



WALDEN ASSOCIATES

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*Via e-mail 5/9/08 to J. Dyber*

*Certified Mail # 7008 0150 0003 2260 7425*

May 9, 2008

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

Re: Progress Report: April 2008  
Frost Street Sites: Site ID #s1-30043 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.

#### **April Work Completed**

The following tasks were completed in April 2008:

##### **Soil Vapor Intrusion Investigation**

- Received letter from NYSDEC, dated April 8, 2008, approving, in part, amended *On-Site Vapor Intrusion Investigation Summary Report*, dated March 2008, submitted to the NYSDEC on March 7, 2008. The approved recommendations included continued monitoring of the MS-5 and MS-6 sampling locations, continued operation of the air sparge/soil vapor extraction system, and resampling of all sampling points after the AS/SVE system is shut down. Subslab and indoor air sampling was requested to be conducted during the 2008-2009 heating season at the MS-5 and MS-6 locations, along with outdoor air sampling adjacent to the western portion of the Century 21 building.

##### **Groundwater Circulation Well (GCW) System**

- A response letter from the NYSDEC, dated March 21, 2008, requested that a full-scale design for the GCW system, including treatment of deep groundwater from 150-250 feet below grade, be received by the NYSDEC by April 21, 2008. Dispute resolution request filed with NYSDEC, dated April 4, 2008.

Statement of Position of NYSDEC Staff on the pending dispute resolution matter received, dated April 18, 2008. Response to NYSDEC Staff on the pending dispute resolution matter sent to NYSDEC, dated April 30, 2008.

#### SVE/AS System O&M and 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 influent and effluent points of the GAC system.
- Quantitative sampling of influent and effluent SVE system air flow conducted on April 30, 2008. Results of quantitative sampling with one liter summa 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 April 29, 2008.

#### May Work Items

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

#### SVE/AS System O&M

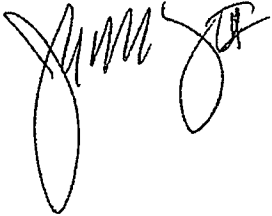
- Monthly operation and maintenance visits to monitor SVE system parameters.
- Monthly individual SVE well line and combined effluent flow monitoring at the interior system sampling ports for VOC concentrations utilizing a calibrated PID.
- Monthly readings of the sampling ports at the influent and effluent points of the GAC system with a PID.
- Quantitative sampling of influent and effluent SVE system air for analysis scheduled for May 20, 2008.
- 1st quarter 2008 groundwater monitoring sampling event (quarterly sampling of 8 Site related wells – completed in March 2008) results will be presented in a forthcoming quarterly groundwater monitoring report following receipt, evaluation, and data validation of quarterly groundwater sample analysis.

Mr. Jeffrey Dyber, PE  
New York State Department of Environmental Conservation  
May 9, 2008

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

Very truly yours,  
Walden Associates

A handwritten signature in black ink, appearing to read 'J. Heaney, III', with a large, stylized initial 'J' and a flourish at the end.

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 AS/SVE 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:	GLS	Date:	4/25/2008	Weather:	Sunny, ~65F
Arrival Time:		SVE 1 Clock:		SVE 2 Clock:	
Departure Time:		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:	101	ppb			
Carbon Vessels	Pre-Carbon PID	Post Carbon PID	Bypassed		
Carbon Vessel 1	ppm	ppm			
Carbon Vessel 2	ppm	ppm			
Carbon Vessel 3	ppm	ppm	No		
SVE WELL READINGS (INSIDE TRAILER)					
SVE	Velocity	Flow	Vacuum	PID Concentration	
V1	>4000 FPM	scfm	44 inch H <sub>2</sub> O	ppm	
V2	5500 FPM	scfm	49 inch H <sub>2</sub> O	ppm	
V3a	4500 FPM	scfm	40 inch H <sub>2</sub> O	ppm	
V3	>4000 FPM	scfm	40 inch H <sub>2</sub> O	ppm	
V4	4600 FPM	scfm	40 inch H <sub>2</sub> O	ppm	
V6	3800 FPM	scfm	39 inch H <sub>2</sub> O	ppm	
V5	3300 FPM	scfm	40 inch H <sub>2</sub> O	ppm	
V7	3200 FPM	scfm	40 inch H <sub>2</sub> O	ppm	
Pre-Knockout Port			3.5 inch Hg vac	ppm	
SVE Flow Rate	3800 FPM	scfm			
AS WELL READINGS (INSIDE TRAILER)					
AS WELL #	Pressure	Air Flow	AS WELL #	Pressure	Air Flow
AS Well #1	15 psi	3.75 SCFM	AS Well #16	16 psi	3.5 SCFM
AS Well #2	15 psi	4.5 SCFM	AS Well #12	18 psi	>2 SCFM
AS Well #4	15.5 psi	5.5 SCFM	AS Well #10	18.5 psi	>2 SCFM
AS Well #3	16.25 psi	5 SCFM	AS Well #13	18 psi	>2 SCFM
AS Well #5	16 psi	5.5 SCFM	AS Well #14	15.5 psi	5 SCFM
AS Well #7	16 psi	5 SCFM	AS Well #18	15.5 psi	5.5 SCFM
AS Well #9	15.75 psi	8.5 SCFM	AS Well #17	16 psi	4.75 SCFM
AS Well #8	15 psi	5.75 SCFM	AS Well #15	16 psi	7.5 SCFM
AS Well #6	15.75 psi	5.5 SCFM	AS Well #19	16 psi	4.5 SCFM
AS Well #11	16.25 psi	3 SCFM			
NOTES					

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

Inspected By:	GLS	Date:	4/30/2008	Weather: Sunny, ~48F
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Arrival Time:	745	SVE 1 Clock:	126926	SVE 2 Clock:	101982
Departure Time:		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 ppb

Carbon Vessels	Pre-Carbon PID	Post Carbon PID	Bypassed
Carbon Vessel 1	16.6 ppm	0.0 ppm	No
Carbon Vessel 2	ppm	ppm	Yes
Carbon Vessel 3	ppm	ppm	No

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	100 psi

SVE SYSTEM	
Knockout Tank Level	25 gallons
Knockout Discharge to Sewer	NA gallons

Monitoring Well Depth to Water Readings	
2a	49.67
4a	49.20
6a	45.01

SVE WELL READINGS (INSIDE TRAILER)						
SVE	Velocity	Flow	Vacuum	PID Concentration		
V1	7750 FPM	scfm	44 inch H <sub>2</sub> O	20.3 ppm		
V2	5100 FPM	scfm	48 inch H <sub>2</sub> O	52.6 ppm		
V3a	4300 FPM	scfm	40 inch H <sub>2</sub> O	4.4 ppm		
V3	5000 FPM	scfm	39 inch H <sub>2</sub> O	22.6 ppm		
V4	4500 FPM	scfm	39 inch H <sub>2</sub> O	2.4 ppm		
V6	3800 FPM	scfm	38 inch H <sub>2</sub> O	1.3 ppm		
V5	3500 FPM	scfm	40 inch H <sub>2</sub> O	2.5 ppm		
V7	3150 FPM	scfm	39 inch H <sub>2</sub> O	1.6 ppm		
Pre-Knockout Port			3.5 inch Hg vac	14.2 ppm		
SVE Flow Rate	3800 FPM	scfm				

AS WELL READINGS (INSIDE TRAILER)						
AS WELL #	Pressure	Air Flow	AS WELL #	Pressure	Air Flow	
AS Well #1	15.5 psi	3.75 SCFM	AS Well #16	16.5 psi	3.75 SCFM	
AS Well #2	15.5 psi	4.25 SCFM	AS Well #12	18 psi	>2 SCFM	
AS Well #4	16 psi	5.5 SCFM	AS Well #10	18.5 psi	>2 SCFM	
AS Well #3	16.5 psi	4.75 SCFM	AS Well #13	18 psi	>2 SCFM	
AS Well #5	16.5 psi	4.75 SCFM	AS Well #14	16 psi	5 SCFM	
AS Well #7	16.5 psi	4.5 SCFM	AS Well #18	16 psi	5.5 SCFM	
AS Well #9	16 psi	8 SCFM	AS Well #17	16.5 psi	5 SCFM	
AS Well #8	15.5 psi	5.75 SCFM	AS Well #15	16.5 psi	7.5 SCFM	
AS Well #6	16 psi	5.25 SCFM	AS Well #19	16.5 psi	4 SCFM	
AS Well #11	16.5 psi	2.75 SCFM				

NOTES	
Collected:	
Effluent 4/30/08 at 0922 1L Summa Canister #1SC00594	
Influent 4/30/08 at 0945 1L Summa Canister #1SC00599	



## **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
<b><i>2008 Total</i></b>	<b><i>8,750</i></b>		
<b>Project Total</b>	<b>58,868</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	10/19/2007	11/19/2007	12/18/2007	1/21/2008**	2/28/2008	3/20/2008
	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>	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	460u	430u	0.25u	60.2U	60.2U	23.5U	1.01U	1.01U	1.22U	1.22U	1.22U	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	710u	670u	0.39u	43.7U	43.7U	11.0U	1.01U	1.01U	1.01U	1.01U	1.01U	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	710u	670u	0.39u	49.7U	49.7U	12.5U	0.99U	0.99U	0.99U	0.99U	0.99U	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	730u	690u	0.40u	42.6U	42.6U	10.5U	0.85U	0.85U	0.85U	0.85U	0.85U	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	710u	670u	0.39u	63.6U	63.6U	16.0U	1.27U	1.27U	1.27U	1.27U	1.27U	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	730u	690u	0.40u	349U	349U	86.0U	1.01U	1.01U	1.01U	1.01U	1.01U	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	980u	930u	0.53u	82.0U	82.0U	15.0U	1.64U	1.64U	1.64U	1.64U	1.64U	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	2,700	3,200	110	1,480	4,690	1,120	1.35U	1.35U	1.35U	1.35U	1.35U	1,900	1,100	970	330	ND	1,500	840
1,1,2-Trichloroethane	980u	930u	0.53u	68.4U	68.4U	12.5U	1.37U	1.37U	1.37U	1.37U	1.37U	ND	ND	ND	ND	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	27,000	9.4	80,000	65,000	65,000	65,000
1,1,2,2-Tetrachloroethane	1,200u	1,200u	0.67u	53.4U	53.4U	12.5U	1.07U	1.07U	1.07U	1.07U	1.07U	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (total)	710u	670u	0.39u	50.7U	50.7U	12.5U	0.87U	0.87U	0.87U	0.87U	0.87U	ND	ND	ND	ND	ND	ND	ND

Target Compound	NYSDEC DAR-1 SGC	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	10/19/2007	11/19/2007	12/18/2007	1/21/2008	2/28/2008	3/20/2008
	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>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Vinyl Chloride	180,000	0.51u	0.51u	0.51u	1.20U	1.20U	0.47U	1.22U	1.22U	1.22U	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene		0.79u	0.79u	0.79u	0.87U	0.87U	0.22U	1.01U	1.01U	1.01U	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene		0.79u	0.79u	0.79u	0.99U	0.99U	0.25U	0.99U	0.99U	0.99U	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	none	0.81u	0.81u	0.81u	0.85U	0.85U	0.21U	0.85U	0.85U	0.85U	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		0.79u	0.79u	0.79u	1.27U	1.27U	0.32U	1.27U	1.27U	1.27U	ND	ND	ND	ND	ND	16	49
1,2-Dichloroethane		0.81u	0.81u	0.81u	0.98U	0.98U	1.72U	1.01U	1.01U	1.01U	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	68,000	1.1u	1.1u	1.1u	1.64U	1.64U	0.30U	1.64U	1.64U	1.64U	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	54,000	4.1	1.4	1.1u	1.35U	16.9	2.75	1.35U	1.35U	3,000	ND	690	80	ND	17	480	ND
1,1,2-Trichloroethane	none	1.1u	1.1u	1.1u	1.37U	1.37U	0.25U	1.37U	1.37U	1.37U	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1,000	55	26	8.8	54.4	196	2.84	1,680	107	9,580	25	9.2	21,000	6,000	15	580	7,000
1,1,2,2-Tetrachloroethane		1.4u	1.4u	1.4u	1.07U	1.07U	0.25U	1.07U	1.07U	1.07U	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (total)	none	0.79u	0.79u	0.79u	1.01U	1.01U	0.25U	0.87U	0.87U	0.87U	ND	ND	ND	ND	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 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.

\*\* Summa 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:**