Monthly Operations and Monitoring Report
June 2006

Site:
Stanton Cleaners Area Groundwater Contamination Site
Great Neck, New York

Prepared for:
Environmental Chemical Corporation
1293 Broad Street, Suite 200
Bloomfield, New Jersey 07003

Prepared by:
Earth Tech, Inc.
7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228

July 1, 2006

ET Project No. 70536.02.01.02

Monthly Operations and Monitoring Report June 2006

Site:
Stanton Cleaners Area Groundwater Contamination
Great Neck, NY

Prepared for:
Environmental Chemical Corporation
1293 Broad Street, Suite 200
Bloomfield, New Jersey 07003

Prepared by:
Earth Tech, Inc.
7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228

July , 2006

Earth Tech Project No. 70536.02.01.02

Author: _____

Title: _____

Date: _____

Reviewer: _____

Title: _____

Date: _____

Table of Contents

Figures

Tables

Appendices

1.0 INTRODUCTION

This Monthly Operations and Monitoring Report, June 2006 (Monthly Report) has been prepared by Earth Tech, Inc., as a subcontractor to Environmental Chemical Corporation (ECC), under Contract No.5442-001-001.

The Stanton Cleaners Area Groundwater Contamination (Stanton) site is located at 110 Cutter Mill Road in Great Neck, Nassau County, New York. The Stanton Cleaner Property (SCP) is approximately ¼ acre in size and includes a two-story building in which a dry-cleaning business operates and an adjacent one-story boiler/storage building as well as a two-story treatment building. The site is bordered by an indoor tennis facility, a synagogue and school facility.

Improper handling and disposal of spent dry cleaning solvents, including Tetrachloroethylene (PCE), resulted in the release of hazardous substances at the site. PCE migrated from the site's subsurface soils into the indoor air environments of the surrounding buildings and into groundwater beneath the site, resulting in a significant threat to human health.

In 1983, approximately 20 cubic yards of PCE-contaminated soil was removed from behind the Stanton Cleaners property.

In 1989, a groundwater extraction and treatment system was installed by the original Site operator to address groundwater contamination which resulted from improper disposal of spent PCE behind the SCP building. This system is not currently operational.

In 1998, the New York State Department of Environmental Conservation (NYSDEC) funded the construction of a new air stripper treatment system for the WAGNN water supply wells, which are impacted by contamination from the Site. This treatment system is currently in operation. In October 1998, as an immediate response action, the EPA installed a temporary soil vapor interceptor system, adjacent to the tennis club, to mitigate impacts from PCE vapors to the indoor air of this facility.

In 2001, the EPA completed the construction and installation of a soil vapor extraction (SVE) system and a ground water treatment (GWT) system on the SCP. Both the SVE and GWT systems are housed in the treatment building that was constructed on the SCP. The SVE was installed to remediate the VOC-contaminated soils, thus reducing the indoor air contamination in the adjacent affected buildings to safe levels. The GWT system was installed to remediate the VOC-contaminated groundwater and to remove the threat of vapors through the Site soils. Both systems are currently operating at the Site. The collected VOC-contaminated vapors and groundwater from both systems are treated through separate granular activated carbon (GAC) systems.

The site is presently under the jurisdiction of the Remedial Branch of the USEPA, Region II; USACE provides oversight to USEPA for the remedial action and the long-term remedial action programs. ECC provides oversight to the USACE to perform long-term remediation actions. Earth Tech, as a subcontractor to ECC, provides support on the following tasks as described in the Work Plan:

- Operation and maintenance (O&M) of the GWTS and SVE, including sampling and reporting;
- Sampling of monitoring wells associated with the site in order to track the migration of the contaminant plume, along with reporting.

- Sampling of indoor air quality of buildings adjacent to the site in order to identify all the adjacent buildings being impacted by site related contaminants and the effectiveness of the remedial actions being instituted at the site.

All work under this contract is performed in accordance with the following documents:

- Work Plan for Long-Term Remedial Action Support;
- Site-Specific Health and Safety Plan (HASP), dated July 23, 2001 (Revised February 3, 2003) and
- Sampling Quality Assurance Project Plan (SQAPP) dated August 22, 2000.

As required by the Scope of Work for this project, monthly summary reports are prepared to document and summarize the activities taking place. These reports provide a concise description of work performed during the reporting period and include pertinent deliverables as appendices. This monthly summary report covers the period between May 1 and May 31, 2006.

2.0 SUMMARY OF ACTIVITIES DURING JUNE 2006

The following list summarizes activities performed and milestone dates under this contract during the reporting period, June 1 through June 31, 2006:

- June 7 – O&M Inspection/System Monitoring
- June 7 – Monthly System Sampling
- June 7 – Calibration of pH and conductivity meters (Recovery Well, Air Stripper and Effluent) by grab sample and using pH buffers
- June 15 – O&M Inspection/System Monitoring
- June 15 – Bi weekly air monitoring
- June 20 – O&M Inspection/System Monitoring
- June 26 – Monthly water level gauging
- June 26 – O&M Inspection/System Monitoring
- June 26 – Bi weekly air monitoring
- June 26 – Calibration of pH and conductivity meters (Recovery Well, Air Stripper and Effluent) by grab sample

Details of system shutdowns and alarms during the month of June 2006 are discussed in section 3.1. Daily Quality Control Reports (DQCRs), which include projected work for the following two weeks, are completed for each day of site activities. Copies of these reports are included as Appendix A.

3.0 GROUNDWATER TREATMENT SYSTEM ACTIVITIES

3.1 Operation and Maintenance

The GWTS treated and discharged 2,413,463.2 gallons during the month of June 2006. The system was operational (recovery well pumps running) for approximately 720 of the 720 hours during the month, for an average operating flow of 55.86 gallons per minute (gpm). The system has treated a total of 128,108,854 gallons since the plant startup in November 2001.
.

There are currently two recovery wells pumping water into the system (EPA-EXT-02 and EPA-MW-24). EPA-EXT-02 is located in the triangle, the corner of New Cutter Mill Road and Mirrielees Road. Extraction well MW-24 had been pumping from the triangle location until it was turned off and April 20, 2005. Extraction well EPA-EXT-4R was activated on April 20, 2005. EPA-EXT-4R is located in the parking lot directly in front of the Stanton Dry Cleaners building. The decision to turn off extraction well MW-24 and replace it with EPA-EXT-4R in April 2005 was made by the USEPA. Later, in early 2006, based on an evaluation of laboratory analytical results obtained from extraction well EPA-EXT-4R and monitoring well sampling results for monitoring wells located in the area of EPA-MW-24, the decision was made to shut down extraction well EPA-EXT-4R and re-activate EPA-MW-24. Therefore, EPA-EXT-4R was taken offline and EPA-MW-24 was activated on February 2, 2006.

The facility is equipped with a remote monitoring and control system that was accessed a minimum of three times per week, by the lead engineer, during the reporting period to ensure proper system operation and notify response personnel if a problem or abnormal condition was observed. The system also provides remote notification of alarm conditions via automatic e-mail and text messaging.

The Treatment System Operation and Maintenance Checklist were completed during each O&M inspection event and the checklists for June 7, 15, 20 and 26, 2006 are provided in Appendix B. When the system is operational, any abnormal conditions or parameters outside of the normal operating range are addressed by the lead operator and/or monitoring/environmental technician on site (Jim Simmonds or James Kearns). If they require guidance or notes any serious conditions, the inspector notifies the response manager (Tom Williams). The checklists are completed on site and sent to James Kearns for review and scheduling of additional work if needed. Abnormal conditions and/or parameters outside the operating range are addressed, including repairs, cleaning, and continued monitoring.

System operational and alarm conditions are automatically stored by the PLC. This data is downloaded every two weeks. The June 2006 operational data is included in Appendix C. While operational, the system data are within the normal ranges and are consistent with visual observations, with any exceptions as described above.

The effluent flow data table in Appendix C shows daily discharge flows from each day of system operation and cumulative treated water discharge for each day during the reporting period, as well as a summary of total monthly flow and average daily flow since the system was started up in October 2001.

A review of October's Operations and maintenance logs indicated there has been a slight reduction in discharge flow for the P&T system. In an effort to increase the discharge flow, it was determined that the P&T system aqueous phase carbon vessels needed to be placed in parallel in the system treatment train in an effort to reduce back pressure and increase effluent flow. The altering of the piping for the 2-400 pound aqueous phase carbon vessels from series to parallel was performed on November 1, and 2, 2005.

On November 30, 2005 the SVE systems was offline due to a faulty low level sensor in the SVE knockout tank. The sensor was reviewed during the December 19, 2005 O&M inspection and was deemed to be faulty. A new low-level float switch was installed on January 9, 2006.

On January 9, 2006, three drains were installed in the line of SVE 1 so that the line can be drained weekly and so adequate air flow can be obtained at the SVE 1 air sample ports for the bi weekly air monitoring. On January 24, 2006 the drains were replaced with more permanent ball valve drains.

3.2 Sampling and Analysis

3.2.1 Raw and Treated Groundwater

In accordance with the SQAPP, GWTS sampling is conducted on a monthly basis to monitor plant efficiency, to determine whether liquid carbon breakthrough has occurred, and to verify that contract-specific discharge parameters (in accordance with National Pollutant Discharge Elimination System (NPDES) permit equivalency) are met. The combined GWTS influent, along with the GWTS effluent (discharge), will be sampled by the 15th of each month. Collected samples will be shipped to a designated EPA, CLP lab for analysis of TCL volatile organic compounds.

Earth Tech personnel conducted the GWTS influent and effluent sampling for this report period on June 7, 2006. The samples were shipped to the USEP Region II DESA Laboratory, located in Edison, NJ for analysis of low concentration TCL volatile organic compounds. A copy of the full sampling trip report containing the chain of custody forms and FedEx air bill is included in Appendix D. Laboratory analytical results for the GWTS sampling event during this reporting period will be forwarded to ECC under separate cover from the laboratory.

Measurements of influent and effluent pH and turbidity, along with effluent conductivity, are automatically monitored and recorded by the GWTS PLC on a daily basis; this information is included with the downloaded data in Appendix C.

The next GWTS influent / effluent sampling event is scheduled for July 11, 2006.

3.2.2 Process Air Stream Monitoring

Air monitoring of the SVE and Pump and Treat System is performed on a bi-weekly basis. It includes monitoring for VOCs, air velocity, temperature, humidity, dew point, vacuum pressure and other parameters, as specified in the O&M manual. Air monitoring is performed at the following locations within the system:

- Combined SVE - Influent (pre-treatment),
- Post groundwater Air-Stripper (pre-treatment),
- Post vapor phase carbon vessel 1 – Air Stripper air discharge (post-treatment),
- Post vapor phase carbon vessel 2 – SVE air discharge (post-treatment),
- Sub-slab monitoring points (pre-treatment),
- SVE wells EPA-SVE-1 through EPA-SVE-4 (Shallow and Medium depth)

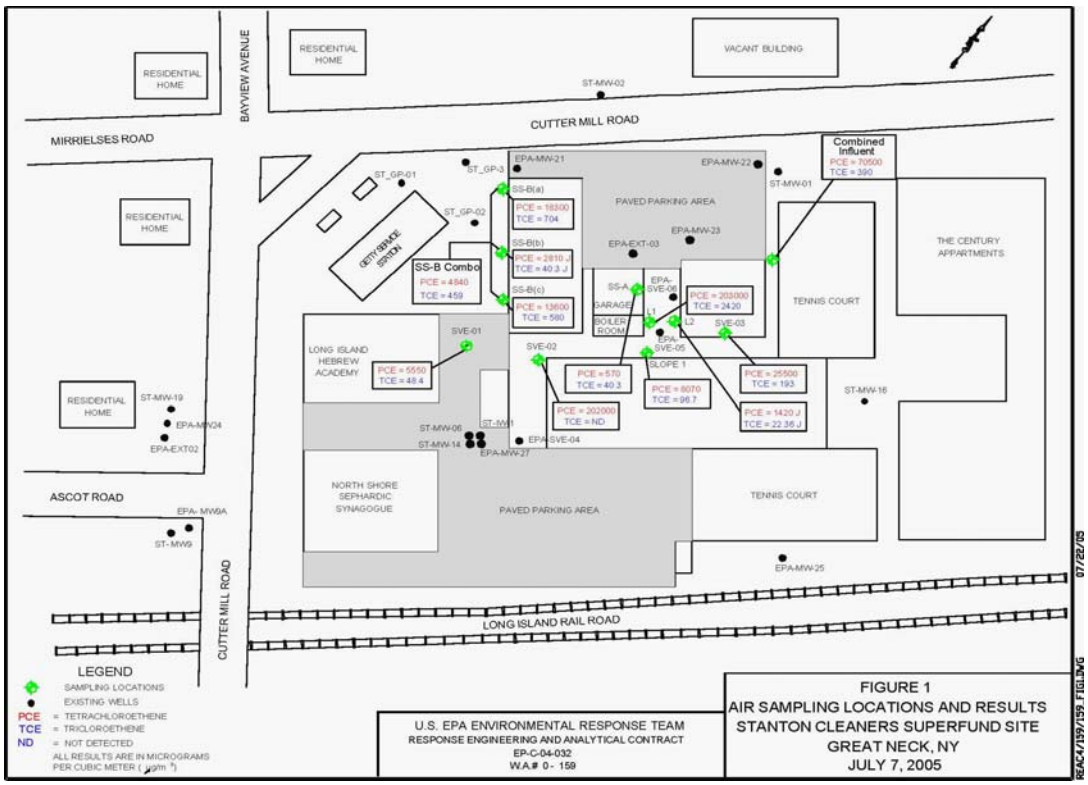
On October 3, 2005, following a review of the REAC SVE System Air Sampling Results for the event performed on July 7, 2005, the active SVE recovery wells were modified in an effort to maximize contaminant recovery rates. Details of the modifications to the active SVE wells prior to and post October 3, 2005 are included in the table below.

Table 1 Modification to Active SVE Wells

SVE Location	Prior to 10/3/05	After 10/3/05
SVE 1	Shallow On	Shallow and Intermediate On
SVE 2	Shallow On	Shallow On
SVE 3	Shallow On	Shallow On
SVE 4	Off	Off
EPA-SVE-4R	On	On
SSA	On	On
SSB-A	On	On
SSB-B	On	Off
SSB-C	On	On
L1	On	On
L2	On	Off

In addition to modifying the active SVE locations, the names of each location were altered in an effort to stay consistent with REAC's nomenclature. Future weekly monitoring logs will be consistent REACs sample numbers. The laboratory analytical results for REAC's sampling of the SVE locations, performed on July, 7, 2005 are included in the figure below (please note the results in the figure are reported in micrograms per cubic meter).

Figure 1 Air Sampling Locations and Results



Additional evaluation/enhancement of the SVE recovery rates is ongoing and the installation of several SVE sample port locations was performed on November 1 and 2, 2005. On January 9, 2006, two more SVE sample port locations were installed in the line of SVE 3. The bi-weekly air monitoring logs are included in Appendix F. Estimated PCE removal rates for the SVE system are presented in Table 1. A Graph showing the estimated PCE removal rate trend over time is presented in Figure 2. The next bi-weekly air-monitoring event is scheduled for July 13, 2006.

4.0 MONITORING WELL SAMPLING

Groundwater samples from select monitoring wells both on and off-site are collected on a quarterly basis and shipped to a designated EPA, CLP lab for analysis. Groundwater sampling activities are performed in accordance with the USEPA Groundwater Sampling SOP #2007 and the USEPA Low-Stress Purging and Sampling SOP provided in the SQAPP. Each quarterly sampling event is coordinated with the local water authority to schedule the event when local water supply drawdown conditions do not impact the measurements. The location and number of monitoring wells as well as analytical parameters will be determined before each event by the USPEA, USACE, and ECC.

The first semi-annual groundwater sampling event of 2005 was conducted by Earth Tech personnel on February 7 through 11, 2005. A total of 25 groundwater monitoring wells were sampled for analysis of the presence of TCL volatiles only. A copy of the full sampling trip report containing the chain of custody forms and FedEx air bills is included in Appendix D.

The second semi-annual groundwater sampling event was performed the week of August 29, 2005. It included sampling 29 monitoring wells, 15 of which had natural attenuation parameter analyses. Laboratory analytical results for this semi-annual groundwater sampling event were sent directly to ECC under separate cover from the laboratory. The next groundwater monitoring well sampling event is scheduled for the week of May 22, 2006. Below is a list of monitoring wells that will be sampled (per RPM selection/request). Also below is a list of monitored well samples that will be further analyzed for monitoring and natural attenuation parameters.

Table 2 Monitored Well Samples for Further Analysis

Wells to be Sampled	Monitoring & Natural Attenuation Parameter Wells
ST-MW-02	CL-ID
EPA-MW-22	EPA-MW-29
EPA-ME-21	ST-MW-20
ST-MW-15	EPA-MW-26
ST-MW-19	EPA-MW-27
ST-MW-12	ST-MW-17
CL-1D	ST-MW-12
EPA-ME-26	ST-MW-19
SSB-C	EPA-MW-21
EPA-MW-23	EPA-MW-9A*
ST-MW-14	
EPA-MW-27	
EPA-MW-9A	
ST-MW-11	
EPA-MW-29	
CL-4D	
ST-MW-20*	
ST-MW-17*	

*as a back-up only in the event another well cannot be sampled)

5.0 PLUME PERIMETER MONITORING

Groundwater level measurements are obtained from both on-site and offsite wells once a month in order to evaluate capture zone(s) around the groundwater extraction wells. The event is coordinated with the local water authority so the event can be scheduled when the local water supply drawdown conditions will have minimal impact to the measurements.

Water level measurements were collected on June 26, 2006. The location and number of monitoring wells was determined by the USEPA based on the site Capture Zone Analysis Plan. Groundwater level measurements for June 26, 2006 and historical groundwater level measurements are provided in Appendix H.

6.0 INDOOR AIR QUALITY SAMPLING

Indoor air quality samples from select locations within the treatment building and buildings along the perimeter of the site are collected using summa canisters on a quarterly basis and shipped to a laboratory for analysis. The location and number of indoor air quality samples to be collected as well as analytical parameters are determined by the USEPA, USACE and ECC.

The last indoor air quality sampling event was conducted on May 31 and June 1, 2006 by Earth Tech personnel. This sampling event was conducted to address air quality issues within the Long Island Hebrew Academy.

7.0 FUTURE EVENTS PLANNED

The following scheduled events are planned (or have since occurred) during the next three reporting periods:

- Continue to perform GWTS inspection and maintenance as required;
- Continue to perform bi-weekly system air monitoring;
- Collect system influent and effluent samples as directed by USACE/ECC/USEPA;
- Obtain groundwater level measurements as directed by USACE/ECC/USEPA;
- Revise O&M manual to reflect changes to GWP&T carbon vessel set-up (April 2006);
- Aqueous and vapor phase carbon change out (July 18, 2006)
- Change out of carbon filters on the roof of the Long Island Hebrew Academy (July 2006)
- Carbon in indoor air filters (R2D2s) change out (Early August)

8.0 PROBLEM AREAS AND RECOMMENDED SOLUTIONS (OUTSTANDING ISSUES)

The altering of the piping for the 2-400 pound aqueous phase carbon vessels from series to parallel was performed in November 2005. A review of flow rates indicated the effluent flow has increased from approximately 60 gpm to 72 gpm following the change. Action List of ongoing and completed items is provided in Appendix J to track work tasks that have been targeted as issues to be addressed.

Monthly O&M performed on November 29, 2005 indicated the low level float switch for the SVE system knockout tank was not functioning. Further inspection performed in December 2005 indicated a replacement was required. A replacement low level float switch was installed on January 9, 2006.

Figures

Tables

Estimated PCE Recovery Rates
Stanton Cleaners Area Groundwater Contamination Site
250 CFM SVE SYSTEM
September 2003 – June 2006

Date	# of Days	Flow Rate (cfm)	Flow Rate Avg (cfm)	VOC Concentration (ppm)	VOC Average (ppm)	VOC Discharge Rate (lbs/day)	VOC Total Discharge (lbs)
9/11/2003	1	225	225	4.2	4.20	0.6	0.6
9/25/2003	13	210	217.5	4.7	4.45	0.6	7.8
10/8/2003	13	213	211.5	5	4.85	0.6	8.2
10/23/2003	15	210	210	12.2	8.6	1.1	16.7
11/5/2003	13	215	212.5	6.8	9.5	1.2	16.2
11/22/2003	17	211	213	6	6.4	0.8	14.3
12/4/2003	12	205	208	5.9	5.95	0.8	9.2
12/17/2003	13	200	202.5	4	4.95	0.6	8.0
12/30/2003	13	210	205	4	4.95	0.6	8.1
1/15/2004	16	205	207.5	4.1	4.05	0.5	8.3
2/5/2004	SVE System Manually Shutdown Since 1/16/04						
2/12/2004	8	200	200	3.5	3.5	0.4	3.5
2/26/2004	14	205	202.5	5.3	4.4	0.6	7.7
3/10/2004	12	200	202.5	5	5.15	0.6	7.7
3/25/2004	15	199	199.5	5.1	5.05	0.6	9.3
4/13/2004	19	175	187	6.3	5.7	0.7	12.5
4/29/2004	16	170	172.5	6	6.15	0.7	10.5
						Total	**148.7**

Notes:

SVE system turned off from 8/24/2004 through 8/31/2004 during tennis court demolition activities.

New SVE well EPA-EXT-04 on-line 11/04/2004

VOC readings taken before vapor phase carbon off-gas treatment.

Deep SVE Wells Closed on 12/10/03 Per OSC's Request

Formula provided by EPA in the "*Elements for Effective Management of Operating Pump and Treatment Systems*" publication.

$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m3}{ft.3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

$$C_{air\ (mg/m3)} = \frac{Conc\ (ppmv)}{1E+06} \times \frac{1\ mole\ air}{24.1\ L} \times \frac{1000\ L}{m3} \times \frac{1000\ mg}{g} \times MW_x$$

Notes:

Mair = mass loading, removal rate in air (lbs/day)

Qair = flow rate in air (cfm)

Cair = contaminant concentration (mg/m3)

MWx = molecular weight in grams/mole, for PCE is 166

Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Fahrenheit (0 degrees Celsius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

Date	# of Days	Flow Rate		VOC			
		(cfm)	Avg (cfm)	Concentration (ppm)	Average (ppm)	Discharge Rate (lbs/day)	Total Discharge (lbs)
5/13/2004	14	150	160	6	6	0.6	8.3
5/30/2004	17	147	148.5	5.9	5.95	0.5	9.3
6/10/2004	11	150	148.5	4.4	5.15	0.5	5.2
6/30/2004	20	145	147.5	5.6	5	0.5	9.1
7/8/2004	8	140	142.5	4.9	5.25	0.5	3.7
7/22/2004	14	139	139.5	4.8	4.85	0.4	5.8
8/9/2004	18	140	139.5	3.1	3.95	0.3	6.1
8/31/2004	1	135	137.5	3	3.05	0.3	0.3
9/8/2004	8	120	127.5	2.9	2.95	0.2	1.9
9/30/2004	22	121	120.5	3.1	3	0.2	4.9
10/4/2004	5	121	121	2.9	3	0.2	1.1
10/20/2004	15	120	120.5	2.8	2.85	0.2	3.2
11/1/2004	12	121	120.5	3	2.9	0.2	2.6
11/17/2004	16	125	123	4.1	3.55	0.3	4.3
11/29/2004	12	120	122.5	4.2	4.15	0.3	3.8
12/7/2004	8	121	120.5	4.2	4.2	0.3	2.5
12/16/2004	9	120	120.5	4.1	4.15	0.3	2.8
						Total	**223.5**

Notes:

SVE system turned off from 8/24/2004 through 8/31/2004 during tennis court demolition activities.

New SVE well EPA-EXT-04 on-line 11/04/2004

VOC readings taken before vapor phase carbon off-gas treatment.

Deep SVE Wells Closed on 12/10/03 Per OSC's Request

Formula provided by EPA in the "*Elements for Effective Management of Operating Pump and Treatment Systems*" publication.

$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m^3}{ft.3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

$$C_{air\ (mg/m3)} = \frac{Conc\ (ppmv)}{1E+06} \times \frac{1\ mole\ air}{24.1\ L} \times \frac{1000\ L}{m3} \times \frac{1000\ mg}{g} \times MW_x$$

Notes:

Mair = mass loading, removal rate in air (lbs/day)

Qair = flow rate in air (cfm)

Cair = contaminant concentration (mg/m3)

MWx = molecular weight in grams/mole, for PCE is 166

Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Fahrenheit (0 degrees Celsius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

Date	# of Days	Flow Rate (cfm)	Flow Rate Avg (cfm)	VOC Concentration (ppm)	VOC Average (ppm)	VOC Discharge Rate (lbs/day)	VOC Total Discharge (lbs)
1/12/2005	27	120	120	4.5	4.3	0.3	8.6
1/17/2005	5	120	120	4.5	4.5	0.3	1.7
2/9/2005	23	120	120	3.9	4.2	0.3	7.2
2/23/2005	14	120	120	3.5	3.7	0.3	3.8
3/2/2005	7	120	120	3.2	3.35	0.2	1.7
3/16/2005	14	120	120	3.5	3.35	0.2	3.5
4/4/2005	19	120	120	3	3.25	0.2	4.6
4/20/2005	16	120	120	2.9	2.95	0.2	3.5
5/3/2005	13	120	120	3.1	3.00	0.2	2.9
5/19/2005	16	120	120	2.9	3.00	0.2	3.6
6/15/2005	26	120	120	1	1.95	0.1	3.8
6/22/2005	7	270	120	8.3	4.65	0.3	2.4
7/25/2005	33	280	275	8.3	8.30	1.4	46.5
8/9/2005	15	290	285	5	6.65	1.2	17.6
8/24/2005	15	290	290	6	5.50	1.0	14.8
9/7/2005	14	260	275	6.5	6.25	1.1	14.9
9/20/2005	13	260	260	6.8	6.65	1.1	13.9
						Total	**378.3**

Notes:

SVE system turned off from 8/24/2004 through 8/31/2004 during tennis court demolition activities.

New SVE well EPA-EXT-04 on-line 11/04/2004

VOC readings taken before vapor phase carbon off-gas treatment.

Deep SVE Wells Closed on 12/10/03 Per OSC's Request

Formula provided by EPA in the "*Elements for Effective Management of Operating Pump and Treatment Systems*" publication.

$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m^3}{ft.^3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

$$C_{air\ (mg/m3)} = \frac{Conc\ (ppmv)}{1E+06} \times \frac{1\ mole\ air}{24.1\ L} \times \frac{1000\ L}{m3} \times \frac{1000\ mg}{g} \times MW_x$$

Notes:

Mair = mass loading, removal rate in air (lbs/day)

Qair = flow rate in air (cfm)

Cair = contaminant concentration (mg/m3)

MWx = molecular weight in grams/mole, for PCE is 166

Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Fahrenheit (0 degrees Celsius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

Date	# of Days	Flow Rate (cfm)	Flow Rate Avg (cfm)	VOC Concentration (ppm)	VOC Average (ppm)	VOC Discharge Rate (lbs/day)	VOC Total Discharge (lbs)
10/3/2005	13	270	265	7.4	7.10	1.2	15.1
10/18/2005	15	240	255	3.7	5.55	0.9	13.1
11/7/2005	20	250	245	1.5	2.60	0.4	7.9
11/29/2005	22	200	225	1.7	1.60	0.2	4.9
12/19/2005	20	305	252.5	14.7	8.20	1.3	25.6
1/4/2006	16	260	282.5	3.4	9.05	1.6	25.3
1/19/2006	15	285	272.5	2.5	2.95	0.5	7.4
1/30/2006	10	275	280	2.2	2.35	0.4	4.1
2/16/2006	17	210	242.5	10.7	6.45	1.0	16.4
2/27/2006	11	275	242.5	2.4	6.55	1.0	10.8
3/23/2006	24	245	260	2.3	2.35	0.4	9.1
4/11/2006	19	245	245	1.6	1.95	0.3	5.6
5/4/2006	23	265	255	0	0.80	0.1	2.9
6/15/2006	42	270	267.5	5	2.50	0.4	17.3
6/26/2006	11	260	265	0	2.50	0.4	4.5
						Total	**548.2**

Notes:

SVE system turned off from 8/24/2004 through 8/31/2004 during tennis court demolition activites.
New SVE well EPA-EXT-04 on-line 11/04/2004
VOC readings taken before vapor phase carbon off-gas treatment.
Deep SVE Wells Closed on 12/10/03 Per OSC's Request
Formula provided by EPA in the "*Elements for Effective Management of Operating Pump and Treatment Systems*" publication.

$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m3}{ft.3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

$$C_{air\ (mg/m3)} = \frac{Conc\ (ppmv)}{1E+06} \times \frac{1\ mole\ air}{24.1\ L} \times \frac{1000\ L}{m3} \times \frac{1000\ mg}{g} \times MW_x$$

Notes:
Mair = mass loading, removal rate in air (lbs/day)
Qair = flow rate in air (cfm)
Cair = contaminant concentration (mg/m3)
MWx = molecular weight in grams/mole, for PCE is 166

Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Farenheit (0 degrees Celcius), the conversion is (1 mole air)/(22.4 L).

Appendices

Appendix A

Daily Quality Control Reports (DQCRs)

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 6/7/06 | **Earth Tech Project No.: 70536**

Day	S	**M**	**T**	**W**	**T**	**F**	**S**
Weather				**RAINY**			
Temp.				**60°F**			
Wind				**SLIGHT**			
Humidity				**80%**			

Earth Tech Personnel On-Site: **Robert Derrick, Chuck Fernald**

Subcontractor (include names & responsibilities): **N/A**

Contract Materials and Equipment on site: **Ford F 150, F-250, general sampling equipment, Horiba U 22, pH 4.0 and 7.0 buffers, general hand tools**

Work Performed (include sampling; list by NAS number if applicable):

Monthly system sampling
O and M Inspection
Cleaned and calibrated pH meter sensors (See special notes)

Quality Control Activities (including field calibrations): **Calibration of Horiba U 22**

Health and Safety Levels and Activities: **Level D**

Problems Encountered/Correction Action Taken: **N/A**

Explain Developments Leading to Change in SOW or Finding of Fact: **N/A**

Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): **N/A**

Have all required submittals and samples of construction been approved? **Yes**

Do the materials and equipment to be used conform to the submittals? **Yes**

Has all preliminary work been inspected, tested, and completed? **Yes**

Test required and inspection techniques to be executed to prove contract compliance (include both expected and actual results): **N/A**

Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 6/7/06 | **Earth Tech Project No.: 70536**

Comments and deficiencies noted and corrective actions taken: **Explained in work performed section.**

Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Special Notes:

The system was shut down and all three pH meter sensors (Recovery Well, Air Stripper and Effluent) were taken out and cleaned. Two of the pH meters are model TB417. These are older models. The manuals recommended not doing a pH buffer calibration with the sensors but instead said that a grab sample calibration was more accurate. These two meters have only been off by a few tenths of a pH unit anyway. The effluent pH meter is a newer model (TB82). This meter has been the most accurate. A two point pH buffer calibration was performed on the Effluent meter. The readings on the meters still do not match the readings of the meters on the PLC so there must be a communication issue between them and the computer.

After the system was turned back on, it was found that air got into the air stripper pump. The lines before the pump and the effluent line were drained. The pump was turned on and off several times to clear it of any air. This fixed the solution, the system was turned back on and is operating normally.

Tomorrow's Expectations:

Bi-weekly air monitoring
Weekly O and M inspection

By: Robert Derrick Title: Environmental Scientist

Signature: Robert Derrick (Quality Control Representative/Manager)

The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.

Signature: (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 6/15/06 | **Earth Tech Project No.: 70536**

Day	S	**M**	**T**	**W**	**T**	**F**	**S**
Weather					**SUNNY**		
Temp.					**65 F**		
Wind					**NONE**		
Humidity					**50%**		

Earth Tech Personnel On-Site: **Robert Derrick, Trip Stakem**

Subcontractor (include names & responsibilities): **N/A**

Contract Materials and Equipment on site: **F 150, MultiRae PID, VelociCalc, air pump and bag, pressure gauge, general hand tools**

Work Performed (include sampling; list by NAS number if applicable):

Weekly O and M inspection
Bi weekly air monitoring

Quality Control Activities (including field calibrations): **Calibrated PID**

Health and Safety Levels and Activities: **Level D**

Problems Encountered/Correction Action Taken: **N/A**

Explain Developments Leading to Change in SOW or Finding of Fact: **N/A**

Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): **N/A**

Have all required submittals and samples of construction been approved? **Yes**

Do the materials and equipment to be used conform to the submittals? **Yes**

Has all preliminary work been inspected, tested, and completed? **Yes**

Test required and inspection techniques to be executed to prove contract compliance (include both expected

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 6/15/06 | **Earth Tech Project No.: 70536**

and actual results): **N/A**

Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**

Comments and deficiencies noted and corrective actions taken: **Explained in work performed section.**

Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Special Notes:

Tomorrow's Expectations:

Weekly o and m inspection

Vapor Phase Carbon Change out (Late June)

Monthly system sampling (early July)

By: Robert Derrick Title: Environmental Scientist

Signature: Robert Derrick (Quality Control Representative/Manager)

The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.

Signature: (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 6/20/06 | **Earth Tech Project No.: 70536**

Day	S	**M**	**T**	**W**	**T**	**F**	**S**
Weather			**SUNNY**				
Temp.			**75 F**				
Wind			**NONE**				
Humidity			**70%**				

Earth Tech Personnel On-Site: **Rob Derrick, Trip Stakem**

Subcontractor (include names & responsibilities): **N/A**

Contract Materials and Equipment on site: **F-150, general hand tools**

Work Performed (include sampling; list by NAS number if applicable):
Weekly O and M inspection

Quality Control Activities (including field calibrations): N/A

Health and Safety Levels and Activities: **Level D**

Problems Encountered/Correction Action Taken: **N/A**

Explain Developments Leading to Change in SOW or Finding of Fact: **N/A**

Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): **N/A**

Have all required submittals and samples of construction been approved? **Yes**

Do the materials and equipment to be used conform to the submittals? **Yes**

Has all preliminary work been inspected, tested, and completed? **Yes**

Test required and inspection techniques to be executed to prove contract compliance (include both expected and actual results): **N/A**

Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY	
Client: ECC	Contract No: 5442-001-001
Contractor: Earth Tech, Inc. Address: 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228 Phone No.: (804) 515-8300	
Date: 6/20/06	**Earth Tech Project No.: 70536**
Comments and deficiencies noted and corrective actions taken: **Explained in work performed section.**	
Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.	
Explained in work performed section.	
Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.	
Special Notes:	
Tomorrow's Expectations:	
Bi weekly air monitoring	
O and M inspection	
Vapor Phase Carbon change out (Late June)	
Monthly System sampling (early July)	
By: Robert Derrick	Title: Environmental Scientist
Signature: Robert Derrick	(Quality Control Representative/Manager)
The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.	
Signature:	(Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 6/26/06 | **Earth Tech Project No.: 70536**

Day	S	**M**	**T**	**W**	**T**	**F**	**S**
Weather		**CLOUDY**					
Temp.		**80 F**					
Wind		**5-10 MPH**					
Humidity		**70%**					

Earth Tech Personnel On-Site: **Rob Derrick, Trip Stakem**

Subcontractor (include names & responsibilities): **N/A**

Contract Materials and Equipment on site: **F-150, VelociCalc, MultiRae PID, air pump, sample bag, pressure gauge, water level tape, general hand tools**

Work Performed (include sampling; list by NAS number if applicable):

Weekly O and M inspection
Bi weekly Air Monitoring
Monthly Water Level Gauging (6-27-06)
Finished Calibrating pH and Conductivity Meters

Quality Control Activities (including field calibrations): **Calibrated PID and Horiba (2 point pH calibration and general calibration)**

Health and Safety Levels and Activities: **Level D**

Problems Encountered/Correction Action Taken: **N/A**

Explain Developments Leading to Change in SOW or Finding of Fact: **N/A**

Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): **N/A**

Have all required submittals and samples of construction been approved? **Yes**

Do the materials and equipment to be used conform to the submittals? **Yes**

Has all preliminary work been inspected, tested, and completed? **Yes**

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 6/26/06 | **Earth Tech Project No.: 70536**

Test required and inspection techniques to be executed to prove contract compliance (include both expected and actual results): **N/A**

Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**

Comments and deficiencies noted and corrective actions taken: **Explained in work performed section.**

Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Special Notes:

Tomorrow's Expectations:

O and M inspection
Vapor Phase Carbon change out (Late June)
Monthly System sampling (early July)

By: Robert Derrick Title: Environmental Scientist

Signature: Robert Derrick (Quality Control Representative/Manager)

The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.

Signature: (Contractor's Authorized Representative)

Appendix B

Groundwater Treatment System Operation & Maintenance Checklists

6/7/06

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES X NO
If so, list where._____

B. Is there water on the floor? YES X NO
If so, list where._____

C. Are all three (3) floor sump level switches in place? X YES NO

D. Is there any evidence of water in any of these floor sumps? YES X NO
Note: If water is present, remove with shop vac or paper towels.

2. A. Display screen on computer will either show system or screen saver. If screen saver is on, tap screen with finger to show screen. If only the desktop is showing with no system screen, click the *Lookout – (Stanton)* icon on the taskbar at the bottom of the screen.

B. From the site display, monitor and record the following.

1. Recovery Well EPA-EXT-02 flow[1] _____60_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well EPA-EXT-4R flow _____ GPM
4. Recovery Well EPA-EXT-4R valve open _____ %
5. Recovery Well pH _____8.3_____ pH
6. Recovery Well conductivity _____148_____ cond
7. Air Stripper pH _____10.1_____ pH
8. Air Stripper temperature _____174_____ deg.
9. Air Stripper air flow _____358_____ CFM
10. Pre-vapor carbon pressure _____0_____ "wc
11. Post carbon air flow _____2746_____ CFM
12. Discharge conductivity _____152_____ cond
13. Discharge pH _____9.4_____ pH
14. Discharge flow _____68_____ GPM
15. Discharge total gallons _____128,143,245_____ Gal
16. SVE inlet vacuum _____4_____ "Hg

[1] *Wells EPA-EXT-02 and MW-24 wells are manifold together in the field and are piped into the treatment building together. The EPA-EXT-02 water flow meter is therefore actually displaying and totalizing the output of both wells.*

17. SVE air flow _____500_____ CFM

C. From the treatment room, monitor and record the following.

1. Recovery Well EPA-EXT-02 total flow _____10606200 ____ Gal
2. Recovery Well EPA-EXT-03 total flow _____ ___ Gal
3. Recovery Well pH _____6.89_____ pH
4. Recovery Well conductivity _____0.68_____ cond
5. Air Stripper pH _____8.44_____ pH
6. Air Stripper temperature _____15.4_____ deg. F
7. Air Stripper Pump water flow _____70_____ GPM
8. Air Stripper Pump pressure _____29_____ PSI
9. Discharge conductivity ____0.65____ cond
10. Discharge pH _____7.77_____ pH
11. SVE inlet vacuum (digital readout) _____01.8_____ "Hg
12. SVE inlet vacuum _____3.0_____ "Hg
13. SVE post knockout vacuum _____4.5_____ "Hg

3. A. If time allows, check to see that the treatment system is cycling properly as described in STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE O&M MANUAL

6/15/06

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES XNO
If so, list where._____

B. Is there water on the floor? YES XNO
If so, list where._____

C. Are all three (3) floor sump level switches in place? XYES NO

D. Is there any evidence of water in any of these floor sumps? YES XNO
Note: If water is present, remove with shop vac or paper towels.

2. A. Display screen on computer will either show system or screen saver. If screen saver is on, tap screen with finger to show screen. If only the desktop is showing with no system screen, click the *Lookout – (Stanton)* icon on the taskbar at the bottom of the screen.

B. From the site display, monitor and record the following.

1. Recovery Well EPA-EXT-02 flow[1] _____50_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well EPA-EXT-4R flow _____ GPM
4. Recovery Well EPA-EXT-4R valve open _____ %
5. Recovery Well pH _____7.2_____ pH
6. Recovery Well conductivity _____157_____ cond
7. Air Stripper pH _____8.8_____ pH
8. Air Stripper temperature _____174_____ deg.
9. Air Stripper air flow _____354_____ CFM
10. Pre-vapor carbon pressure _____0_____ “wc
11. Post carbon air flow _____2546_____ CFM
12. Discharge conductivity _____159_____ cond
13. Discharge pH _____9.2_____ pH
14. Discharge flow _____60_____ GPM
15. Discharge total gallons ___126877120_____ Gal
16. SVE inlet vacuum _____4_____ “Hg

[1] *Wells EPA-EXT-02 and MW-24 wells are manifold together in the field and are piped into the treatment building together. The EPA-EXT-02 water flow meter is therefore actually displaying and totalizing the output of both wells.*

17. SVE air flow _____500_____ CFM

C. From the treatment room, monitor and record the following.

1. Recovery Well EPA-EXT-02 total flow ____1178700_____ Gal
2. Recovery Well EPA-EXT-03 total flow _____ ___ Gal
3. Recovery Well pH _____ __5.85_____ pH
4. Recovery Well conductivity _____0.74_____ cond
5. Air Stripper pH _____ 7.22_____ pH
6. Air Stripper temperature _____15.5_____ deg. F
7. Air Stripper Pump water flow _____ GPM
8. Air Stripper Pump pressure _____28_____ PSI
9. Discharge conductivity ____0.69____ cond
10. Discharge pH _____ 7.59_____ pH
11. SVE inlet vacuum (digital readout) _____01.5_____ "Hg
12. SVE inlet vacuum _____2.5_____ "Hg
13. SVE post knockout vacuum _____5.0_____ "Hg

3. A. If time allows, check to see that the treatment system is cycling properly as described in STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE O&M MANUAL

6/20/06

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES X NO
If so, list where._____

B. Is there water on the floor? YES XNO
If so, list where._____

C. Are all three (3) floor sump level switches in place? XYES NO

D. Is there any evidence of water in any of these floor sumps? YES X NO
Note: If water is present, remove with shop vac or paper towels.

2. A. Display screen on computer will either show system or screen saver. If screen saver is on, tap screen with finger to show screen. If only the desktop is showing with no system screen, click the *Lookout – (Stanton)* icon on the taskbar at the bottom of the screen.

B. From the site display, monitor and record the following.

1. Recovery Well EPA-EXT-02 flow[1] _____53_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well EPA-EXT-4R flow _____ GPM
4. Recovery Well EPA-EXT-4R valve open _____ %
5. Recovery Well pH __7.2_____ pH
6. Recovery Well conductivity _____162_____ cond
7. Air Stripper pH _____ 8.8_____ pH
8. Air Stripper temperature _____179_____ deg.
9. Air Stripper air flow _____413_____ CFM
10. Pre-vapor carbon pressure _____0_____ "wc
11. Post carbon air flow _____2394_____ CFM
12. Discharge conductivity _____168_____ cond
13. Discharge pH _____9.2_____ pH
14. Discharge flow _____69_____ GPM
15. Discharge total gallons _____127268884_____ Gal
16. SVE inlet vacuum _____4_____ "Hg

[1] *Wells EPA-EXT-02 and MW-24 wells are manifold together in the field and are piped into the treatment building together. The EPA-EXT-02 water flow meter is therefore actually displaying and totalizing the output of both wells.*

17. SVE air flow _____500_____ CFM

C. From the treatment room, monitor and record the following.

1. Recovery Well EPA-EXT-02 total flow ____1532100_____ Gal
2. Recovery Well EPA-EXT-03 total flow _____ ___ Gal
3. Recovery Well pH _____ __5.85_____ pH
4. Recovery Well conductivity _____0.74_____ cond
5. Air Stripper pH _____ 7.17_____ pH
6. Air Stripper temperature _____15.8_____ deg. F
7. Air Stripper Pump water flow _____ GPM
8. Air Stripper Pump pressure _____27_____ PSI
9. Discharge conductivity ___0.73_____ cond
10. Discharge pH _____ 7.55_____ pH
11. SVE inlet vacuum (digital readout) _____01.5_____ “Hg
12. SVE inlet vacuum _____2.5_____ “Hg
13. SVE post knockout vacuum _____5.0_____ “Hg

3. A. If time allows, check to see that the treatment system is cycling properly as described in STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE O&M MANUAL

6/26/06

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES X NO
If so, list where._____

B. Is there water on the floor? YES XNO
If so, list where._____

C. Are all three (3) floor sump level switches in place? XYES NO

D. Is there any evidence of water in any of these floor sumps? YES X NO
Note: If water is present, remove with shop vac or paper towels.

2. A. Display screen on computer will either show system or screen saver. If screen saver is on, tap screen with finger to show screen. If only the desktop is showing with no system screen, click the *Lookout – (Stanton)* icon on the taskbar at the bottom of the screen.

B. From the site display, monitor and record the following.

1. Recovery Well EPA-EXT-02 flow[1] _____49_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well EPA-EXT-4R flow _____ GPM
4. Recovery Well EPA-EXT-4R valve open _____ %
5. Recovery Well pH ___8.1_____ pH
6. Recovery Well conductivity _____170_____ cond
7. Air Stripper pH _____ 9.1_____ pH
8. Air Stripper temperature _____182_____ deg.
9. Air Stripper air flow _____398_____ CFM
10. Pre-vapor carbon pressure _____0_____ "wc
11. Post carbon air flow _____2604_____ CFM
12. Discharge conductivity _____176____ cond
13. Discharge pH _____8.6_____ pH
14. Discharge flow _____70_____ GPM
15. Discharge total gallons _____127773948_____ Gal
16. SVE inlet vacuum _____4_____ "Hg

[1] *Wells EPA-EXT-02 and MW-24 wells are manifold together in the field and are piped into the treatment building together. The EPA-EXT-02 water flow meter is therefore actually displaying and totalizing the output of both wells.*

17. SVE air flow _____500_____ CFM

C. From the treatment room, monitor and record the following.

1. Recovery Well EPA-EXT-02 total flow ____198700_____ Gal
2. Recovery Well EPA-EXT-03 total flow _____ ___ Gal
3. Recovery Well pH _____ _5.96_____ pH
4. Recovery Well conductivity _____0.74_____ cond
5. Air Stripper pH _____ 7.29_____ pH
6. Air Stripper temperature _____15.8_____ deg. F
7. Air Stripper Pump water flow _____ GPM
8. Air Stripper Pump pressure _____28_____ PSI
9. Discharge conductivity ____0.73____ cond
10. Discharge pH _____6.89 _____ pH
11. SVE inlet vacuum (digital readout) _____01.5_____ "Hg
12. SVE inlet vacuum _____2.5_____ "Hg
13. SVE post knockout vacuum _____5.0_____ "Hg

3. A. If time allows, check to see that the treatment system is cycling properly as described in STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE O&M MANUAL

Appendix C

Groundwater Treatment System Downloaded Operational Data

Stanton Cleaners Groundwater Contamination Site - June 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow
	Flow (GPM)	Flow (GPM)	Flow (GPM)	Flow (GPM)	Flow (CFM)	Temperature (deg F)			pH	pH	pH				
6/1/2006 0:00	0	0	61	64	2447	168	127	132	8.1	9.4	8.8	127599419.4	349	2447	500
6/1/2006 4:00	0	0	60	64	2870	167	126	132	8.1	9.4	8.8	127615006.6	381	2870	500
6/1/2006 8:00	0	0	58	67	2544	168	127	135	8.1	9.4	8.8	127630579.1	331	2544	500
6/1/2006 12:00	0	0	58	65	2546	171	132	142	8.2	9.5	8.9	127646157.4	332	2546	500
6/1/2006 16:00	0	0	51	69	2728	169	127	141	8	9.7	8.9	127661187.7	298	2728	500
6/1/2006 20:00	0	0	49	67	2447	168	127	139	8	9.7	8.8	127674474.3	447	2447	500
6/2/2006 0:00	0	0	50	5	2555	168	127	138	7.9	9.7	8.8	127688003.8	379	2555	500
6/2/2006 4:00	0	0	50	65	2546	168	126	135	7.9	9.6	8.8	127701454.9	388	2546	500
6/2/2006 8:00	0	0	50	65	2748	168	127	136	7.9	9.6	8.8	127714891.7	352	2748	500
6/2/2006 12:00	0	0	51	6	2447	169	127	137	7.9	9.6	8.8	127728381.1	328	2447	500
6/2/2006 16:00	0	0	50	65	2447	168	126	136	7.9	9.6	8.8	127741669.1	388	2447	500
6/2/2006 20:00	0	0	52	67	2438	167	124	132	7.9	9.6	8.8	127755209.6	384	2438	500
6/3/2006 0:00	0	0	51	66	2691	167	125	133	7.9	9.6	8.8	127768753.3	359	2691	500
6/3/2006 4:00	0	0	51	9	2693	166	126	132	7.9	9.6	8.8	127782050.1	402	2693	500
6/3/2006 8:00	0	0	51	67	2447	165	125	129	7.9	9.6	8.8	127795632	337	2447	500
6/3/2006 12:00	0	0	51	0	2601	168	127	133	7.9	9.6	8.8	127809169.5	419	2601	500
6/3/2006 16:00	0	0	51	67	2396	168	126	131	7.9	9.6	8.8	127822597.1	364	2396	500
6/3/2006 20:00	0	0	50	0	2546	166	127	132	7.9	9.6	8.8	127836044.3	356	2546	500
6/4/2006 0:00	0	0	51	70	2447	165	127	130	7.9	9.7	8.9	127849577.3	392	2447	500
6/4/2006 4:00	0	0	50	65	2548	166	128	130	7.9	9.7	8.9	127862959.3	439	2548	500
6/4/2006	0	0	49	67	2689	166	130	133	8	9.7	8.9	127876356.	338	2689	500

8:00												3			
6/4/2006 12:00	0	0	51	69	2396	166	127	130	7.9	9.7	8.8	127889750.5	464	2396	500
6/4/2006 16:00	0	0	50	0	2396	167	128	133	8	9.7	8.9	127903135.8	340	2396	500
6/4/2006 20:00	0	0	49	69	2746	167	127	131	7.9	9.7	8.8	127916780.1	286	2746	500
6/5/2006 0:00	0	0	50	68	2498	167	127	132	7.9	9.7	8.8	127930127.7	393	2498	500
6/5/2006 4:00	0	0	50	67	2744	167	127	131	7.9	9.6	8.8	127943480.5	376	2744	500
6/5/2006 8:00	0	0	53	69	2544	165	128	131	7.9	9.6	8.8	127956800.3	398	2544	500
6/5/2006 12:00	0	0	51	65	2746	167	130	134	8	9.7	8.9	127970391.4	368	2746	500
6/5/2006 16:00	0	0	51	67	2691	167	130	135	8	9.7	8.9	127983689.3	301	2691	500
6/5/2006 20:00	0	0	51	0	2546	167	127	133	8	9.7	8.9	127996997.1	381	2546	500
6/6/2006 0:00	0	0	51	66	2447	168	129	132	8	9.7	8.9	128010558.9	404	2447	500
6/6/2006 4:00	0	0	54	68	2551	165	127	129	7.9	9.6	8.8	128024157.1	419	2551	500
6/6/2006 8:00	0	0	50	66	2544	167	127	132	7.9	9.6	8.8	128037456.8	434	2544	500
6/6/2006 12:00	0	0	53	66	2601	168	130	136	8	9.7	8.9	128051014.6	388	2601	500
6/6/2006 16:00	0	0	52	71	2546	168	129	136	8	9.7	8.9	128064283	342	2546	500
6/6/2006 20:00	0	0	50	66	2691	167	128	134	8	9.7	8.9	128077841.5	424	2691	500
6/7/2006 0:00	0	0	52	66	2544	167	128	131	8	9.7	8.8	128091395.2	412	2544	500
6/7/2006 4:00	0	0	52	70	2645	168	129	133	8	9.7	8.8	128104704.1	399	2645	500
6/7/2006 8:00	0	0	50	70	2601	167	128	132	8	9.7	8.9	128118293.7	428	2601	500
6/7/2006 12:00	0	0	53	48	2732	170	136	141	8.1	9.9	9.1	128129447.9	367	2732	500
6/7/2006 16:00	0	0	50	67	2551	173	147	151	8.3	10.1	9.4	128142967.6	388	2551	500
6/7/2006 20:00	0	0	50	70	2546	173	148	150	8.3	10.1	9.4	128156519.7	403	2546	86
6/8/2006 0:00	0	0	51	67	2551	174	149	152	8.3	10.1	9.4	128169852.8	452	2551	500
6/8/2006 4:00	0	0	51	69	2447	173	149	152	8.3	10.1	9.4	128183479.4	361	2447	500
6/8/2006 8:00	0	0	52	65	2551	173	146	149	8.3	10.1	9.3	128196856.4	381	2551	500

6/8/2006 12:00	0	0	51	65	2771	174	148	153	8.3	10.1	9.4	128210482.3	346	2771	500
6/8/2006 16:00	0	0	51	70	2748	174	148	154	8.3	10.1	9	128223828.9	371	2748	500
6/8/2006 20:00	0	0	50	68	2447	174	148	152	8.3	10.1	9	128237157.6	297	2447	500
6/9/2006 0:00	0	0	50	67	2553	174	147	151	8.3	10.1	9	128250784.2	424	2553	500
6/9/2006 4:00	0	0	54	66	2691	173	145	148	8.3	10	8.9	128264174.3	406	2691	500
6/9/2006 8:00	0	0	54	68	2551	174	148	153	8.3	10.1	9	128277799.9	372	2551	500
6/9/2006 12:00	0	0	49	69	2546	174	149	154	8.3	10.1	9	128291177.6	366	2546	500
6/9/2006 16:00	0	0	52	70	2544	174	147	152	8.3	10.1	9	128304538	353	2544	500
6/9/2006 20:00	0	0	52	69	2594	174	146	151	8.3	10.1	9	128317911.2	399	2594	500
6/10/2006 0:00	0	0	50	65	2500	173	147	152	8.3	10.1	9	128331570.2	317	2500	500
6/10/2006 4:00	0	0	50	69	2744	171	146	148	8.3	10.1	8.9	128344966.5	393	2744	500
6/10/2006 8:00	0	0	51	65	2546	172	147	148	8.3	10.1	9	128358631.8	420	2546	500
6/10/2006 12:00	0	0	50	68	2440	173	148	150	8.3	10.1	9	128371974.8	369	2440	500
6/10/2006 16:00	0	0	50	0	2601	172	148	151	8.3	10.2	9	128385375.6	420	2601	500
6/10/2006 20:00	0	0	52	68	2544	172	147	148	8.3	10.1	9	128398883.8	371	2544	500
6/11/2006 0:00	0	0	50	65	2868	171	148	148	8.3	10.1	9	128412450.8	373	2868	500
6/11/2006 4:00	0	0	50	4	2551	172	150	149	8.3	10.2	9	128425964.3	423	2551	500
6/11/2006 8:00	0	0	52	66	2774	173	153	154	8.4	10.2	9.1	128439305.3	305	2774	500
6/11/2006 12:00	0	0	51	68	2746	172	150	152	8.4	10.2	9	128452858.2	354	2746	500
6/11/2006 16:00	0	0	51	72	2601	174	149	154	8.4	10.2	9.1	128466129.8	348	2601	500
6/11/2006 20:00	0	0	53	66	2748	174	148	152	8.4	10.2	9	128479679.5	367	2748	500
6/12/2006 0:00	0	0	51	67	2551	172	149	151	8.4	10.2	9	128493231.1	409	2551	500
6/12/2006 4:00	0	0	51	0	2774	172	149	150	8.3	10.1	9	128506723.6	472	2774	500
6/12/2006 8:00	0	0	52	66	2601	173	150	154	8.4	10.2	9	128520076.5	398	2601	500
6/12/200	0	0	50	65	2746	175	151	156	8.4	10.2	9.1	128533641.	429	2746	500

6 12:00												1			
6/12/2006 16:00	0	0	51	65	2546	175	160	160	7.2	8.8	9.2	128546942.3	349	2546	500
6/12/2006 20:00	0	0	53	67	2396	175	159	160	7.2	8.8	9.2	128560520	325	2396	500
6/13/2006 0:00	0	0	50	68	2546	175	159	158	7.2	8.7	9.2	128573820.6	369	2546	500
6/13/2006 4:00	0	0	49	66	2553	175	159	158	7.2	8.7	9.2	128587391.3	404	2553	500
6/13/2006 8:00	0	0	50	69	2553	176	161	160	7.2	8.8	9.2	128600733.9	363	2553	500
6/13/2006 12:00	0	0	51	0	2544	177	162	162	7.2	8.8	9.2	128614275.5	379	2544	500
6/13/2006 16:00	0	0	50	70	2751	176	160	160	7.2	8.8	9.2	128627757.9	412	2751	500
6/13/2006 20:00	0	0	51	70	2447	176	158	160	7.2	8.8	9.2	128640975.9	384	2447	500
6/14/2006 0:00	0	0	51	68	2546	176	160	162	7.2	8.8	9.2	128654485.1	328	2546	500
6/14/2006 4:00	0	0	53	69	2447	176	161	162	7.2	8.8	9.2	128667990.3	331	2447	500
6/14/2006 8:00	0	0	54	4	2748	174	154	156	7.1	8.6	9.1	128681454.3	399	2748	500
6/14/2006 12:00	0	0	50	67	2748	164	122	125	6.6	8.1	8.5	128694736.8	394	2748	500
6/14/2006 16:00	0	0	53	67	2442	170	139	140	6.8	8.4	8.8	128708227.3	381	2442	500
6/14/2006 20:00	0	0	51	66	2691	165	132	132	6.8	8.3	8.7	128721708.2	404	2691	500
6/15/2006 0:00	0	0	52	70	2691	164	125	125	6.6	8.1	8.5	128735178.7	401	2691	500
6/15/2006 4:00	0	0	51	68	2546	163	123	123	6.6	8.1	8.5	126846743.1	432	2546	500
6/15/2006 8:00	0	0	51	68	2544	167	131	131	6.7	8.2	8.7	126860207	336	2544	500
6/15/2006 12:00	0	0	50	67	2774	176	159	160	7.2	8.8	9.2	126873663.2	364	2774	500

6/15/2006 16:00	0	0	52	66	2507	175	157	158	7.2	8.8	9.2	126887083.9	467	2507	500
6/15/2006 20:00	0	0	51	67	2546	174	159	158	7.2	8.7	9.2	126900509.8	337	2546	500
6/16/2006 0:00	0	0	53	66	2866	175	160	158	7.2	8.8	9.2	126913941.3	452	2866	500
6/16/2006 4:00	0	0	51	69	2546	174	160	158	7.2	8.7	9.2	126927345.5	429	2546	500
6/16/2006	0	0	54	5	2544	176	162	160	7.2	8.8	9.2	126940988.1	428	2544	500

8:00															
6/16/2006 12:00	0	0	49	67	2447	176	163	164	7.2	8.8	9.3	126954453.6	357	2447	500
6/16/2006 16:00	0	0	54	65	2555	175	162	162	7.2	8.8	9.3	126967831.6	333	2555	500
6/16/2006 20:00	0	0	51	70	2746	176	160	161	7.2	8.8	9.2	126981190.1	394	2746	500
6/17/2006 0:00	0	0	51	67	2553	174	160	159	7.2	8.7	9.2	126994560.3	401	2553	500
6/17/2006 4:00	0	0	51	65	2774	175	159	158	7.2	8.7	9.2	127008198	448	2774	500
6/17/2006 8:00	0	0	49	66	2546	177	162	162	7.2	8.7	9.2	127021560.2	414	2546	500
6/17/2006 12:00	0	0	52	66	2544	177	164	165	7.2	8.8	9.2	127034904.7	337	2544	500
6/17/2006 16:00	0	0	52	0	2546	178	163	165	7.3	8.8	9.3	127048369.3	394	2546	500
6/17/2006 20:00	0	0	52	68	2447	178	163	166	7.3	8.8	9.3	127061830.1	428	2447	500
6/18/2006 0:00	0	0	51	65	2873	177	163	164	7.2	8.8	9.2	127075118.8	404	2873	500
6/18/2006 4:00	0	0	52	66	2693	176	160	162	7.2	8.8	9.2	127088676.1	376	2693	500
6/18/2006 8:00	0	0	50	68	2546	178	162	165	7.2	8.8	9.2	127101958.1	348	2546	500
6/18/2006 12:00	0	0	52	66	2447	179	163	168	7.3	8.8	9.3	127115508.7	378	2447	500
6/18/2006 16:00	0	0	52	0	2509	178	161	167	7.2	8.8	9.2	127128924.1	394	2509	500
6/18/2006 20:00	0	0	51	65	2509	178	161	166	7.2	8.8	9.2	127142268	330	2509	500
6/19/2006 0:00	0	0	52	65	2447	179	164	167	7.3	8.8	9.3	127155778.5	367	2447	500
6/19/2006 4:00	0	0	51	9	2505	177	162	167	7.2	8.8	9.2	127169279.7	313	2505	500
6/19/2006 8:00	0	0	51	66	2447	179	162	166	7.2	8.8	9.2	127182515.9	331	2447	500
6/19/2006 12:00	0	0	52	66	2558	178	163	168	7.2	8.8	9.3	127196053.6	407	2558	500
6/19/2006 16:00	0	0	52	68	2447	179	161	166	7.2	8.8	9.3	127209448.8	427	2447	500
6/19/2006 20:00	0	0	51	71	2555	178	163	165	7.2	8.8	9.3	127222931.2	388	2555	500
6/20/2006 0:00	0	0	53	10	2555	178	161	164	7.2	8.8	9.2	127236413.9	397	2555	500
6/20/2006 4:00	0	0	51	68	2571	178	162	166	7.2	8.7	9.2	127249667.5	422	2571	500
6/20/2006 8:00	0	0	51	71	2546	179	163	168	7.2	8.8	9.3	127263236.1	381	2546	500

6/20/2006 12:00	0	0	51	70	2396	177	162	165	7.2	8.8	9.2	127276529.9	372	2396	500
6/20/2006 16:00	0	0	51	69	2507	178	162	167	7.2	8.8	9.3	127290125.9	409	2507	500
6/20/2006 20:00	0	0	50	68	2256	177	162	165	7.2	8.8	9.3	127303466.7	357	2256	500
6/21/2006 0:00	0	0	53	68	2447	176	162	165	7.2	8.8	9.2	127316767.1	371	2447	500
6/21/2006 4:00	0	0	54	69	2691	177	163	164	7.2	8.8	9.2	127330395.4	415	2691	500
6/21/2006 8:00	0	0	49	70	2553	177	164	164	7.2	8.8	9.3	127343693.8	490	2553	500
6/21/2006 12:00	0	0	50	69	2544	178	166	167	7.3	8.9	9.3	127357226.6	383	2544	500
6/21/2006 16:00	0	0	51	68	2256	178	164	166	7.3	8.9	9.3	127370458.1	403	2256	500
6/21/2006 20:00	0	0	51	67	2546	176	163	164	7.2	8.8	9.3	127383963.5	420	2546	500
6/22/2006 0:00	0	0	54	67	2748	177	165	166	7.3	8.8	9.3	127397482.6	414	2748	500
6/22/2006 4:00	0	0	52	1	2601	178	165	167	7.3	8.8	9.3	127410912.4	397	2601	500
6/22/2006 8:00	0	0	50	70	2546	179	165	168	7.3	8.8	9.3	127424181	392	2546	500
6/22/2006 12:00	0	0	51	66	2601	180	166	171	7.3	8.9	9.3	127437651.3	445	2601	500
6/22/2006 16:00	0	0	49	65	2509	180	165	172	7.3	8.9	9.3	127451107.7	414	2509	500
6/22/2006 20:00	0	0	52	66	2753	166	128	133	6.7	8.2	7.9	127464525.5	392	2753	500
6/23/2006 0:00	0	0	52	66	2447	163	115	118	6.5	7.9	7.6	127477914.3	392	2447	500
6/23/2006 4:00	0	0	50	67	2396	161	111	115	6.4	7.8	7.5	127491284.2	425	2396	500
6/23/2006 8:00	0	0	50	67	2546	161	110	114	6.4	7.8	7.5	127504658.6	373	2546	500
6/23/2006 12:00	0	0	52	0	2546	159	101	105	6.2	7.7	7.4	127518124.9	417	2546	500
6/23/2006 16:00	0	0	52	66	2447	159	93	98	6.1	7.5	7.2	127531721	423	2447	500
6/23/2006 20:00	0	0	51	69	2546	159	85	89	6	7.4	7.1	127545083.6	459	2546	500
6/24/2006 0:00	0	0	50	68	2555	159	88	93	6	7.4	7.1	127558436.7	417	2555	500
6/24/2006 4:00	0	0	50	0	2502	159	93	96	6.1	7.5	7.2	127571944.1	379	2502	500
6/24/2006 8:00	0	0	54	66	2507	159	95	100	6.1	7.5	7.2	127585435.4	410	2507	500
6/24/2006	0	0	52	69	2601	160	95	100	6.1	7.6	7.2	127598762.4	403	2601	500

12:00															
6/24/2006 16:00	0	0	49	70	2546	159	95	98	6.1	7.5	7.2	127612378.7	413	2546	500
6/24/2006 20:00	0	0	52	66	2870	159	96	99	6.1	7.5	7.2	127625735.4	337	2870	500
6/25/2006 0:00	0	0	54	0	2546	159	100	104	6.2	7.6	7.3	127639117.5	433	2546	500
6/25/2006 4:00	0	0	50	69	2601	159	104	105	6.2	7.6	7.4	127652674.3	420	2601	500
6/25/2006 8:00	0	0	53	66	2548	160	105	108	6.3	7.7	7.4	127665992.8	443	2548	500
6/25/2006 12:00	0	0	51	70	2544	160	105	109	6.3	7.7	7.4	127679580.6	420	2544	500
6/25/2006 16:00	0	0	50	68	2574	160	101	105	6.2	7.7	7.3	127692904.1	386	2574	500
6/25/2006 20:00	0	0	52	72	2396	159	98	102	6.2	7.6	7.3	127706219.9	452	2396	500
6/26/2006 0:00	0	0	51	70	2585	159	102	105	6.2	7.7	7.4	127719822.9	399	2585	500
6/26/2006 4:00	0	0	50	66	2551	159	105	108	6.3	7.7	7.4	127733166.7	420	2551	500
6/26/2006 8:00	0	0	51	66	2445	166	124	127	6.6	8.1	7.8	127746793.1	320	2445	500
6/26/2006 12:00	0	0	50	67	2546	182	170	175	8.1	9.1	8.6	127760123.2	388	2546	500
6/26/2006 16:00	0	0	52	65	2505	182	171	177	8.1	9.1	8.6	127773444.8	373	2505	500
6/26/2006 20:00	0	0	50	69	2555	181	170	175	8.1	9.1	8.6	127787041.4	398	2555	500
6/27/2006 0:00	0	0	50	65	2396	181	170	173	8.1	9	8.6	127800385.7	326	2396	500
6/27/2006 4:00	0	0	50	8	2507	181	170	175	8.1	9.1	8.6	127813982.5	377	2507	500
6/27/2006 8:00	0	0	50	67	2447	179	163	168	7.9	8.9	8.5	127827372.9	412	2447	500
6/27/2006 12:00	0	0	52	67	2396	167	124	130	7.3	8.2	7.8	127840715.6	352	2396	500
6/27/2006 16:00	0	0	54	68	2546	175	148	153	7.6	8.6	8.2	127854025.4	394	2546	500
6/27/2006 20:00	0	0	50	65	2742	181	170	175	8	9.1	8.6	127867641	396	2742	500
6/28/2006 0:00	0	0	51	69	2447	181	171	175	8	9.1	8.6	127880954.1	363	2447	500
6/28/2006 4:00	0	0	54	7	2748	180	169	174	8	9.1	8.6	127894541.1	389	2748	500
6/28/2006 8:00	0	0	52	69	2553	181	170	174	8	9.1	8.6	127907905.7	333	2553	500
6/28/2006 12:00	0	0	50	65	2555	182	171	177	8	9.1	8.6	127921214	344	2555	500

6/28/2006 16:00	0	0	51	65	2396	182	169	177	8.1	9.1	8.6	127934799.9	389	2396	500
6/28/2006 20:00	0	0	53	67	2604	181	169	175	8.1	9	8.6	127948133.1	392	2604	500
6/29/2006 0:00	0	0	52	65	2472	181	171	175	8.1	9	8.6	127961720.1	327	2472	500
6/29/2006 4:00	0	0	53	65	2396	181	171	175	8.1	9	8.6	127975032.7	437	2396	500
6/29/2006 8:00	0	0	52	66	2546	181	171	175	8.1	9	8.6	127988619.6	335	2546	500
6/29/2006 12:00	0	0	52	67	2449	182	171	178	8.1	9.1	8.6	128001939	376	2449	500
6/29/2006 16:00	0	0	50	67	2507	176	156	160	7.9	8.8	8.4	128015492.2	331	2507	500
6/29/2006 20:00	0	0	52	66	2774	163	120	123	7.2	8.1	7.7	128028795.8	393	2774	500
6/30/2006 0:00	0	0	53	67	2502	164	119	122	7.2	8	7.6	128042176.6	424	2502	500
6/30/2006 4:00	0	0	51	0	2771	162	121	121	7.2	8.1	7.7	128055377.5	369	2771	500
6/30/2006 8:00	0	0	53	65	2601	165	126	126	7.3	8.2	7.8	128068655.2	363	2601	500
6/30/2006 12:00	0	0	53	67	2553	164	121	123	7.2	8.1	7.7	128082165.4	336	2553	500
6/30/2006 16:00	0	0	50	65	2599	159	109	111	7	7.9	7.5	128095388.2	331	2599	500
6/30/2006 20:00	0	0	52	69	2546	158	98	98	6.8	7.7	7.3	128108854.8	318	2546	500

Appendix D

Sampling Trip Reports

SAMPLING TRIP REPORT

Site Name: STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
CERCLIS ID Number: NYD047650197
Sampling Dates: June 7, 2006
CLP Case Number: N/A
Site Location: 110 Cutter Mill Road, Great Neck, New York, 11021
Sample Descriptions: Groundwater Treatment System Influent / Effluent.

Laboratories Receiving Samples (Table 1):

Case Number	Sample Type	Name and Address of Laboratory
N/A	TCL-VOAs OLC03.2	John Birri USEPA Region II DESA LAB Building 209 MS-230 2890 Woodbridge Avenue Edison, N.J. 08837

Sample Dispatch Data (Table 2):

On June 7, 2006, a total of four (4) groundwater samples, including one (1) duplicate sample and one (1) trip blank were shipped to the U.S. Environmental Protection Agency Region II Lab (USEPA) for TCL-VOAs analysis.

FedEx Air Bill No.	Number of Coolers	Number and Type of Samples	Time and Date of Shipping
855368819713	1	Total of 4 Aqueous Samples to include 1 duplicate sample, and 1 Trip Blank for TCL-VOAs	6/7/06 @ 14:45 TO: USEPA

Sampling Personnel (Table 3):

Name	Organization	Site Duties
Tom Williams	Earth Tech, Inc.	Earth Tech Project Manager
James Kearns	Earth Tech, Inc.	Earth Tech Task Manager/ Health and Safety
Robert Derrick	Earth Tech, Inc.	Sampler

Sample Numbers and Collection Points (Table 4):

Laboratory	Analysis	Sample Type	Sample #	Sample Collection Point(SCP)
USEPA Region II DESA LAB Building 209 MS-230 2890 Woodbridge Avenue Edison, N.J. 08837	TCL-VOAs	Aqueous Groundwater	Influent (MW-24 and EPA-EXT-02)	Influent (MW-24 and EPA-EXT-02)
			Effluent	Effluent
			Effluent A	Duplicate of Effluent
			TB	Trip Blank

Additional Comments:

The Influent, Effluent and Effluent-A samples were collected after a five gallon purge from the sample ports located within the treatment system. The influent sample includes MW-24 and EPA-EXT-02. These two wells combine before they reach the treatment room and therefore cannot be sampled individually. These samples were collected for the following analysis: Target Compound List (TCL) Volatile Organic Compounds. In addition, one duplicate sample (Effluent-A) was collected from the effluent of the groundwater treatment process and was a duplicate sample of sample Effluent. One trip blank (TB) was also included in the shipment. Copies of the Chain of Custody forms and a copy of the FedEx air bill are included in Appendix A and B, respectively.

Earth Tech personnel also collected real time water quality parameters from the raw water for all the following sampling locations: Influent and Effluent (Discharge) and the results are included in Appendix C.

Chain of Custody
(June 7, 2006 System Sampling Event)

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: L
DAS No:
SDG No:

Date Shipped:	6/7/2006
Carrier Name:	FedEx
Airbill:	855368819713
Shipped to:	USEPA REGION II DESA LAB Building 209, MS-230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6886

Chain of Custody Record

	Relinquished By (Date / Time)	Received By (Date / Time)
1	6-7-06 2:45PM	
2		
3		
4		

Sampler Signature:

For Lab Use Only

Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
EFFLUENT	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Effluent	S: 6/7/2006	13:06		
EFFLUENT-A	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Effluent-A	S: 6/7/2006	13:08		
INFLUENT (MW-24 AND	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Influent (MW-24 and EPA-EXT-02)	S: 6/7/2006	12:53		
TB	Field QC/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Trip Blank	S: 6/7/2006	8:00		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt	Chain of Custody Seal Number:	
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? ___	Shipment Iced? ___
VOA = CLP TCL Volatiles					

TR Number: 2-445049606-060506-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: R
DAS No:

Region:	2	Date Shipped:	6/7/2006	**Chain of Custody Record**	Sampler Signature:
Project Code:		Carrier Name:	FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:	,	Airbill:	855368819713	1 6-7-06/2:45PM	
CERCLIS ID:	NYD047650197	Shipped to:	USEPA REGION II DESA LAB Building 209, MS-230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6886	2	
Spill ID:	02LH			3	
Site Name/State:	Stanton Cleaners Area Groundwater Contami			4	
Project Leader:	James Kearns				
Action:	Operations and Maintenance				
Sampling Co:	Earth Tech				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
EFFLUENT	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Effluent	S: 6/7/2006	13:06		--
~~EFFLUENT-A~~	~~Ground Water/ Robert Derrick~~	~~L/G~~	~~VOA (14)~~	~~(HCL) (3)~~	~~Effluent-A~~	~~S: 6/7/2006~~	~~13:08~~		~~Field Duplicate~~
INFLUENT (MW-24 AND	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Influent (MW-24 and EPA-EXT-02)	S: 6/7/2006	12:53		--
TB	Field QC/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Trip Blank	S: 6/7/2006	8:00		Trip Blank

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
VOA = CLP TCL Volatiles			

TR Number: 2-445049606-060506-0004

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

FedEx Air Bill
(June 7, 2006 System Sampling Event)

FedEx Express **US Airbill**

FedEx Tracking Number 8553 6881 9713

Form ID No. 0200 **Sender's Copy**

1 From *Please print and press hard.*

Date 6-7-06 Sender's FedEx Account Number 237442548

Sender's Name Robert Derrick Phone ( )

Company Earth Tech [redacted]

Address 110 Cutter Mill Road Dept./Floor/Suite/Room

City Great Neck State NY ZIP 11021

2 Your Internal Billing Reference First 24 characters will appear on invoice. OPTIONAL

3 To

Recipient's Name John Birri Phone (732) 9066886

Company USEPA Region II Desa Lab

Recipient's Address 2890 Woodbridge Avenue, Building 209, MS-230 Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City Edison State NJ ZIP 08837

4a Express Package Service To add SATURDAY Delivery, see Section 6. *Packages up to 150 lbs.* ** To most locations.

- [X] FedEx Priority Overnight — Next business morning.*
- [ ] FedEx Standard Overnight — Next business afternoon.*
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.*
- [ ] FedEx 2Day — Second business day.*
- [ ] FedEx Express Saver — Third business day.*

FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service To add SATURDAY Delivery, see Section 6. *Packages over 150 lbs.* ** To most locations.

- [ ] FedEx 1Day Freight* — Next business day.**
- [ ] FedEx 2Day Freight — Second business day.**
- [ ] FedEx 3Day Freight — Third business day.**

* Call for Confirmation:

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [X] Other

6 Special Handling Include FedEx address in Section 3.

- [ ] **SATURDAY Delivery** Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes.
- [ ] **HOLD Weekday** at FedEx Location NOT Available for FedEx First Overnight.
- [ ] **HOLD Saturday** at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [X] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. or Credit Card No. Exp. Date

Total Packages	Total Weight	Total Declared Value†
1		$ .00

FedEx Use Only

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Anyone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. *Fee applies.*

520

Rev. Date 5/05•Part #156280•©1994–2005 FedEx•PRINTED IN U.S.A. SRF

RETAIN THIS COPY FOR YOUR RECORDS.

Try online shipping at fedex.com

By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

Questions? Go to our Web site at fedex.com
or call 1.800.GoFedEx 1.800.463.3339.

Water Quality Parameters
(June 7, 2006 System Sampling Event)

STANTON CLEANERS SITE LTRA

Groundwater Pump and Treatment System
Water Quality Parameters Log

Date: 6/7/06
Project # 70536

	pH	COND.	TURB.	DO	TEMP.	SALINITY
Influent*	6.85	0.708	9.0	10.7	15.58	0.0
Discharge	7.88	0.689	2.9	9.7	16.27	0.0

Total Gallons pumped:
gallons **128,143,245 gallons**
Flow rate: **68 gpm**

*** The influent consists of MW-24 and EPA-EXT-02. These wells combine before they reach the treatment room and therefore cannot be individually sampled for analysis.**

Equipment Calibrated by: **Robert Derrick** **Comments:**
Water samples collected by: **Robert Derrick**
Water monitoring performed by: **Robert Derrick**

TEMP. - Temperature measured in degrees Fahrenheit.
COND. - Conductivity measured in milliSiemens per centimeter (mS/cm).
TURB. - Turbidity measure in nephelometric turbidity units (NTU).
DO - Dissolved Oxygen measured in milligrams per liter (mg/L).
SALINITY - Salinity in percentage.

Appendix E

Groundwater Treatment System Raw and Treated Analytical Data

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B0001	10/27/2003	MTBE	2	J	?
				cis -1,2-Dichloroethene	2	J	?
				Trichloroethene (TCE)	3	J	5
				Toluene	3	J	5
				Tetrachloroethene	350 (D)		5
Effluent	SC-04	B0002	10/27/2003	None			
Trip Blank	SC-TB	B0003	10/27/2003	Acetone	61	J	5
				Methylene chloride	2	J	5
Influent	SC-01	B0177	11/12/2003	Tetrachloroethene (PCE)	240		5
				Chlorodifluoromethane	8.6	NJ	
				1,2-Dichloroethene	3.3	NJ	5
Effluent	SC-04	B0178	11/12/2003	Chlorodifluoromethane	22	NJ	
Influent Dup	SC-60	B0179	11/12/2003	Tetrachloroethene	250		5
				Chlorodifluoromethane	29	NJ	
				1,2-Dichloroethene	3.4	NJ	
Trip Blank	SC-TB	B0180	11/12/2003	Tetrachloroethene	9.4		5
				Chlorodifluoromethane	4.3	NJ	
Influent	SC-01	B17J3	12/10/2003	Tetrachloroethene	290 (D)		5
				cis -1,2-Dichloroethene	2	J	
				Trichloroethene	3	J	
Effluent	SC-04	B17J4	12/10/2003	None			
Influent Dup	SC-61	B17J5	12/10/2003	Tetrachloroethene	280 (D)		5
				cis -1,2-Dichloroethene	2	J	
				Trichloroethene	3	J	
Trip Blank	SC-TB	B17J6	12/10/2003	MTBE	5	J	
				Toluene	2	J	
				Ethylbenzene	2	J	
Influent	SC-01	B1000	1/12/2004	MTBE	2.7		
				cis -1,2-Dichloroethene	1.5		
				Trichloroethene	2.5		
				Tetrachloroethene	280		5
Effluent	SC-04	B1001	1/12/2004	None			
Influent Dup	SC-62	B1002	1/12/2004	MTBE	2.6		
				cis -1,2-Dichloroethene	1.5		
				Trichloroethene	2.5		
				Tetrachloroethene	300		5
Trip Blank	SC-TB	B1003	1/12/2004	Methylene chloride	0.6	K	
				MTBE	3.7		
				Tetrachloroethene	7.9		5
				m&p-Xylene	0.7		
Influent	SC-01	B17Z0	2/12/2004	*cis* -1,2-Dichloroethene	1.7		
				Trichloroethene	3.0		
				Tetrachloroethene	610 (D)		5
				Unknown TIC	0.53	J	
Effluent	SC-04	B17Z1	2/12/2004	Acetone	3.8	J	5
Influent Dup	SC-63	B17Z2	2/12/2004	Acetone	25	J	5
				cis -1,2-Dichloroethene	1.7		
				Trichloroethene	2.8		
				Tetrachloroethene	440 (D)		5
Trip Blank	SC-TB	B17Z3	2/12/2004	Methylene chloride	0.16	J	
				MTBE	4.7		
				Chloroform	0.26	J	
				Tetrachloroethene	7.1		5
				Xylene (total)	0.56		
				1,3-Dichlorobenzene	0.40	J	
				1,4-Dichlorobenzene	0.38	J	
				Unknown TIC	0.58	J	
				Benzene, 1-ethyl-3-methyl-	0.72	JN	

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B17Z6	3/10/2004	MTBE	2.7		
				cis -1,2-Dichloroethene	1.2		
				Trichloroethene	2.3		
				Tetrachloroethene	260		5
Effluent	SC-04	B17Z7	3/10/2004	Tetrachloroethene	0.70		5
Influent Dup	SC-64	B17Z8	3/10/2004	MTBE	2.8		
				cis -1,2-Dichloroethene	1.2		
				Trichloroethene	2.3		
				Tetrachloroethene	260		5
Trip Blank	SC-TB	B17Z9	3/10/2004	Acetone	1.8		5
				Toluene	0.50		
				Isobutane	41	NJ	
Influent	SC-01	B1BS2	4/14/2004	MTBE	1.9		
				cis -1,2-Dichloroethene	0.83		
				Trichloroethene	1.5		
				Tetrachloroethene	380 (D)		5
Effluent	SC-04	B1BS3	4/14/2004	Tetrachloroethene	1.9		5
Influent Dup	SC-65	B1BS4	4/14/2004	Acetone	1.2	J	5
				MTBE	1.5		
				cis -1,2-Dichloroethene	0.67	J	
				Trichloroethene	1.1		
				Tetrachloroethene	260 (D)		5
Trip Blank	SC-TB	B1BS5	4/14/2004	Methylene chloride	0.17	J	
				Chloroform	2.8		
				Bromodichloromethane	0.80		
Influent	SC-01	B1BS6	5/20/2004	MTBE	2.1		
				cis -1,2-Dichloroethene	1.0		
				Trichloroethene	1.8		
				Tetrachloroethene	190		5
Effluent	SC-04	B1BS7	5/20/2004	Acetone	1.2		5
Influent Dup	SC-66	B1BS8	5/20/2004	Acetone	0		5
				MTBE	2.1		
				cis -1,2-Dichloroethene	0.9		
				Trichloroethene	1.6		
				Tetrachloroethene	200		5
Trip Blank	SC-TB	B1BS9	5/20/2004	Acetone	1		5
				Chloroform	0		
				Bromodichloromethane	0		
Influent	SC-01	B1BS6	6/15/2004	Carbon Disulfide	1.1		
				MTBE	2.7		
				cis -1,2-Dichloroethene	1.3		
				Trichloroethene	2.4		
				Tetrachloroethene	320		5
Effluent	SC-04	B1BS7	6/15/2004	Tetrachloroethene	2.1		5
Influent Dup	SC-67	B1BS8	6/15/2004	MTBE	2.3		
				cis -1,2-Dichloroethene	1.2		
				Trichloroethene	2.2		
				Tetrachloroethene	330		5
Trip Blank	SC-TB	B1BS9	6/15/2004	None			

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B1FJ2	7/13/2004	Acetone	0.8		5
				MTBE	2.3		
				cis -1,2-Dichloroethene	1.1		
				Trichloroethene	1.7		
				Tetrachloroethene	170		5
Effluent	SC-04	B1FJ3	7/13/2004	Acetone	0.72		5
				Tetrachloroethene	2		5
Influent Dup	SC-67	B1FJ4	7/13/2004	MTBE	2.4		
				cis -1,2-Dichloroethene	1.1		
				Trichloroethene	1.8		
				Tetrachloroethene	160		5
Trip Blank	SC-TB	B1FJ5	7/13/2004	Acetone	0.73		5
				Acetic Acid, Ethyl Ester	2.5	NJ	
Influent	SC-01	B1GH2	8/16/2004	MTBE	1.9		
				cis -1,2-Dichloroethene	0.7		
				Trichloroethene	1.5		
				Tetrachloroethene	200		5
				Acetone	2		5
Effluent	SC-04	B1GH3	8/16/2004	Tetrachloroethene	5.4		5
				Acetone	1.6		5
Influent Dup	SC-69	B1GH4	8/16/2004	Acetone	1.2		5
				MTBE	2		
				cis -1,2-Dichloroethene	0.7		
				Trichloroethene	1.5		
				Tetrachloroethene	210		5
Influent	SC-01			Chloromethane	0.80		
				Acetone	1.0		5
				MTBE	1.5		
				cis- 1,2-Dichloroethene	0.70		
				Trichloroethene	1.4		
				Tetrachloroethene	200		5
Effluent	SC-04			Chloromethane	0.80		
				Acetone	2.1		5
				Tetrachloroethene	1.7		5
Influent Dup	SC-70			Acetone	1.0		5
				MTBE	1.3		
				cis- 1,2-Dichloroethene	0.60		
				Trichloroethene	1.4		
				Tetrachloroethene	210		5
Trip Blank	SC-TB			Acetone	2.2		5
				2-Butanone	1.5		
Influent	SC-01	B1LZ2	10/21/2004	Acetone	5	J	5
				Methylene chloride	0.2	J	
				MTBE	0.82		
				cis -1,2-Dichloroethene	0.5		
				Trichloroethene	1.2		
				Tetrachloroethene	220		5
Effluent	SC-04	B1LZ3	10/21/2004	Acetone	5	J	5
				Methylene chloride	0.5	UJ	
				Tetrachloroethene	0.2	J	5
Influent Dup	SC-71	B1LZ4	10/21/2004	Acetone	5	J	5
				Methylene chloride	1.1		
				MTBE	1.1		
				cis -1,2-Dichloroethene	0.64		
				Trichloroethene	1.1		
				Tetrachloroethene	210	(D)	5
Trip Blank	SC-TB	B1LZ5	10/21/2004	Acetone	5.7		5
				Methylene chloride	0.68		
				Toluene	0.39	J	

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B1T22	11/17/2004	Acetone	3	J	5
				Methylene chloride	1.3	U	
				MTBE	1.3		
				cis -1,2-Dichloroethene	0.64		
				Trichloroethene	1.2		
				Tetrachloroethene	170	(D)	5
Effluent	SC-04	B1T23	11/17/2004	Methyl Acetate	0.5	UJ	
				Methylene chloride	0.5	U	
Influent Dup	SC-72	B1T24	11/17/2004	Methylene chloride	0.85	U	
				MTBE	1.3		
				cis -1,2-Dichloroethene	0.5		
				Trichloroethene	0.83		
				Tetrachloroethene	160	(D)	5
Trip Blank	SC-TB	B1T25	11/17/2004	Acetone	3	J	5
				Methyl Acetate	0.5	UJ	
				Methylene chloride	0.46	J	
				2-Butanone	2.4	J	
				Tetrachloroethene	9.6		5
				1,2,3-Trichlorobenzene	0.5	UJ	5
Influent	SC-01	B1T79	12/15/2004	MTBE	1.6		
				cis -1,2-Dichloroethene	0.45	J	
				Trichloroethene (TCE)	1.0	J	5
				Tetrachloroethene	100	(D)	5
				Methylcyclohexane	1	UJ	
				Bromomethane	1	UJ	
				Bromodichloromethane	1	UJ	
				Chloromethane	1	UJ	
				1,2-Dichloroethene	1	UJ	
				1,2-Dichloropropane	1	UJ	
				2-Hexanone	10	R	
				4-Methyl-2-pentanone	10	R	
Effluent	SC-04	B1T81	12/15/2004	Benzene	0.5	JB	
				1,2,4-Trichlorobenzene	0.5	JB	
				1,2,3-Trichlorobenzene	0.5	JB	5
Influent Dup	SC-73	B1T80	12/15/2004	Methyl tert-Butyl Ether	1.6		
				cis-1,2-Dichloroethene	0.48	J	
				Trichloroethene	0.98	J	
				4-Methyl-2-pentanone	10	R	
				Tetrachloroethene	98	(D)	5
				2-Hexanone	10	R	
Trip Blank	SC-TB	B1T82	12/15/2004	Chloroform	0.1	J	
				Cyclohexane	0.15	J	
				Benzene	0.5	JB	
				Toluene	0.21	J	

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B1W00	1/21/2005	MTBE	1.5		
				cis -1,2-Dichloroethene	0.7		
				Trichloroethene (TCE)	1.4		5
				Tetrachloroethene	160		5
Effluent	SC-04	B1W02	1/21/2005	Acetone	1.8		5
Influent Dup	SC-74	B1W01	1/21/2005	Methyl tert-Butyl Ether	1.4		
				cis-1,2-Dichloroethene	0.7		
				Trichloroethene	1.4		
				Tetrachloroethene	150		5
				Acetone	10		5
Trip Blank	SC-TB	B1W03	1/21/2005	Acetone	3.5		5
Influent	SC-01	AG00197	2/3/2005	MTBE	1.4		
				cis -1,2-Dichloroethene	0.5		
				Trichloroethene (TCE)	1.1		5
				Tetrachloroethene	140		5
Effluent	SC-04	AG00198	2/3/2005	Acetone	1.2		5
Influent Dup	SC-75	AG00199	2/3/2005	Methyl tert-Butyl Ether	1.5		
				cis-1,2-Dichloroethene	0.54		
				Trichloroethene	1.1		
				Tetrachloroethene	140		5
				Acetone	1.1		5
Trip Blank	SC-TB	AG00200	2/3/2005	Acetone	4.3		5
				4-Methyl-2-pentanone	1.2		
Influent	SC-01	AG00468	3/9/2005	MTBE	1.4		
				Acetone	2.5		5
				Trichloroethene (TCE)	1.1		5
				Tetrachloroethene	130		5
Effluent	SC-04	AG00469	3/9/2005	Acetone	1.8		5
Influent Dup	SC-76	AG00470	3/9/2005	MTBE	1.4		
				Acetone	1.2		5
				Trichloroethene	1.1		
				Tetrachloroethene	130		5
Trip Blank	SC-TB	AG00471	3/9/2005	Acetone	1.7		5
				Chloroform	1.6		
Influent (EPA-EXT-02)	SC-01	AG00825	4/22/2005	MTBE	1.7		
				2-Butanone	2.2		
				Acetone	2.4		5
				Trichloroethene (TCE)	1.1		5
				Tetrachloroethene	65		5
Influent (EPA-EXT-4R)	SC-02	AG00826	4/22/2005	2-Butanone	2.5		
				Acetone	5.1		5
				Trichloroethene (TCE)	1.3		5
				Tetrachloroethene	9.5		5
Effluent	SC-04	AG00827	4/22/2005	None			
Influent Dup ~~(EPA-EXT-02)~~ (EPA-EXT-4R)	SC-77	AG00828	4/22/2005	2-Butanone	2.8		
				Acetone	4.9		5
				Trichloroethene	1.3		
				Tetrachloroethene	9		5

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Trip Blank	SC-TB	AG00829	4/22/2005	Acetone	1		5
				Chloroform	1.7		
				Trichloroethene (TCE)	0.84		5
Influent (EPA-EXT-02)	SC-01	AG01320	5/24/2005	MTBE	1.1		
				Trichloroethene (TCE)	1.0		5
				Tetrachloroethene	100		5
Influent (EPA-EXT-4R)	SC-02	AG01321	5/24/2005	Tetrachloroethene	8.8		5
Effluent	SC-04	AG01322	5/24/2005	Acetone	1.3		5
Influent Dup ~~(EPA-EXT-02)~~ (EPA-EXT-4R)	SC-78	AG01323	5/24/2005	Tetrachloroethene	8.6		5
Trip Blank	SC-TB	AG01324	5/24/2005	Acetone	1.3		5
				Chloroform	13		
				Bromodichloromethane	2.5		
Influent (EPA-EXT-02)	SC-01	AG02074	6/22/2005	MTBE	0.98		
				Trichloroethene (TCE)	0.8		5
				Tetrachloroethene	95		5
				Acetone	2.7	K	5
				Ethyl Acetate	10	JN	
Influent (EPA-EXT-4R)	SC-02	AG02075	6/22/2005	Tetrachloroethene	9.1		5
				Acetone	1.9	K	5
				Ethyl Acetate	3.6	JN	
				Propane, 2-Isothiocyanto-2	0.8	JN	
Influent		AG02076	6/22/2005	MTBE	0.64		
				Tetrachloroethene	50		5
				Acetone	2	K	5
				Trichloroethene (TCE)	0.56		5
				Ethyl Acetate	8.8	JN	
Effluent	SC-04	AG02072	6/22/2005	Acetone	2.6	K	5
				Ethyl Acetate	6.2	JN	
EffluenDup	SC-04	AG02073	6/22/2005	Acetone	2.6	K	5
				Ethyl Acetate	3.3	JN	
Trip Blank	SC-TB	AG02077	6/22/2005	Acetone	2.4	K	5
				Chloroform	13		
				Bromodichloromethane	2.7		
				Ethyl Acetate	3.1	JN	
Influent (EPA-EXT-02)	SC-01	AG02780	7/12/2005	MTBE	0.9		
				Trichloroethene (TCE)	0.8		5
				Tetrachloroethene	85		5
				Acetone	1	K	5
Influent (EPA-EXT-4R)	SC-02	AG02781	7/12/2005	Tetrachloroethene	7.4		
				Acetone	2.1	K	5
				Ethyl Acetate	4.1	JN	
				Propane, 2-Isothiocyanto-2	1.4	JN	
Influent		AG02782	7/12/2005	MTBE	0.52		
				Tetrachloroethene	43		5
Effluent	SC-04	AG02778	7/12/2005	Acetone	2.8	K	5
				Ethyl Acetate	11	JN	
EffluenDup	SC-04	AG02779	7/12/2005	Acetone	1.9	K	5
				Ethyl Acetate	5.2	JN	
Trip Blank	SC-TB		7/12/2005	Acetone	1.5	K	5
				Chloroform	12		
				Bromodichloromethane	2.6		

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent (EPA-EXT-02)	SC-01	AG03721	8/15/2005	MTBE	0.68		
				Trichloroethene (TCE)	0.73		5
				Tetrachloroethene	88		5
Influent (EPA-EXT-4R)	SC-02	AG03722	8/15/2005	Tetrachloroethene	9.7		5
				Propane, 2-Isothiocyanto-2	0.53	JN	
Influent		AG03723	8/15/2005	Tetrachloroethene	43		5
Effluent	SC-04	AG03725	8/15/2005	Acetone	ND (5.0)		5
EffluenDup	SC-04	AG03720	8/15/2005	Acetone	ND (5.0)		5
Trip Blank	SC-TB	AG03724	8/15/2005	Chloroform	13		
				Bromodichloromethane	2.6		
Influent (EPA-EXT-02)	SC-01	AG04086	9/8/2005	MTBE	0.76		
				Trichloroethene (TCE)	0.74		5
				Tetrachloroethene	90		5
Influent (EPA-EXT-4R)	SC-02	AG04087	9/8/2005	Tetrachloroethene	9.8		5
Influent		AG04088	9/8/2005	MTBE	0.63		
				Tetrachloroethene	44		5
Effluent	SC-04	AG04084	9/8/2005	Acetone	ND (1.0)		5
EffluentDup	SC-04	AG04085	9/8/2005	Acetone	1.0		5
Trip Blank	SC-TB	AG04089	9/8/2005	Chloroform	11		
				Bromodichloromethane	2.2		
Influent (EPA-EXT-02)	SC-01	AG07649	10/5/2005	MTBE	0.82		
				Trichloroethene (TCE)	0.78		5
				Tetrachloroethene	100		5
Influent (EPA-EXT-4R)	SC-02	AG07650	10/5/2005	Tetrachloroethene	9.3		5
Influent		AG07651	10/5/2005	MTBE	0.6		
				Acetone	1		5
				Tetrachloroethene	52		5
Effluent	SC-04	AG07647	10/5/2005	Acetone	1.1		
EffluentDup	SC-04	AG07648	10/5/2005	Acetone	1.4		
Trip Blank	SC-TB	AG07652	10/5/2005	Chloroform	ND		
Influent (EPA-EXT-02)	SC-01	AG08530	11/14/2005	Acetone	1.4	K	
				MTBE	0.92		
				Trichloroethene (TCE)	0.81		5
				Tetrachloroethene	95		5
Influent (EPA-EXT-4R)	SC-02	AG08531	11/14/2005	Acetone	1.0	K	5
				Tetrachloroethene	10		5
Influent		AG08532	11/14/2005	MTBE	0.9		
				Acetone	1.4	K	5
				Trichloroethene (TCE)	0.74		5
				Tetrachloroethene	91		5
Effluent	SC-04	AG08528	11/14/2005	Acetone	ND		5
EffluentDup	SC-04	AG08529	11/14/2005	Acetone	ND		5
Trip Blank	SC-TB	AG08533	11/14/2005	Acetone	2.0	K	5

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent (EPA-EXT-02)	SC-01	AG08953	12/6/2005	Acetone	4.1		
				MTBE	0.85		
				Trichloroethene (TCE)	0.67		5
				Tetrachloroethene	90		5
				1-Butanol	0.63	NJ	
Influent (EPA-EXT-4R)	SC-02	AG08954	12/6/2005	Acetone	1.4	K	5
				Tetrachloroethene	9.5		5
Influent		AG08955	12/6/2005	MTBE	0.9		
				Acetone	1.4	K	5
				Trichloroethene (TCE)	0.77		5
				Tetrachloroethene	89		5
Effluent	SC-04	AG08951	12/6/2005	Acetone	1.5	K	5
EffluentDup	SC-04	AG08952	12/6/2005	Acetone	3.0	K	5
Trip Blank	SC-TB		12/6/2005	Acetone	ND		5
Influent (EPA-EXT-02)	SC-01	AH00216	1/10/2006	Acetone	ND		5
				MTBE	0.98		
				Trichloroethene (TCE)	0.79		5
				Tetrachloroethene	93		5
Influent (EPA-EXT-4R)	SC-02	AH00217	1/10/2006	Acetone	ND (1.0)		5
				Tetrachloroethene	8.2		5
Influent		AH00218	1/10/2006	MTBE	0.94		
				Acetone	ND (1.0)		5
				Trichloroethene (TCE)	0.85		5
				Tetrachloroethene	90		5
Effluent	SC-04	AH00214	1/10/2006	Acetone	ND (1.0)		5
EffluentDup	SC-04	AH00215	1/10/2006	Furan, Tetrahydro	0.52	NJ	
Trip Blank	SC-TB	AH00219		Acetone	ND (1.0)		5
Influent	SC-01	AH01177	2/15/2006	MTBE	1.2		
				Trichloroethene (TCE)	0.72		5
				Tetrachloroethene	80		5
MW-19		AH01178	2/15/2006	Acetone	1.2		5
				Trichloroethene (TCE)	1.2		5
				Tetrachloroethene	85		5
MW-21		AH01179	2/15/2006	Trichloroethene (TCE)	2.6		5
				Tetrachloroethene	27		5
Effluent		AH01175	2/15/2006		ND		
Effluent Duplicate		AH01176	2/15/2006		ND		
Trip Blank	SC-TB	AH00219	2/15/2006	Chloroform	10		
				Bromodichloromethane	2.3		
Influent	SC-01	AH01256	3/8/2006	MTBE	1.4		
				Trichloroethene (TCE)	0.71		5
				Tetrachloroethene	83		5
				Acetone	2		5
Effluent	SC-04	AH01254	3/8/2006	Acetone	2		5
Effluent Duplicate	SC-04	AH01255	3/8/2006	Acetone	2.4		5
Trip Blank	SC-TB	AH01257	3/8/2006	Acetone	2		5
				Bromodichloromethane	5		
				Chloroform	14		
Influent	SC-01	AH01641	4/5/2006	MTBE	1.5		
				TRICHLOROETHENE	0.57		
				TETRACHLOROETHENE	68		
				ACETONE	1.7		
				ETHYL ACETATE	1.5	NJ	
Effluent	SC-04	AH01639	4/5/2006	ACETONE	1.7		
				EHHYL ACETATE	1.7	NJ	
Effluent A	SC-04	AH01640	4/5/2006	ACETONE	4.6		
			4/5/2006	EHHYL ACETATE	5.3	NJ	
Trip Blank	SC-TB	AH01642	4/5/2006	ACETONE	1.7		

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent (MW-24 & EPA-EXT-02)	SC-01	AH02078	5/3/2006	ACETONE	2.3		5
				MTBE	1.7		
				TRICHLOROETHENE	0.72		
				TETRACHLOROETHENE	80		5
Effluent	SC-04	AH02076	5/3/2006	CHLOROMETHANE	0.51		
				ACETONE	1.6		5
Effluent-A	SC-04	AH02077	5/3/2006	ACETONE	2.2		5
Trip Blank	SC-TB	AH02079	5/3/2006	ACETONE	1.8		5
Influent	SC-01	AH02645	6/8/2006	ACETONE	1.8	K	5
				MTBE	1.6		
				TRICHLOROETHENE	70		
				EHHYL ACETATE	0.7	NJ	5
Effluent	SC-04	AH02643	6/8/2006	ACETONE	1.2	K	5
Effluent-A	SC-04	AH02644	6/8/2006	ACETONE	1.5	K	
			6/8/2006	ETHYL ACETATE	1	NJ	5
Trip Blank	SC-TB	AH02646	6/8/2006		ND		

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria

Notes:

***** = Unless otherwise noted, samples collected from ECC ID SC-04 were used as the matrix spike / matrix spike duplicate sample.

****** = Data validation was performed by EPA Region II. ECC carried over assigned qualifers and did not perform a separate review or validation of the data.

(D) = Detection from a dilution of the sample.

J = qualified as estimated

JN = Presumptive evidence for the presence of the material at an estimated value.

K = The reported value may be biased high.

µg/L = micrograms per liter

MTBE = Tert-butyl-methyl-ether

NJ = TIC. The reported value is estimated.

TIC = Tentatively Identified Compound.

Appendix F

Soil Vapor Extraction and Pump and Treat System Bi-weekly Air Monitoring Logs

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Bi-Weekly Air Monitoring Log

Date: 6-15-06
Project # 70536

	MultiRAE Plus PGM-50					VelociCalc Plus				
	VOC	**CO**	**Oxygen**	**LEL**	**H2S**	**Temp.**	**Vac. Pre.**	**%RH**	**Dew pt.**	**Flow**
SVE-Influent	5.0	0	20.3%	0%	0%	110.2	N/A	27.0%	69.1	270
Post Air Stripper	0.0	0	20.9%	0%	0%	58.7	N/A	96.6%	57.7	2300
SVE-Effluent[1]	0.0	0	20.5%	0%	0%	92.0	N/A	46.7%	68.9	260
GW Post Vapor Effluent[2]	0.0	0	20.9%	0%	0%	61.6	N/A	89.5%	58.0	2300
EPA-SVE-1 (shallow)	0.0	0	20.9%	0%	0%	74.0	8.50	55.0%	56.9	2.30
EPA-SVE-1 (medium)	0.0	0	20.9%	0%	0%	77.6	6.75	60.5%	63.0	1.50
EPA-SVE-2 (shallow)	0.0	0	20.9%	0%	0%	82.4	3.00	55.0%	64.4	1.00
EPA-SVE-2 (medium)	0.0	0	20.9%	0%	0%	89.0	0.00	55.0%	70.5	0.020
SS-A	0.3	0	20.9%	0%	0%	75.2	3.00	52.0%	58.0	28.00
EPA-SVE-04R/SS-B(A)	1.4	0	20.9%	0%	0%	75.5	2.75	62.5%	60.8	0.550
SS-B-C	Blocked by truck									
SS-C	0.3	0	20.9%	0%	0%	81.1	3.00	48.0%	60.3	34.0
L1	0.0	0	20.9%	0%	0%	82.7	5.00	45.0%	59.7	78.5
L2	Offline									
SS-B(B)	1.5	0	20.9%	0%	0%	76.4	2.50	52.5%	58.0	7.4
SS Vent-LIHA	0.0	0	20.9%	0%	0%	80.7	1.75	46.0%	58.0	85.0
Vapor Point-1/Slope 1	0.6	0	20.9%	0%	0%	N/A	N/A	N/A	N/A	N/A
SVE-3A	Water in line									
SVE-3B	1.9	0	20.9%	0%	0%	73.2	8.50	65.0	60	114.0
Background	0.0	0	20.9%	0%	0%	74.6	N/A	51.2%	55.3	N/A

Equipment calibrated by: R. Derrick
Air readings collected by: R. Derrick

***Approximately**

Comments:

VOC: Volatile Organic Compounds
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
temperature: measured in degrees Fahrenheit
pressure: measured in inches of water (in/H2O), inches of mercury (in/Hg), or pounds per square inch (psi).
Flow: measured in cubic feet per minute (cfm)

[1]Formerly Post SVE Carbon
[2]Formerly Post Air Stripper Carbon

%RH: relative humidity

Dew Pt.: dew point in degrees Fahrenheit

AS: Air Stripper
SVE: Soil Vapor Extraction System

[3]Formerly Sub-Slab A,B, and C respectively
[4]Formerly Sub-Slab D
[5]Formerly Sub-Slab B
NA- Not Available

	Prior to 10/3/05	**After 10/3/05**
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	shallow on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	off
SS-B(C)	on	on
L1	on	on
L2	on	off

Comments:
New SVE well EPA-EXT-04 online since 11/4/04
Sub-slab sample ports online since 3/22/05
L2 is offline

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Bi-Weekly Air Monitoring Log

Date: 6-26-06
Project # 70536

	MultiRAE Plus PGM-50					VelociCalc Plus				
	VOC	**CO**	**Oxygen**	**LEL**	**H2S**	**Temp.**	**Vac. Pre.**	**%RH**	**Dew pt.**	**Flow**
SVE-Influent	0.0	1	20.2%	0%	0%	112.0	N/A	29.5%	73.1	260
Post Air Stripper	0.0	0	20.9%	0%	0%	58.9	N/A	98.5%	57.8	2300
SVE-Effluent[1]	0.0	1	20.3%	0%	0%	96.3	N/A	47.0%	72.6	265
GW Post Vapor Effluent[2]	0.0	0	20.9%	0%	0%	60.2	N/A	59.6%	91.5	2550
EPA-SVE-1 (shallow)	0.0	0	20.3%	0%	0%	81.8	6.50	72.5%	72.1	2.10
EPA-SVE-1 (medium)	0.0	1	20.9%	0%	0%	81.8	8.00	69.9%	71.5	37.0
EPA-SVE-2 (shallow)	0.0	1	20.9%	0%	0%	81.9	2.50	77.8%	74.2	
EPA-SVE-2 (medium)	0.0	1	20.9%	0%	0%	85.2	0.00	64.1%	71.7	1.3
SS-A	0.0	1	20.9%	0%	0%	77.0	3.00	85.7%	73.6	29.5
EPA-SVE-04R/SS-B(A)	0.0	3	20.9%	0%	0%	83.9	2.50	73.0%	74.6	2.3
SS-B-C	Blocked by truck									
SS-C	0.0	0	20.9%	0%	0%	86.0	2.75	82.0%	75.5	32.0
L1	0.0	2	20.9%	0%	0%	27.3	5.50	84.8%	72.4	77.5
L2	Offline									
SS-B(B)	0.0	3	20.9%	0%	0%	83.2	2.50	74.4%	74.0	26.0
SS Vent-LIHA	0.0	2	20.9%	0%	0%	80.0	1.75	54.0%	67.8	76.0
Vapor Point-1/Slope 1	0.0	1	20.5%	0%	0%	N/A	N/A	N/A	N/A	N/A
SVE-3A	Water in line									
SVE-3B	0.0	3	20.9%	0%	0%	83.4	8.50	69.4	72.9	95.5
Background	0.0	0	20.9%	0%	0%	82.4	N/A	63.5%	70.0	N/A

Equipment calibrated by: R. Derrick
Air readings collected by: R. Derrick

***Approximately**

Comments:

VOC: Volatile Organic Compounds
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
temperature: measured in degrees Fahrenheit
pressure: measured in inches of water (in/H2O), inches of mercury (in/Hg), or pounds per square inch (psi).
Flow: measured in cubic feet per minute (cfm)

[1]Formerly Post SVE Carbon
[2]Formerly Post Air Stripper Carbon

%RH: relative humidity

Dew Pt.: dew point in degrees Fahrenheit

AS: Air Stripper
SVE: Soil Vapor Extraction System

[3]Formerly Sub-Slab A,B, and C respectively
[4]Formerly Sub-Slab D
[5]Formerly Sub-Slab B
NA- Not Available

	Prior to 10/3/05	**After 10/3/05**
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	shallow on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	off
SS-B(C)	on	on
L1	on	on
L2	on	off

Comments:
New SVE well EPA-EXT-04 online since 11/4/04
Sub-slab sample ports online since 3/22/05
L2 is offline

Appendix G

Semi-Annual Groundwater Sampling Analytical Data

No Groundwater Sampling Event this Month

Appendix H

Historical Groundwater Level Monitoring Results (Ongoing)

WATER LEVEL DATA SUMMARY

PROJECT:	Stanton Cleaners	**JOB NUMBER:**	70536
LOCATION:	Great Neck, NY	**DATE:**	6/26/2006
CLIENT:	USACE / USEPA	**MEASURED BY:**	Robert Derrick
SURVEY DATUM:	ft msl		
MEASURING DEVICE:	Solinst Water Level Indicator S/N# 34407		

	MEASURING POINT		DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)			
EPA-MW-11D	TOC	74.63			blocked by car
EPA-MW-21	TOC	84.13	65.44	18.69	missing 1 bolt
EPA-MW-22	TOC	82.20	63.10	19.10	
EPA-MW-23	TOC	82.83	63.70	19.13	
EPA-MW-27	TOC	69.32	51.78	17.54	no bolts
ST-MW-02	TOC	82.03			
ST-MW-06	TOC	69.83	43.81	26.02	
ST-MW-09	TOC	78.13	62.92	15.21	
ST-MW-11	TOC	75.25			blocked by car
ST-MW-12	TOC	87.20	70.24	16.96	missing 1 bolt
ST-MW-14	TOC	69.73	54.38	15.35	no bolts
ST-MW-16	TOC	75.78	53.85	21.93	no bolts
ST-MW-17	TOC	86.53	69.74	16.79	no bolts
ST-MW-19	TOC	82.50	65.70	16.80	no bolts
ST-MW-20	TOC	84.53	73.45	11.08	no bolts

N/A: Data not available

HISTORICAL GROUNDWATER ELEVATIONS
STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
GREAT NECK, NASSAU COUNTY, NEW YORK

Well ID	Top of PVC Elevation (ft msl)	10/29/2003		10/31/2003		11/22/03 - 11/23/03	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	57.74	16.89	57.94	16.69	60.07	14.56
EPA-MW-21	84.13	66.70	17.43	66.14	17.99	66.86	17.27
EPA-MW-22	82.20	64.51	17.69	64.08	18.12	65.09	17.11
EPA-MW-23	82.83	64.97	17.86	64.54	18.29	78.61	4.22
EPA-MW-27	69.32	51.74	17.58	51.12	18.20	52.85	16.47
ST-MW-02	82.03	64.19	17.84	63.78	18.25	64.40	17.63
ST-MW-06	69.83	63.43	6.40	44.82	25.01	44.92	24.91
ST-MW-09	78.13	61.39	16.74	60.67	17.46	62.52	15.61
ST-MW-11	75.25	58.67	16.58	58.06	17.19	60.59	14.66
ST-MW-12	87.20	73.84	13.36	70.18	17.02	72.01	15.19
ST-MW-14	69.73	50.94	18.79	50.76	18.97	56.40	13.33
ST-MW-16	75.78	55.51	20.27	55.53	20.25	65.51	10
ST-MW-17	86.53	69.95	16.58	69.27	17.26	71.55	14.98
ST-MW-19	82.50	67.01	15.49	64.93	17.57	68.04	14.46
ST-MW-20	84.53	65.99	18.54	65.83	18.70	73.45	11.08

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	12/17/03 - 12/18/03		1/12/2004		2/26/2004	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.00	15.63	57.52	17.11	56.50	18.13
EPA-MW-21	84.13	64.99	19.14	66.17	17.96	64.30	19.83
EPA-MW-22	82.20	63.03	19.17	63.99	18.21	61.90	20.30
EPA-MW-23	82.83	77.05	5.78	64.45	18.38	63.00	19.83
EPA-MW-27	69.32	51.75	17.57	51.22	18.10	50.50	18.82
ST-MW-02	82.03	63.25	18.78	64.03	18.00	62.03	20.00
ST-MW-06	69.83	43.10	26.73	45.74	24.09	44.40	25.43
ST-MW-09	78.13	61.50	16.63	--	--	60.00	18.13
ST-MW-11	75.25	59.23	16.02	62.10	13.15	60.90	14.35
ST-MW-12	87.20	72.00	15.20	70.27	16.93	60.50	26.70
ST-MW-14	69.73	55.05	14.68	NA	NA	48.70	21.03
ST-MW-16	75.78	64.18	11.60	54.99	20.79	53.00	22.78
ST-MW-17	86.53	69.99	16.54	69.40	17.13	67.25	19.28
ST-MW-19	82.50	67.21	15.29	--	--	65.25	17.25
ST-MW-20	84.53	71.56	12.97	63.51	21.02	61.75	22.78

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	3/29/2004		4/5/2004		5/19/2004	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	60.00	14.63	60.36	14.27	60.30	14.33
EPA-MW-21	84.13	66.99	17.14	67.38	16.75	67.10	17.03
EPA-MW-22	82.20	61.90	20.30	65.00	17.20	64.98	17.22
EPA-MW-23	82.83	65.10	17.73	65.59	17.24	65.25	17.58
EPA-MW-27	69.32	52.08	17.24	52.84	16.48	53.10	16.22
ST-MW-02	82.03	63.99	18.04	64.90	17.13	64.87	17.16
ST-MW-06	69.83	45.60	24.23	46.24	23.59	46.25	23.58
ST-MW-09	78.13	62.80	15.33	--	--	62.00	16.13
ST-MW-11	75.25	60.00	15.25	60.85	14.40	60.46	14.79
ST-MW-12	87.20	72.22	14.98	72.22	14.98	72.12	15.08
ST-MW-14	69.73	56.99	12.74	57.87	11.86	58.13	11.60
ST-MW-16	75.78	54.68	21.10	55.48	20.30	55.09	20.69
ST-MW-17	86.53	70.25	16.28	71.76	14.77	71.80	14.73
ST-MW-19	82.50	66.00	16.50	--	--	65.78	16.72
ST-MW-20	84.53	71.45	13.08	73.78	10.75	73.65	10.88

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	6/14/2004		7/21/04 - 7/22/04		8/2/2004	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.97	14.66	59.75	14.88	59.75	14.88
EPA-MW-21	84.13	67.00	17.13	66.99	17.14	66.11	18.02
EPA-MW-22	82.20	64.78	17.42	64.50	17.70	64.33	17.87
EPA-MW-23	82.83	66.21	16.62	66.10	16.73	65.16	17.67
EPA-MW-27	69.32	53.05	16.27	52.98	16.34	54.86	14.46
ST-MW-02	82.03	65.11	16.92	65.00	17.03	59.85	22.18
ST-MW-06	69.83	45.99	23.84	45.66	24.17	44.11	25.72
ST-MW-09	78.13	62.00	16.13	61.79	16.34	--	--
ST-MW-11	75.25	60.40	14.85	60.39	14.86	60.50	14.75
ST-MW-12	87.20	72.29	14.91	72.20	15.00	71.36	15.84
ST-MW-14	69.73	58.55	11.18	58.34	11.39	55.56	14.17
ST-MW-16	75.78	55.09	20.69	55.01	20.77	54.85	20.93
ST-MW-17	86.53	71.52	15.01	71.46	15.07	70.80	15.73
ST-MW-19	82.50	65.00	17.50	64.77	17.73	--	--
ST-MW-20	84.53	73.44	11.09	73.25	11.28	71.66	12.87

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	9/28/04 - 9/29/04		10/12/04 -10/13/04		11/3/2004	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.70	14.93	58.97	15.66	58.95	15.68
EPA-MW-21	84.13	66.75	17.38	66.50	17.63	66.41	17.72
EPA-MW-22	82.20	64.41	17.79	64.34	17.86	64.32	17.88
EPA-MW-23	82.83	65.11	17.72	65.00	17.83	64.87	17.96
EPA-MW-27	69.32	52.31	17.01	52.25	17.07	52.26	17.06
ST-MW-02	82.03	65.00	17.03	65.03	17.00	65.00	17.03
ST-MW-06	69.83	44.55	25.28	55.34	14.49	55.29	14.54
ST-MW-09	78.13	62.00	16.13	62.12	16.01	62.15	15.98
ST-MW-11	75.25	60.41	14.84	60.50	14.75	60.34	14.91
ST-MW-12	87.20	72.00	15.20	72.21	14.99	72.22	14.98
ST-MW-14	69.73	56.71	13.02	56.50	13.23	56.49	13.24
ST-MW-16	75.78	55.10	20.68	57.00	18.78	57.01	18.77
ST-MW-17	86.53	70.99	15.54	70.98	15.55	70.95	15.58
ST-MW-19	82.50	64.84	17.66	64.80	17.70	64.79	17.71
ST-MW-20	84.53	71.97	12.56	72.00	12.53	72.55	11.98

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	12/8/2004		1/3/2005		2/7/2005	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.75	14.88	59.10	15.53	57.63	17.00
EPA-MW-21	84.13	66.61	17.52	65.67	18.46	65.80	18.33
EPA-MW-22	82.20	64.33	17.87	64.44	17.76	65.32	16.88
EPA-MW-23	82.83	65.16	17.67	65.10	17.73	64.44	18.39
EPA-MW-27	69.32	52.24	17.08	51.87	17.45	50.85	18.47
ST-MW-02	82.03	64.54	17.49	64.78	17.25	63.90	18.13
ST-MW-06	69.83	44.11	25.72	55.41	14.42	47.32	22.51
ST-MW-09	78.13	59.98	18.15	62.31	15.82	63.44	14.69
ST-MW-11	75.25	60.50	14.75	59.99	15.26	58.64	16.61
ST-MW-12	87.20	71.36	15.84	71.98	15.22	70.45	16.75
ST-MW-14	69.73	55.56	14.17	56.51	13.22	50.15	19.58
ST-MW-16	75.78	54.85	20.93	57.08	18.70	55.15	20.63
ST-MW-17	86.53	70.80	15.73	71.03	15.50	70.75	15.78
ST-MW-19	82.50	64.32	18.18	64.76	17.74	65.01	17.49
ST-MW-20	84.53	71.66	12.87	72.43	12.10	65.09	19.44

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	3/22/2005		4/11/2005		5/19/2005	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	60.00	14.63	60.99	13.64	61.00	13.63
EPA-MW-21	84.13	64.50	19.63	64.00	20.13	63.21	20.92
EPA-MW-22	82.20	64.55	17.65	65.12	17.08	65.43	16.77
EPA-MW-23	82.83	65.00	17.83	65.10	17.73	65.00	17.83
EPA-MW-27	69.32	51.67	17.65	51.60	17.72	51.33	17.99
ST-MW-02	82.03	63.99	18.04	63.89	18.14	63.40	18.63
ST-MW-06	69.83	55.40	14.43	55.42	14.41	55.32	14.51
ST-MW-09	78.13	61.20	16.93	61.78	16.35	61.72	16.41
ST-MW-11	75.25	60.10	15.15	60.00	15.25	59.99	15.26
ST-MW-12	87.20	72.00	15.20	71.21	15.99	71.12	16.08
ST-MW-14	69.73	56.20	13.53	56.33	13.40	56.34	13.39
ST-MW-16	75.78	57.00	18.78	57.10	18.68	57.30	18.48
ST-MW-17	86.53	70.78	15.75	70.00	16.53	59.90	26.63
ST-MW-19	82.50	63.23	19.27	63.00	19.50	63.00	19.50
ST-MW-20	84.53	71.32	13.21	71.21	13.32	71.71	12.82

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	6/15/2005		7/7/2005		8/4/2005	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	58.70	15.93	58.51	16.12	59.07	15.56
EPA-MW-21	84.13	66.35	17.78	66.27	17.83	66.85	17.28
EPA-MW-22	82.20	63.83	18.37	63.78	18.42	64.38	17.82
EPA-MW-23	82.83	64.32	18.51	64.29	18.54	64.88	17.95
EPA-MW-27	69.32	51.45	17.87	51.35	17.97	51.84	17.48
ST-MW-02	82.03	--	--	--	--	--	
ST-MW-06	69.83	45.70	24.13	45.90	23.93	45.80	24.03
ST-MW-09	78.13	63.45	14.68	63.29	14.84	63.94	14.19
ST-MW-11	75.25	--	--	--	--	--	
ST-MW-12	87.20	71.02	16.18	70.71	16.49	71.42	15.78
ST-MW-14	69.73	55.08	14.65	54.99	14.74	55.45	14.28
ST-MW-16	75.78	54.54	21.24	54.71	21.07	54.82	20.96
ST-MW-17	86.53	70.35	16.18	70.17	16.36	70.78	15.75
ST-MW-19	82.50	66.82	15.68	66.89	15.61	66.53	15.97
ST-MW-20	84.53	71.20	13.33	71.07	13.46	71.59	12.94

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	8/30/2005		10/11/2005		11/6/2005	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63			59.28	15.35	60.09	
EPA-MW-21	84.13	67.03	17.10	67.35	16.78	67.14	16.99
EPA-MW-22	82.20	64.52	17.68	64.93	17.27	64.67	17.53
EPA-MW-23	82.83	65.03	17.80	65.43	17.40	65.17	17.66
EPA-MW-27	69.32	55.11	14.21	52.38	16.94	52.27	17.05
ST-MW-02	82.03	64.42	17.61				
ST-MW-06	69.83	46.25	23.58	45.99	23.84	43.69	26.14
ST-MW-09	78.13			64.28	13.85	64.40	13.73
ST-MW-11	75.25		--				--
ST-MW-12	87.20	71.61	15.59	71.68	15.52	71.76	15.44
ST-MW-14	69.73	55.71	14.02	55.71	14.02	57.16	12.57
ST-MW-16	75.78	55.21	20.57	55.78	20.00	54.55	21.23
ST-MW-17	86.53	70.99	15.54	71.09	15.44	71.36	15.17
ST-MW-19	82.50	66.71	15.79	66.90	15.60	66.86	15.64
ST-MW-20	84.53	71.83	12.70	71.78	12.75	74.56	9.97

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	12/19/2005		1/24/2006		2/22/2006	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.19	15.44	59.22	15.41	58.37	16.26
EPA-MW-21	84.13	66.84	17.29	66.55	17.58	65.72	18.41
EPA-MW-22	82.20	64.39	17.81	64.09	18.11	63.38	18.82
EPA-MW-23	82.83	64.89	17.94	64.61	18.22	63.91	18.92
EPA-MW-27	69.32	51.96	17.36	51.72	17.60	51.10	18.22
ST-MW-02	82.03	--	--				
ST-MW-06	69.83	44.43	25.40	44.08	25.75	44.88	24.95
ST-MW-09	78.13	63.96	14.17	63.77	14.36	63.24	14.89
ST-MW-11	75.25	--	--				
ST-MW-12	87.20	71.43	15.77	71.17	16.03	70.58	16.62
ST-MW-14	69.73	55.58	14.15	56.09	13.64	54.86	14.87
ST-MW-16	75.78	54.77	21.01	54.43	21.35	54.17	21.61
ST-MW-17	86.53	70.82	15.71	70.62	15.91	70.03	16.50
ST-MW-19	82.50	66.94	15.56	66.66	15.84	66.46	16.04
ST-MW-20	84.53	71.64	12.89	72.13	12.40	70.81	13.72

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	4/11/2006		5/2/2006		6/26/2006	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.30	15.33	64.90	9.73		
EPA-MW-21	84.13	66.23	17.90	63.84	20.29	65.44	18.69
EPA-MW-22	82.20	63.89	18.31	63.59	18.61	63.10	19.10
EPA-MW-23	82.83	64.44	18.39	68.99	13.84	63.70	19.13
EPA-MW-27	69.32	51.72	17.60	51.28	18.04	51.78	17.54
ST-MW-02	82.03						
ST-MW-06	69.83	46.54	23.29	44.58	25.25	43.81	26.02
ST-MW-09	78.13	63.96	14.17	63.50	14.63	62.92	15.21
ST-MW-11	75.25						
ST-MW-12	87.20	71.35	15.85	73.87	13.33	70.24	16.96
ST-MW-14	69.73	56.10	13.63	55.71	14.02	54.38	15.35
ST-MW-16	75.78	54.58	21.20	54.63	21.15	53.85	21.93
ST-MW-17	86.53	70.76	15.77	70.35	16.18	69.74	16.79
ST-MW-19	82.50	67.13	15.37	66.69	15.81	65.70	16.80
ST-MW-20	84.53	72.13	12.40	71.80	12.73	73.45	11.08

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	5/22/2006	
		DTW (ft BTOC)	Elevation (ft msl)
ST-MW-02	82.03	63.36	18.67
ST-MW-16	75.78	54.52	21.26
EPA-MW-25	73.24	54.03	19.21
EPA-MW-26	78.37	58.64	19.73
ST-MW-15	90.13	72.78	17.35
ST-MW-18	84.4	71.9	12.50
ST-MW-12	87.2	70.4	16.80
ST-MW-17	86.53	69.96	16.57
ST-MW-20	84.53	71.37	13.16
ST-MW-19	N/A	66.3	
ST-MW-09	N/A		
EPA-MW-9A	80.24	65.18	15.06
ST-MW-06	69.83	44.5	25.33
EPA-MW-27	69.32	51.03	18.29
ST-MW-14	69.73	55.35	14.38

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Appendix I

Indoor Air Quality Analytical Data

Appendix J

Action List Dated June 2006

EarthTech
A tyco International Ltd. Company

JUNE 2006 ACTION LIST SUMMARY

PROJECT: Stanton Cleaners **JOB NUMBER:** 70536
LOCATION: Great Neck, NY **DATE:** July 13, 2006
CLIENT: USACE / USEPA

COMPLETED ITEMS	**DATE PERFORMED**
O&M Inspection/ System Monitoring	6/7/2006
Monthly System Sampling	6/7/2006
Calibration of pH and Conductivity Meters	6/7/2006
Bi Weekly Air Monitoring/ O&M Inspection/ System Monitoring	6/15/2006
O&M Inspection/ System Monitoring	6/20/06
Monthly Water Level Gauging	6/26/2006
Bi Weekly Air Monitoring/ O&M Inspection/ System Monitoring	6/26/2006
Calibration of pH and Conductivity Meters	6/26/2006

OUTSTANDING ITEMS / RECOMMENDED SOLUTION	
Change out of Vapor Phase Carbon	To be performed July 18, 2006
Change out of Carbon Filters on Rooftop of LIHA	To be performed July 2006
Change out of Caron in Indoor Air Filters	To be performed August 2006