0.86	33	Flow setting decreased to 4.0	---	---
2-Dec-99	mrh/day	6.09	6.10	8.77	9.05	3	824	86	914	154	68	31%	2.00	7	Flow setting increased to 4.7 (24 gpd), timer installed/set for 1pm to 2pm operation	---	---
16-Dec-99	cc	---	---	---	---	---	---	---	---	---	---	---		---	Pump running but no flow, Timer reset for 3 hr per day operation	---	---
9-Mar-00	mrh/day	6.09	6.10	8.89	9.05	3	861	49	914	37	-37	---		0	PW2000 running but no flow, Peristaltic installed (2 hr/day), DNAPL thickened over time	---	---
11-Apr-00	mrh/day	4.71	4.73	8.82	9.05	6	1263	71	1340	401	25	6%	0.75	13	New peristaltic purchased/installed. Flow setting #7 (for 2 hr/day).	---	---
1-May-00	mrh/dms	4.62	4.64	8.80	9.05	6	1284	77	1368	22	6	22%	0.31	1	No flow (tubing collapsed). Repaired.	---	---
4-May-00	day/jc	4.62	4.64	8.80	9.05	6	1284	77	1368	0	0	0%		0	No flow (tubing leak). Tank emptied. System turned off.	IWR / BFC	Puretech Systems
8-May-00	mrh/jtf	9.05	9.05	9.05	9.05	0	0	0	0	0	0	0%		0	Original tubing replaced with silicon. System restarted at flow setting #3 (for 2 hr/day).		
8-Jun-00	mrh/day	8.55	8.56	8.98	9.05	3	130	22	154	130	25	16%	0.80	5	Backfill settled around vault. Total depth shallow; measurements estimated. Tubing adjusted.	---	---
10-Jul-00	mrh/dms	8.10	8.11	8.90	9.05	3	244	46	293	114	25	18%	0.77	4	Tubing was worn; adjusted.	---	---
25-Aug-00	day	7.30	7.31	8.80	9.05	3	460	77	540	216	31	12%	0.67	5	Tubing adjusted.	---	---
20-Oct-00	mrh	6.25	6.26	8.64	9.05	3	735	127	865	275	49	15%	0.88	6	Tubing worn; adjusted.	---	---
30-Nov-00	mrh	5.75	5.77	8.55	9.05	6	858	154	1019	124	31	20%	0.75	4	Tubing worn; adjusted. Flow rate setting reduced from 3.0 to 1.5; timer not changed.	---	---
18-Jan-01	mrh	5.75	5.77	8.55	9.05	6	858	154	1019	0	0	---		0	Pump starts rough and sounds bad. Pump removed and sent in for repairs.	---	---
7-Feb-01	mrh/hs	5.75	5.77	8.55	9.05	6	858	154	1019	0	0	0%		0	Temporary FloJet pump installed but insufficient NPSH due to low creek elevation.	---	---
30-Mar-01	mrh	5.75	5.77	8.55	9.05	6	858	154	1019	0	0	0%		0	Peristaltic (geopump) installed, full speed, 600 rpm, system OK. NAPL is hi viscocity/settled.	---	---
10-Apr-01	mrh	5.70	5.72	8.51	9.05	6	861	167	1034	3	12	80%	1.12	1.4	3/16" id tubing replaced with 3/8" id tubing. Float switch replaced (plus relay).	---	---
18-May-01	dms/jc	5.65	5.68	8.52	9.05	9	877	164	1050	15	0	0%	0.00	0.4	Tubing worn and soft; adjusted.	---	---
30-Aug-01	mrh/hs	5.53	5.55	8.39	9.05	6	877	204	1087	0	37	100%	0.36	0.4	NAPL appears to be accumulated in well. Timer set to 3 hrs/day. Original peristaltic re-installed.	---	---
3-Oct-01	hs/jc	5.46	5.48	8.35	9.05	6	886	216	1108	9	12	57%	0.36	0.6	NAPL may still be accumulated in well. Timer increased to 4 hrs/day.	---	---
6-Nov-01	hs/jc	5.30	5.32	8.27	9.05	6	911	241	1158	25	25	50%	0.73	1.5	Additional NAPL purged from well after readings taken. Timer decreased to 3 hrs/day.	---	---
7-Feb-02	hs/jc	3.89	3.91	8.22	9.05	6	1331	256	1593	420	15	4%	0.17	4.7	Adjusted peristaltic tubing.	---	---
8-Mar-02	hs/jc	3.81	3.83	8.17	9.05	6	1340	272	1618	9	15	62%	0.53	0.9	Adjusted peristaltic tubing.	---	---
10-Apr-02	mrh	3.43	3.45	7.88	9.05	6	1368	361	1735	28	90	76%	2.71	3.6	Adjusted tubing. Installed piston pump for one day test (then removed). Timer increased to 4 hrs.	---	---
7-May-02	hs/jc	3.15	3.17	7.82	9.05	6	1436	380	1822	68	19	21%	0.69	3.2	Tank full.	Frank's Vacuum	Chemtron
7-May-02		9.05	9.05	9.05	9.05	0	0	0	0	---	---	---		---	Tank pumped out.		
25-Jun-02	cd	6.00	6.02	9.02	9.05	6	926	9	942	926	15	2%	0.32	19.2	Depth's estimated. Pump set at #4, 3 hrs/day	---	---
2-Aug-02	mrh/jc	3.15	3.17	9.00	9.05	6	1800	15	1822	874	6	1%	0.16	23.2	Tank full, mostly water.	---	---
6-Sep-02	jc	3.15	3.17	9.00	9.05	6	1800	15	1822	0	0	0%		0.0	Tank Emptied.	Frank's Vacuum	Clean Harbors, MD
6-Sep-02		9.05	9.05	9.05	9.05	0	0	0	0	---	---	---		---			
8-Oct-02	mrh/jc	8.98	8.98	8.98	9.05	0	0	22	22	0	22	100%	0.68	0.7	Pump removed for repair	---	---
18-Nov-02	cd	8.98	8.98	8.98	9.05	0	0	22	22	0	0	0%		0.0	Pump reinstalled	---	---
4-Feb-03	mrh/jc	4.32	4.32	8.95	9.05	0	1430	31	1460	1430	9	1%	0.12	18.4	Tank again full of mostly water (timer was left on manual?). Tank emptied.	Frank's Vacuum	Clean Harbors, MD
4-Feb-03		9.05	9.05	9.05	9.05	0	0	0	0	---	---	---		---			
12-Mar-03	jc	9.00	9.00	9.00	9.05	0	0	15	15	0	15	100%	0.43	0.4	Pump running fast, so removed for evaluation/repair.	---	---
10-Apr-03	mrh/jc	9.00	9.00	9.00	9.05	0	0	15	15	0	0	0%		0.0	Pump reinstalled: runs fast/variable with no load, runs OK with flow load. Timer set to 30 min/day, speed 8.	---	---
23-Jul-03	mrh/jc	8.78	8.78	8.78	9.05	0	0	83	83	0	68	100%	0.65	0.7	Additional system checks/adjustments made by J Clark on 5/5, 5/20, 6/12, and 6/24.	---	---
23-Apr-04	mrh	8.05	8.06	8.55	9.05	3	151	154	309	151	74	33%	0.27	0.8	Additional system checks/adjustments made by NFG on 8/31, 8/06, 9/05, 9/08, 9/11, 9/17, 9/25, 10/30, 11/18.	---	---
24-Nov-04	jl,jc	7.31	7.32	8.54	9.05	3	377	157	537	225	3	1%	0.01	1.1	O/W Interface probe not acting precisely, actual DNAPL volume probably greater.	---	---
19-Apr-05	mh,jc,jl,sh	7.19	7.20	8.43	9.05	3	380	191	574	3	34	92%	0.23	0.3	Additional system checks/adjustments made by J Clark on 11/24, 1/20/2005, 3/7, 3/11, 4/12, 4/18.	---	---
27-Oct-05	mrh, jc	6.96	6.97	8.20	9.05	3	380	262	645	0	71	100%	0.37	0.4	New OWI probe, but readings inconsistent with previous readings. System checks by NFG 5/11, 6/24, 7/28, 8/25, 10/06.	---	---
22-Mar-06	mrh, jc	6.78	6.79	8.02	9.05	3	380	318	701	0	56	100%	0.38	0.4	Additional system checks by NFG 10/26/05, 12/14/05, 1/6/06, 2/24/06.	---	---
24-Oct-06	mrh, jc	4.90	4.91	7.38	9.05	3	763	516	1281	383	198	34%	0.91	2.7	Depth to NAPL reading is approximate. Additional system checks by NFG 5/11, 6/29, 7/26, 9/07.	---	---
2-Mar-07	jc, cb	3.36	3.37	7.15	9.05	3	1167	587	1757	404	71	15%	0.55	3.7	Pump turned off 3/02/07 because tank near full. Readings taken **4/25/07**. Depth to DNAPL reading is approximate.	---	---
Input values						Cumulative gallons :				8751	1254						
											Water	NAPL					

* 309 gallons per foot of tank height



Scajaquada Creek DNAPL System Monitoring Log

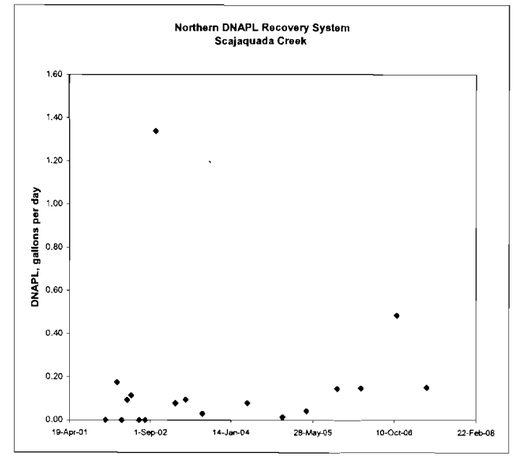
National Fuel Gas
The RETEC Group
NFGD 1-02111-750

NORTHERN SYSTEM

Date	Initials	Field Measurements (by OWI probe)				Calculations (total tank contents) *				Calculations (this period recovery)					Operator's Notes	Transporter	Disposal Facility
		Manhole rim to top of LNAPL (ft)	Manhole rim to top of Water (ft) (estimated)	Manhole rim to top of DNAPL (ft)	Manhole rim to bottom of Tank (ft)	LNAPL (gal)	Water (gal)	DNAPL (gal)	Total (gal)	Water Increase (gal)	NAPL Increase (gal)	% NAPL	NAPL (gpd)	Total Flow (gpd)			
28-Nov-01	mrh/cd	8.89	8.89	8.89	8.89	0	0	0	0	0	0	0%	0.00	0.0	Develop well with hand operated diaphragm pump. Measurements are approximate.	---	---
7-Feb-02	hs/jc	8.62	8.62	8.85	8.89	0	71	12	83	71	12	15%	0.17	1.2	Pump well by hand.	---	---
8-Mar-02	hs/jc	8.61	8.61	8.85	8.89	0	74	12	86	3	0	0%	0.00	0.1	Pump well by hand.	---	---
10-Apr-02	mrh	8.59	8.59	8.84	8.89	0	77	15	93	3	3	50%	0.09	0.2	Pump well by hand.	---	---
7-May-02	hs/jc	8.51	8.51	8.83	8.89	0	99	19	117	22	3	12%	0.11	0.9	Hand pump not working well.	---	---
25-Jun-02	cd	8.51	8.51	8.83	8.89	0	99	19	117	0	0	0%	0.00	0.0	Hand pump not working. Discarded.	---	---
2-Aug-02	mrh/jc	8.51	8.51	8.83	8.89	0	99	19	117	0	0	0%	0.00	0.0	Begin peristaltic startup. Setting #6.5, 2hr 15 min per day	---	---
8-Oct-02	mrh/jc	7.43	7.44	8.55	8.89	3	343	105	451	244	90	27%	1.34	5.0	Additional system checks/adjustments made by J Clark on 8/15, 8/21, 8/27, 9/09, and 9/12.	---	---
4-Feb-03	mrh/jc	7.36	7.37	8.52	8.89	3	355	114	472	12	9	43%	0.08	0.2	Numbers approximate. Surface of contents frozen. Turn on heat.	---	---
10-Apr-03	mrh/jc	7.28	7.29	8.50	8.89	3	374	120	497	19	6	25%	0.10	0.4	Pumping mostly water, changed timer to 30 min/week.	---	---
23-Jul-03	mrh	7.05	7.06	8.49	8.89	3	442	124	568	68	3	4%	0.03	0.7	Additional system checks/adjustments made by J Clark on 5/5, 5/20, 6/12, and 6/24.	---	---
23-Apr-04	mrh	6.90	6.91	8.42	8.89	3	466	145	614	25	22	47%	0.08	0.2	Additional system checks/adjustments made by NFG on 8/01, 8/06, 9/05, 9/08, 9/11, 9/17, 9/25, 10/30, 11/18.	---	---
24-Nov-04	jl, jc	6.66	6.67	8.41	8.89	3	537	148	689	71	3	4%	0.01	0.3	O/W interface probe not working accurately, depth of DNAPL is estimated.	---	---
19-Apr-05	mh,jc,jl,sh	6.45	6.46	8.39	8.89	3	596	154	753	59	6	10%	0.04	0.4	Additional system checks/adjustments made by J Clark on 11/24, 1/20/2005, 3/7, 3/11, 4/12, 4/18.	---	---
26-Oct-05	mrh, jc	6.33	6.34	8.30	8.89	3	605	182	790	9	28	75%	0.15	0.2	New OWI probe, but readings inconsistent with previous readings. System checks by NFG 5/11, 6/24, 7/28, 8/25, 10/06.	---	---
22-Mar-06	mrh, jc	6.20	6.21	8.23	8.89	3	624	204	831	19	22	54%	0.15	0.3	Additional system checks by NFG 10/26/05, 12/14/05, 1/6/06, 2/24/06.	---	---
24-Oct-06	mrh, jc	5.20	5.21	7.89	8.89	3	828	309	1139	204	105	34%	0.49	1.4	Depth to NAPL reading is approximate. Additional system checks by NFG 5/11, 6/29, 7/26, 9/07.	---	---
25-Apr-07	mrh, jc	4.90	4.91	7.80	8.89	3	892	337	1232	65	28	30%	0.15	0.5	Depth to NAPL reading is approximate. Additional system checks by NFG 10/31/2006, 11/16/2006, 3/02/2007.		

Input values

Cumulative gallons : 892 Water, 340 NAPL



* 309 gallons per foot of tank height

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