



WALDEN ASSOCIATES

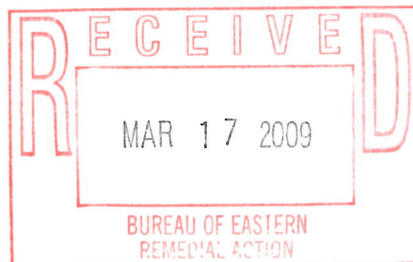
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*Via e-mail 3/10/09 to J. Dyber*  
*Certified Mail # 7008 1830 0003 3629 3429*

March 10, 2009

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



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

Dear Mr. Dyber:

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

**February Work Completed**

The following tasks were completed in February 2009:

**SVE/AS System O&M**

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 February 26, 2009. Results of quantitative sampling with one liter summa canisters for TO-15 analysis are summarized in Table D-1 in Appendix D.

#### GCW System

- An amended *Groundwater Circulation Well System Full Scale Remedial Design Plans*, dated December 2008 (Revised February 5, 2009), was submitted to the NYSDEC on February 5, 2009.

#### Source Delineation

- A *Proposal for 89 Frost Street Source Delineation Sampling* letter was submitted to the NYSDEC on February 6, 2009.
- Groundwater samples for source delineation were collected on February 9-13 and 18, 2009. Results will be presented in a forthcoming report following receipt and evaluation of sample analysis.

#### March Work Items

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

#### 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 March 23, 2009.
- 3<sup>rd</sup> quarter 2008 groundwater monitoring sampling event (annual sampling of 29 Site related wells – completed in September 2008) and 4<sup>th</sup> 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.

-3-

- 1st quarter 2009 groundwater monitoring sampling event (quarterly sampling of 8 Site related wells – completed in December 2007) was completed the first week in March.

Soil Vapor Intrusion

- Follow-up soil vapor intrusion investigation work for two subslab/indoor air sampling locations at the western end of the Century 21 Building scheduled to begin the week of March 16, 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.  
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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**

Inspected By:	GLW	Date:	2/26/2009	Weather:	Mostly Cloudy -35F
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Arrival Time:	9:10	SVE 1 Clock:	SVE 2 Clock:
Departure Time:	11:00	SVE 1 Clock:	SVE 2 Clock:

CONTROL PANEL	Arrival	Departure
AS System	on	on
SVE System	on	on
Surge Protection	Lit	Lit
Lightning Protection	White	White
Sensaphone	on	on

PID	
Calibrated	yes
Concentration:	100 ppm

Carbon Vessels	Pre-Carbon PID	Post Carbon PID	Bypassed
Carbon Vessel 1	12.8 ppm	0.0 ppm	No
Carbon Vessel 2	ppm	ppm	
Carbon Vessel 3	ppm	ppm	

AIR SPARGE SYSTEM	
Cleaned Particulate Filter	No
Drained Filter/collector 1	Yes
Drained Filter/collector 2	Yes
Compressor Discharge Pressure	30 psi
Compressor Holding tank Pressure	85 psi

SVE SYSTEM	
Knockout Tank Level	~1/6 full
Knockout Discharge to Sewer	NA gallons

Monitoring Well Depth to Water Readings	
2a	50.39
4a	49.83
6a	45.79

SVE WELL READINGS (INSIDE TRAILER)						
SVE	Velocity		Flow	Vacuum		PID Concentration
V1	8250	FPM	scfm	51	inch H <sub>2</sub> O	30.9 ppm
V2	5100	FPM	scfm	52	inch H <sub>2</sub> O	55.6 ppm
V3a	4700	FPM	scfm	52	inch H <sub>2</sub> O	0.0 ppm
V3	6250	FPM	scfm	52	inch H <sub>2</sub> O	18.7 ppm
V4	4700	FPM	scfm	52	inch H <sub>2</sub> O	0.0 ppm
V6	4200	FPM	scfm	52	inch H <sub>2</sub> O	0.0 ppm
V5	3350	FPM	scfm	52	inch H <sub>2</sub> O	0.0 ppm
V7	3250	FPM	scfm	53	inch H <sub>2</sub> O	0.0 ppm
Pre-Knockout Port				4.5	inch Hg vac	22.3 ppm
SVE Flow Rate	4200	FPM	scfm			

AS WELL READINGS (INSIDE TRAILER)						
AS WELL #	Pressure		Air Flow	AS WELL #	Pressure	
AS Well #1	14.5	psi	6 SCFM	AS Well #16	15.5	psi
AS Well #2	14.75	psi	7 SCFM	AS Well #12	0	psi
AS Well #4	15	psi	6.5 SCFM	AS Well #10	5.5	psi
AS Well #3	15.25	psi	6 SCFM	AS Well #13	2	psi
AS Well #5	15.75	psi	6 SCFM	AS Well #14	14	psi
AS Well #7	15	psi	3.5 SCFM	AS Well #18	14.5	psi
AS Well #9	14.75	psi	4.5 SCFM	AS Well #17	15	psi
AS Well #8	14	psi	5 SCFM	AS Well #15	15	psi
AS Well #6	15	psi	4.5 SCFM	AS Well #19	15	psi
AS Well #11	15.5	psi	2 SCFM			

NOTES
1022 - Collect Effluent 2/26/09 sample
1027 - Collect Influent 2/26/09 sample
Outside KO tank contains approximately 350/625 ga

## **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**

<b>Date of Transport from Site</b>	<b>Spent GAC Weight (pounds)</b>	<b>Carbon Facility</b>	<b>RCRA Facility #</b>
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
<b><i>2006 Total</i></b>	<b><i>37,041</i></b>		
March 30, 2007	6,913	Envirotrol Inc.	PAD987270725
September 20, 2007	6,164	Envirotrol Inc.	PAD987270725
<b><i>2007 Total</i></b>	<b><i>13,077</i></b>		
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
<b><i>2008 Total</i></b>	<b><i>22,033</i></b>		
January 28, 2009	7,004	Siemens Water Technologies	PAD987270725
<b><i>2009 Total</i></b>	<b><i>7,004</i></b>		
<b>Project Total</b>	<b>79,155</b>		

## **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 INFLUENT/EFFLUENT AIR SAMPLE RESULTS (TO-15)

Target Compound	Influent									
	10/23/2006	12/7/2006	1/18/2007	4/4/2007	4/27/2007	5/16/2007	6/15/2007	7/18/2007	8/15/2007	10/10/2007
Vinyl Chloride	460u	430u	0.25u	60.2U	60.2U	23.5U	1.22U	1.22U	1.22U	ND
1,1-Dichloroethene	710u	670u	0.39u	43.7U	43.7U	11.0U	1.01U	1.01U	1.01U	ND
trans-1,2-Dichloroethene	710u	670u	0.39u	49.7U	49.7U	12.5U	0.99U	0.99U	0.99U	ND
1,1-Dichloroethane	730u	690u	0.40u	42.6U	42.6U	10.5U	0.85U	0.85U	0.85U	ND
cis-1,2-Dichloroethene	710u	670u	0.39u	63.6U	63.6U	16.0U	1.27U	1.27U	1.27U	ND
1,2-Dichloroethane	730u	690u	0.40u	34.9U	34.9U	86.0U	1.01U	1.01U	1.01U	ND
1,1,1-Trichloroethane	980u	930u	0.53u	82.0U	82.0U	15.0U	1.64U	1.64U	1.64U	ND
Trichloroethene	2,700	3,200	1.10	1,480	4,690	1,120	1,35U	1,35U	1,35U	970
1,1,2-Trichloroethane	980u	930u	0.53u	68.4U	68.4U	12.5U	1.37U	1.37U	1.37U	ND
Tetrachloroethene	190,000	180,000	10,000	129,000	116,000	13,700	145,000	37,500	13,500	92,000
1,1,2,2-Tetrachloroethane	1,200u	1,200u	0.67u	53.4U	53.4U	12.5U	1.07U	1.07U	1.07U	ND
1,2-Dichloroethene (total)	710u	670u	0.39u	50.7U	50.7U	12.5U	0.87U	0.87U	0.87U	ND

Target Compound	Effluent									
	10/19/2006	12/7/2006	1/18/2007	4/4/2007	4/27/2007	5/16/2007	6/15/2007	7/18/2007	8/15/2007 *	9/26/2007
Vinyl Chloride	0.51u	0.51u	0.79u	0.87U	0.87U	0.47U	1.22U	1.22U	1.22U	ND
1,1-Dichloroethene	0.79u	0.79u	0.79u	0.99U	0.99U	0.25U	1.01U	1.01U	1.01U	ND
trans-1,2-Dichloroethene	0.79u	0.79u	0.79u	0.99U	0.99U	0.25U	0.99U	0.99U	0.99U	ND
1,1-Dichloroethane	0.81u	0.81u	0.81u	0.85U	0.85U	0.21U	0.85U	0.85U	0.85U	ND
cis-1,2-Dichloroethene	0.79u	0.79u	0.79u	1.27U	1.27U	0.32U	1.27U	1.27U	1.27U	ND
1,2-Dichloroethane	0.81u	0.81u	0.81u	0.98U	0.98U	1.72U	1.01U	1.01U	1.01U	ND
1,1,1-Trichloroethane	1.1u	1.1u	1.1u	1.64U	1.64U	0.30U	1.64U	1.64U	1.64U	ND
Trichloroethene	4.1	1.4	1.1u	1.35U	16.6	2.75	1.35U	1.35U	3,000	ND
1,1,2-Trichloroethane	1.1u	1.1u	1.1u	1.37U	1.37U	0.25U	1.37U	1.37U	1.37U	690
Tetrachloroethene	55	26	8.8	54.4	96	2.84	1,680	107	9,580	25
1,1,2,2-Tetrachloroethane	1.4u	1.4u	1.4u	1.07U	1.07U	0.25U	1.07U	1.07U	1.07U	ND
1,2-Dichloroethene (total)	0.79u	0.79u	0.79u	1.01U	1.01U	0.25U	0.87U	0.87U	0.87U	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 Severn Trent Laboratories

4/4/07 - 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

FROST STREET SITES  
WESTBURY, NEW YORK

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

Target Compound	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	1/26/2009
	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Vinyl Chloride	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
trans-1,2-Dichloroethene	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
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	220	220	ND	ND	ND	ND
1,2-Dichloroethane	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
Trichloroethene	ND	1,500	840	1,100	850	1,200	4.1	1,400	1,300	1,400	1,200	240	2,000
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	9.4	80,000	65,000	60,000	61,000	58,000	ND	57,000	73,000	66,000	55,000	19,000	76,000
1,1,2,2-Tetrachloroethane	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

Target Compound	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	1/19/2009
	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Vinyl Chloride	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
trans-1,2-Dichloroethene	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
cis-1,2-Dichloroethene	ND	16	49	49	ND	ND	ND	ND	ND	ND	8.7	64	63
1,2-Dichloroethane	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
Trichloroethene	ND	17	480	480	ND	ND	ND	ND	ND	ND	ND	4.2	6.0
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	80
Tetrachloroethene	15	580	7,000	1,700	49	4.1	ND	12	4.7	ND	2.6	ND	4.6
1,1,2,2-Tetrachloroethane	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

SGC = short-term guideline concentration

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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

FILE ON EDOC'S \_\_\_\_\_ YES \_\_\_\_\_ NO

SITE NAME \_\_\_\_\_

SITE # \_\_\_\_\_

COUNTY \_\_\_\_\_ TOWN \_\_\_\_\_

FOILABLE \_\_\_\_\_ YES \_\_\_\_\_ NO

SC/PSA \_\_\_\_\_ RI/FS \_\_\_\_\_

RD \_\_\_\_\_ RA \_\_\_\_\_

SM \_\_\_\_\_ OTHER \_\_\_\_\_

NAME DESCRIPTION: