



WALDEN ASSOCIATES

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*Via e-mail 2/10/09 to J. Dyber
Certified Mail # 7008 1830 0003 3629 3399*

February 10, 2009

Mr. Jeffrey Dyber, PE
NYSDEC, Remedial Bureau A
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

Re: Progress Report: January 2009
Frost Street Sites: Site ID #s 1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

F17p

Dear Mr. Dyber:

Walden Associates (Walden) is pleased to submit the Progress Report for the above-referenced Site.

January Work Completed

The following tasks were completed in January 2009:

SVE/AS System O&M & Carbon Changeout

Refer to Appendix A for a summary of SVE/AS System O&M procedures. During periodic O&M visits, system parameters were logged on dedicated O&M log forms (Refer to Appendix B).

- Monthly SVE/AS remedial system O&M.
- Monthly individual SVE well lines and combined effluent flow monitoring at the interior system sampling ports for VOC concentrations utilizing a calibrated PID.
- Monthly PID readings of the sampling ports at the GAC system influent and effluent points.

- Quantitative sampling of the influent and effluent SVE system air flow was conducted on January 19, 2009. Due to infiltration of ambient, the influent air was re-sampled on January 26, and the previous sample secured was not submitted for analysis. Results of quantitative sampling with one liter summary canisters for TO-15 analysis are summarized in Table D-1 in Appendix D.
- A carbon changeout for all three vessels of the on-site SVE/AS system was completed on January 28, 2009.

GCW System

- A response letter to the *Groundwater Circulation Well System Full Scale Remedial Design Plans* submitted to the NYSDEC, dated December 24 2008, was dated and received by fax from the NYSDEC on January 6, 2009. The NYSDEC requested an amended report be submitted within 30 days of the date of the NYSDEC letter.

February Work Items

The following is a list of work scheduled to be completed during the month of February:

SVE/AS System O&M

- Monthly operation and maintenance visits to monitor SVE system parameters.
- Monthly individual SVE well line and combined effluent flow monitoring at the interior system sampling ports for VOC concentrations utilizing a calibrated PID.
- Monthly readings of the sampling ports at the influent and effluent points of the GAC system with a PID.
- Quantitative sampling of influent and effluent SVE system air for analysis scheduled for February 26, 2009.
- 3rd quarter 2008 groundwater monitoring sampling event (annual sampling of 29 Site related wells – completed in September 2008) and 4th quarter 2008 groundwater monitoring sampling event (quarterly sampling of 8 Site related wells – completed in December 2008) results will be presented in forthcoming quarterly groundwater monitoring reports following receipt, evaluation, and data validation of quarterly groundwater sample analysis.
- An amended *Groundwater Circulation Well System Full Scale Remedial Design Plans*, dated December 2008 (Revised February 5, 2008), was submitted to the NYSDEC on February 5, 2008.

Mr. Jeffrey Dyber, PE
New York State Department of Environmental Conservation
February 10, 2009

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- Groundwater samples will be collected as outlined in *Proposal for 89 Frost Street Source Delineation Sampling* letter submitted to the NYSDEC February 6, 2009. Sampling scheduled to begin February 9, 2009.

Please contact Kristin Scroope or me if you have any questions or require additional information.

Very truly yours,
Walden Associates



Joseph M. Heaney, III P.E.

Principal

cc: A. Tamuno, Esq.
G. Bobersky
G. Litwin
A. Cava
J. Nealon
R. Weitzman
D. Engel, Esq.
H. Szenicer, Esq.
F. Werfel
K. Maldonado

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Appendix A

Summary of SVE/AS System O & M Procedures

Frost Street Sites - Site ID #s1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

Summary of SVE/AS System O&M Activities

During periodic O&M visits, system parameters were logged on dedicated O&M log forms (Refer to Appendix B). The following summarizes SVE/AS system O&M procedures:

Periodic SVE/AS Remedial System O&M

- All SVE well lines and the combined effluent air flow were monitored at the interior system sampling ports for volatile organic compounds (VOCs) using a calibrated photo-ionization detector PID to assess the remedial performance of the SVE/AS system.
- Mechanical checks of the SVE/AS system were performed periodically in accordance with the O&M Manual maintenance schedule.

Vapor Phase Granular Activated Carbon Treatment System Monitoring

- Monthly readings at the influent and effluent sampling ports were made with a calibrated PID to check the GAC system to detect carbon breakthrough. Qualitative VOC monitoring with a PID was utilized to record the performance of the GAC absorption system.
- PID-recorded VOC concentrations (reported in calibrant-gas-equivalents) were used to determine when the GAC in the lead unit requires replacement. The flow from the SVE lines to the lead carbon unit was typically changed to a new lead unit when the intermediate VOC reading is 25 percent or greater of the influent VOC concentration.
- Refer to Appendix C for a log of spent GAC totals to date.

Appendix B

SVE/AS System O & M Log Forms

Frost Street Sites - Site ID #s1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

O & M CHECKLIST FOR SVE/AIR SPARGE SYSTEM
101 Frost Street, Westbury, New York

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O & M CHECKLIST FOR SVE/AIR SPARGE SYSTEM
101 Frost Street, Westbury, New York

Inspected By:	PAB	Date:	1/26/2009	Weather:																																																																									
Arrival Time:	9:30	SVE 1 Clock:	SVE 2 Clock:																																																																										
Departure Time:	10:45	SVE 1 Clock:	SVE 2 Clock:																																																																										
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Appendix C

Log of Spent Vapor Phase GAC Totals to Date

Frost Street Sites - Site ID #s1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

**Frost Street Sites
Westbury, New York**

**Table C1
Spent Vapor Phase GAC Totals**

Date of Transport from Site	Spent GAC Weight (pounds)	Carbon Facility	RCRA Facility #
January 19, 2006	7,500	Giant Resource Recovery-Sumter Inc.	SCD036275626
February 2, 2006	11,441	Envirotrol Inc.	PAD987270725
April 7, 2006	6,486	Envirotrol Inc.	PAD987270725
August 25, 2006	5,923	Envirotrol Inc.	PAD987270725
December 5, 2006	5,691	Envirotrol Inc.	PAD987270725
<i>2006 Total</i>	<i>37,041</i>		
March 30, 2007	6,913	Envirotrol Inc.	PAD987270725
September 20, 2007	6,164	Envirotrol Inc.	PAD987270725
<i>2007 Total</i>	<i>13,077</i>		
January 16, 2008	8,750	Siemens Water Technologies	PAD987270725
April 29, 2008	7,814	Siemens Water Technologies	PAD987270725
September 12, 2008	5,469	Siemens Water Technologies	PAD987270725
<i>2008 Total</i>	<i>22,033</i>		
Project Total	72,151		

Appendix D

Summary of SVE System Influent/Effluent Results (TO-15)

Frost Street Sites - Site ID #s1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

FROST STREET SITES
WESTBURY, NEW YORK

TABLE 1
SUMMARY OF SVE SYSTEM INFLOW/EFFLUENT AIR SAMPLE RESULTS (TO-15)

Target Compound	Influent											
	10/23/2006	12/7/2006	10/23/2007	12/7/2007	4/4/2007	4/27/2007	5/16/2007	6/15/2007	7/18/2007	8/15/2007	10/19/2007	11/19/2007
	µg/m ³											
Vinyl Chloride	460u	430u	0.25u	60.2U	60.2U	23.5U	1.22U	1.22U	1.22U	ND	ND	ND
1,1-Dichloroethene	710u	670u	0.39u	43.7U	43.7U	11.0U	1.01U	1.01U	1.01U	ND	ND	ND
trans-1,2-Dichloroethane	710u	670u	0.39u	49.7U	49.7U	12.5U	0.99U	0.99U	0.99U	ND	ND	ND
1,1-Dichloroethane	730u	690u	0.40u	42.6U	42.6U	10.5U	0.85U	0.85U	0.85U	ND	ND	ND
cis-1,2-Dichloroethene	710u	670u	0.39u	63.6U	63.6U	16.0U	1.27U	1.27U	1.27U	ND	ND	ND
1,2-Dichloroethane	730u	690u	0.40u	349U	349U	86.0U	1.01U	1.01U	1.01U	ND	ND	ND
1,1,1-Trichloroethane	980u	930u	0.55u	82.0U	82.0U	15.0U	1.64U	1.64U	1.64U	ND	ND	ND
Trichloroethene	2,700	3,200	110	1,480	4,690	1,120	1,35U	1,35U	1,35U	1,900	1,100	970
1,1,2-Trichloroethane	980u	930u	0.53u	68.4U	68.4U	12.5U	1.37U	1.37U	1.37U	ND	ND	ND
Tetrachloroethene	190,000	180,000	10,000	129,000	116,000	13,700	145,000	37,500	13,500	92,000	73,000	62,000
1,1,2,2-Tetrachloroethane (total)	1200u	1,200u	0.67u	53.4U	53.4U	12.5U	1.07U	1.07U	1.07U	ND	ND	ND
1,2-Dichloroethene (total)	710u	670u	0.39u	50.7U	50.7U	12.5U	0.87U	0.87U	0.87U	ND	ND	ND

Target Compound	Effluent											
	10/19/2006	12/7/2006	10/19/2007	12/7/2007	4/4/2007	4/27/2007	5/16/2007	6/15/2007	7/18/2007	8/15/2007*	10/19/2007	11/19/2007
	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
NYSDEC DAR-1 SGC	180,000	0.51u	0.51u	1.20U	1.20U	0.47U	1.22U	1.22U	1.22U	ND	ND	ND
Vinyl Chloride	1,1-Dichloroethene	0.79u	0.79u	0.87U	0.87U	0.22U	1.01U	1.01U	1.01U	ND	ND	ND
trans-1,2-Dichloroethene	0.79u	0.79u	0.99u	0.99U	0.25U	0.99U	0.99U	0.99U	0.99U	ND	ND	ND
1,1-Dichloroethane	none	0.81u	0.81u	0.85U	0.85U	0.21U	0.83U	0.83U	0.83U	ND	ND	ND
cis-1,2-Dichloroethene	0.79u	0.79u	1.27U	1.27U	0.32U	1.27U	1.27U	1.27U	1.27U	ND	ND	ND
1,2-Dichloroethane	0.81u	0.81u	0.81u	6.98U	6.98U	1.72U	1.01U	1.01U	1.01U	ND	ND	ND
1,1,1-Trichloroethane	68,000	1.1u	1.1u	1.64U	1.64U	0.30U	1.64U	1.64U	1.64U	ND	ND	ND
Trichloroethene	54,000	4.1	1.4	1.1u	1.35U	16.6	2.75	1.35U	1.35U	3,000	ND	80
1,1,2-Trichloroethane	none	1.1u	1.1u	1.1u	1.37U	1.25U	1.37U	1.37U	1.37U	ND	ND	ND
Tetrachloroethene	1,000	55	26	8.8	54.4	196	2.84	1,680	107	9,580	25	9,200
1,1,2,2-Tetrachloroethane	1.4u	1.4u	1.07U	0.25U	1.07U	1.07U	1.07U	1.07U	1.07U	ND	ND	ND
1,2-Dichloroethene (total)	none	0.79u	0.79u	1.01U	0.25U	0.87U	0.87U	0.87U	0.87U	ND	ND	ND

SGC = short-term guideline concentration

u = compound not detected at concentration above the listed reporting limit

U = compound not detected at concentration above the Method Detection Limit (MDL)

ND = Compound was analyzed for but not detected above the laboratory reporting limit.

10/23/06 - 1/18/07 results analyzed by Sverr/Trent Laboratories

4/4/07 - 8/15/07 data analyzed by United Chemistis

9/2/07 to present data analyzed by Columbia Analytical Services

Note: Lower concentrations detected on 1/18/07, 5/16/07, 7/18/07, 8/15/07 likely due to Air Sparging System component fault - System temporarily down around time of sampling event.

* Effluent sample collected post primary carbon vessel

** Suma canister leaked after filling

FROST STREET SITES
WESTBURY, NEW YORK

TABLE 1 (cont.)
SUMMARY OF SVE SYSTEM INFLUENT/EFFLUENT AIR SAMPLE RESULTS (TO-15)

Influent		1/21/2008*	2/28/2008	3/20/2008	4/30/2008	5/28/2008	6/27/2008	7/23/2008	8/20/2008	9/29/2008	10/20/2008	11/17/2008	12/23/2008	1/21/2009
Target Compound		$\mu\text{g}/\text{m}^3$												
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	9.4	80,000	65,000	60,000	61,000	58,000	ND	57,000	73,000	66,000	55,000	19,000	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Effluent		1/21/2008	2/28/2008	3/20/2008	4/30/2008	5/28/2008	6/27/2008	7/23/2008	8/20/2008	9/29/2008	10/20/2008	11/17/2008	12/23/2008	1/21/2009
Target Compound		$\mu\text{g}/\text{m}^3$												
Vinyl Chloride	180,000	ND												
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	none	ND												
cis-1,2-Dichloroethene	ND	16	49	49	ND	8.7								
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	64
1,1,1-Trichloroethane	68,000	ND	4.2											
Trichloroethylene	54,000	ND	17	480	480	ND	3.5							
1,1,2-Trichloroethane	none	ND												
Tetrachloroethylene	1,000	15	580	7,000	1,700	49	4,1	ND	12	4,7	ND	2,6	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (total)	none	ND												

SGC = short-term guideline concentration

u = compound not detected at concentration above the listed reporting limit

U = compound not detected at concentration above the Method Detection Limit (MDL)

ND = Compound was analyzed for but not detected above the laboratory reporting limit.
10/23/06 - 1/18/07 results analyzed by Seven Trent Laboratories
1/4/07 - 8/15/07 data analyzed by United Chemists

9/26/07 to present data analyzed by Columbia Analytical Services
Note: Lower concentrations detected on 1/18/07, 5/16/07, 7/18/07, 8/15/07 likely due to Air Sparging System component fault - System temporarily down around time of sampling event.

* Effluent sample secured post primary carbon vessel.

** Suma canister leaked after filling