



Monthly Operations and
Monitoring Report
December 1 - December 31, 2006

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

Prepared for:
Environmental Cleanup Contractors
1293 Broad Street, Suite 400
Bloomfield, New Jersey 07003

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

January 1, 2007

ET Project No. 70536-0705

Monthly Operations and Monitoring Report December 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

January 2007

Earth Tech Project No. 70536

Monthly Operations and Monitoring Report December 2006

Site:

Stanton Cleaners Area Groundwater Contamination
Great Neck, NY

Author: _____

Prepared for:

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

Title: _____

Date: _____

Prepared by:

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

Reviewer: _____

January 2007

Title: _____

Earth Tech Project No. 70536

Date: _____

Table of Contents

1.0 INTRODUCTION 1

2.0 SUMMARY OF ACTIVITIES DURING DECEMBER 2006 3

3.0 GROUNDWATER TREATMENT SYSTEM ACTIVITIES 4

 3.1 Operation and Maintenance 4

 3.2 Sampling and Analysis..... 5

 3.2.1 Raw and Treated Groundwater 5

 3.2.2 Process Air Stream Monitoring and Air Sampling..... 5

4.0 MONITORING WELL SAMPLING 7

6.0 INDOOR AIR QUALITY SAMPLING..... 9

7.0 FUTURE EVENTS PLANNED..... 10

8.0 PROBLEM AREAS AND RECOMMENDED SOLUTIONS (OUTSTANDING ISSUES)..... 11

Figures

Figure 1 Air Sampling Locations and Results - February 2005

Tables

Table 1 Modification to Active SVE Wells 6

Table 2 Monitored Well Samples for Further Analysis 7

Appendices

Appendix A Daily Quality Control Reports (DQCRs)

Appendix B Groundwater Treatment System Operation & Maintenance Checklists

Appendix C Groundwater Treatment System Downloaded Operational Data

Appendix D Sampling Trip Reports

Appendix E Groundwater Treatment System Raw and Treated Analytical Data

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

Appendix G Semi-Annual Groundwater Sampling Analytical Data

Appendix H Historical Groundwater Level Monitoring Results (Ongoing)

Appendix I Indoor Air Quality Analytical Data

Appendix J Action List Dated December 2006

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

1.0 INTRODUCTION

This Monthly Operations and Monitoring Report, December 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 Water Authority of Great Neck North (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 United States Environmental protection Agency (USEPA) 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 USEPA 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 system was installed to remediate the volatile organic compound (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; United States Army Corps of Engineers (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 GWT and SVE systems, 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; and,

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

- 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 December 1 and December 31, 2006.

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

2.0 SUMMARY OF ACTIVITIES DURING DECEMBER 2006

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

- December 12 – O&M Inspection/System Monitoring;
- December 13 – Monthly System sampling;
- December 13 – Monthly Water Level Measurements;
- December 13 – Bi-weekly Air Monitoring;
- December 28 – O&M Inspection/System Monitoring; and,
- December 28 – Bi-weekly Air Monitoring.

Details of system shutdowns and alarms during the month of December 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.

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

3.0 GROUNDWATER TREATMENT SYSTEM ACTIVITIES

3.1 Operation and Maintenance

The GWTS treated and discharged 2,460,649.6 gallons during the month of December 2006. The system was operational (recovery well pumps running) for approximately 744 of the 744 hours during the month, for an average operating flow of 55.1 gallons per minute (gpm). The system has treated a total of 142,696,519.2 gallons since the plant startup in October 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 Mirrieles 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 December 13 and 28 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. If they require guidance or notes any serious conditions, the inspector notifies the project manager (Francisco Metcalf). The checklists are completed on site and sent to Francisco Metcalf 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 programmable logic controller (PLC). This data is downloaded every two weeks. The December 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 2005 Operations and Maintenance logs indicated there has been a slight reduction in discharge flow for the GWT system. In an effort to increase the discharge flow, it was determined that the GWT 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.

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

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.

On December 12, 2006 PLC analog cards in positions 2, 3, and 5 were replaced. The replacement of these analog cards fixed the erroneous communication between ph/conductivity meters and the PLC display panel (as described in the November 2006 O & M Report).

3.2 Sampling and Analysis

3.2.1 Raw and Treated Groundwater

In accordance with the SQAPP, GWT system 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 do not exceed the National Pollutant Discharge Elimination System (NPDES) permit equivalency. The combined GWT system influent, along with the GWT system effluent (discharge), will be sampled by the 15th of each month. Collected samples will be shipped to a designated USEPA, contract laboratory program (CLP) lab for analysis of target compound list (TCL) volatile organic compounds.

Earth Tech personnel conducted the GWT system influent and effluent sampling for this report period on December 13, 2006. The samples were shipped to the USEP Region II Division of Environmental Science and Assessment (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 GWT system 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 GWT system PLC on a daily basis; this information is included with the downloaded data in Appendix C.

The next GWT system influent / effluent sampling event is scheduled for January 10, 2007.

3.2.2 Process Air Stream Monitoring and Air Sampling

Air monitoring of the SVE and GWT System is performed on a bi-weekly basis. It includes monitoring for VOCs, carbon monoxide, oxygen, lower explosive limit (LEL), hydrogen sulfide, air velocity in cubic feet per minute (CFM), temperature, relative humidity, dew point, and vacuum pressure 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);

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

- 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); and,
- SVE wells EPA-SVE-1 through EPA-SVE-4 (Shallow and Medium depth).

The bi-weekly air monitoring of the SVE and GWT System was performed on December 13 and 28, 2006. Copies of the bi-weekly air monitoring logs are included in Appendix F. The next bi-weekly air-monitoring event is scheduled for January 10, 2007. A summary of estimated PCE recovery rate based on air monitoring results is presented in table 3.

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 the USEPA Response Engineering and Analytical Contractor's (REAC) 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 1.

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.

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

4.0 MONITORING WELL SAMPLING

Initially, groundwater sampling from select monitoring wells, both on and off-site, were 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 standard operating procedure (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.

In 2005 and at the direction of the USEPA, groundwater sampling frequency was revised. It was decided to switch the frequency to semi-annually. 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 the USEPA Remedial Response Manager 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-ID	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 (back up)	
ST-MW-17(back up)	

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

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 December 13, 2006. The location and number of monitoring wells was determined by the USEPA based on the site Capture Zone Analysis Plan. Historical groundwater level measurements are provided in Appendix H.

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALFE\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

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.

Deleted: C:\DOCUMENTS AND
SETTINGS\FRANCISCO.METCALF\DE
SKTOP\O&M REPORT - DECEMBER
2006.DOC

7.0 FUTURE EVENTS PLANNED

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

- Continue to perform GWT system 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 GWT system carbon vessel set-up (April 2006)

Deleted: C:\DOCUMENTS AND SETTINGS\FRANCISCO.METCALF\DESKTOP\O&M REPORT - DECEMBER 2006.DOC

8.0 PROBLEM AREAS AND RECOMMENDED SOLUTIONS (OUTSTANDING ISSUES)

The altering of the piping for the two (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 gallons per minute (gpm) to 72 gpm following the change. An 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.

On December 28, 2006, one of the windows of the GWT system building was broken. An unidentified person threw a padlock and broke the window. The broken window has been secured (using ply wood from the inside) and a contractor has been scheduled to replace it with a new one. The window replacement will take place on the second week of January 2007.

Deleted: C:\DOCUMENTS AND
SETTINGS\FRANCISCO.METCALFE
SKTOP\O&M REPORT - DECEMBER
2006.DOC

Figures

Tables

**Table 3 - Estimated PCE Recovery Rates
Stanton Cleaners Area Groundwater Contamination Site
250 CFM SVE SYSTEM
September 2003 – December 2006**

Date	No. of Days	Flow Rate		VOC			
		(cfm)	Avg (cfm)	Concentration (ppm)	Average (ppm)	Discharge Rate (lbs/day)	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.

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

$$C_{air} \text{ (mg/m}^3\text{)} = \frac{\text{Conc (ppm)} \times 1 \text{ mole air} \times 1000 \text{ L} \times 1000 \text{ mg}}{1\text{E}+06 \times 24.1 \text{ L} \times \text{MW}_x}$$

Notes:

M_{air} = mass loading, removal rate in air (lbs/day)

Q_{air} = flow rate in air (cfm)

C_{air} = contaminant concentration (mg/m³)

MW_x = 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 Celcius), 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.

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

$$C_{air} (mg/m^3) = \frac{Conc (ppmv) \times 1 \text{ mole air} \times 1000 \text{ L} \times 1000 \text{ mg} \times MW_x}{1E+06 \times 24.1 \text{ L} \times m^3 \times g}$$

Notes:

M_{air} = mass loading, removal rate in air (lbs/day)

Q_{air} = flow rate in air (cfm)

C_{air} = contaminant concentration (mg/m³)

MW_x = 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)
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.

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

$$C_{air} (mg/m^3) = \frac{Conc (ppm)}{1E+06} \times 1 \text{ mole air} \times 1000 \text{ L} \times 1000 \frac{mg}{m^3} \times MW_x$$

Notes:

M_{air} = mass loading, removal rate in air (lbs/day)
 Q_{air} = flow rate in air (cfm)
 C_{air} = contaminant concentration (mg/m³)
 MW_x = 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 Day	Flow Rate		Concentration		VOC	
		(cfm)	Avg (cfm)	(ppm)	Average (ppm)	Discharge Rate (lbs/day)	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
7/13/2006	17	275	267.5	7.2	3.60	0.6	10.1
7/27/2006	14	305	290	3.3	5.25	0.9	13.2
8/3/2006	7	265	285	4.5	3.90	0.7	4.8
8/14/2006	11	270	267.5	10.3	7.40	1.2	13.4
8/28/2006	14	255	262.5	8	9.15	1.5	20.8
						Total	610.5

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.

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

$$C_{air} \text{ (mg/m}^3\text{)} = \frac{\text{Conc (ppmv)} \times 1 \text{ mole air} \times 1000 \text{ L} \times 1000 \text{ mg} \times \text{MW}_x}{1\text{E}+06 \times 24.1 \text{ L} \times \text{m}^3 \times \text{g}}$$

Notes:

M_{air} = mass loading, removal rate in air (lbs/day)

Q_{air} = flow rate in air (cfm)

C_{air} = contaminant concentration (mg/m³)

MW_x = 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		Concentration C (ppm)	Average C (ppm)	VOC	
		(cfm)	Avg (cfm)			Discharge Rate (lbs/day)	Total Discharge (lbs)
9/21/2006	24	280	267.5	12	10.00	1.7	39.6
9/28/2006	7	252	266	10.6	11.30	1.9	13.0
10/12/2006	14	260	256	6.3	8.45	1.3	18.7
10/26/2006	14	250	255	7.8	7.05	1.1	15.5
11/13/2006	18	265	257.5	7.5	7.65	1.2	21.9
11/28/2006	15	265	265	4	5.75	0.9	14.1
12/13/2006	15	98	181.5	0	2.00	0.2	3.4
12/28/2006	15	83	90.5	2.7	1.35	0.1	1.1
						Total	737.9

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.

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

$$C_{air} \text{ (mg/m}^3\text{)} = \frac{\text{Conc (ppmv)} \times 1 \text{ mole air} \times 1000 \text{ L} \times 1000 \text{ mg}}{1\text{E}+0 \times 24.1 \text{ L} \times \text{MW}_x}$$

Notes:

M_{air} = mass loading, removal rate in air (lbs/day)

Q_{air} = flow rate in air (cfm)

C_{air} = contaminant concentration (mg/m³)

MW_x = 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).

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: **12/12/06 and 12/13/06** Earth Tech Project No.: **70536**

Day	S	M	T	W	T	F	S
Weather			PARTLY CLOUDY	RAIN			
Temp.			47° F	52° F			
Wind			SLIGHT	CALM			
Humidity			60%	100%			

Earth Tech Personnel On-Site: **Chuck Fernald, Russ Kolacek**

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

Contract Materials and Equipment on site: **Chevy 1500 pick-up, general sampling equipment, Horiba U 22, General hand tools**

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

**Bi weekly O&M inspection; Bi weekly air monitoring; fixed and zeroed vacuum gauge.
Drained water from SVE piping. Monthly system sampling; measured monthly water levels.
Performed PM on SVE blower (see special notes). Installed new cards in PLC (see special notes).**

Quality Control Activities (including field calibrations): **Calibrated MultiRae, calibrated 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.	
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: Changed oil on SVE blower; grease SVE motor. Changed PLC cards in positions 2, 3, and 5; PLC data matches instrumentation on Plant floor.	
Tomorrow's Expectations: Bi weekly O&M Inspection; bi weekly air monitoring. Change out of carbon in indoor air filters at the site.	
By: Charles H. Fernald	Title: Environmental Technician
Signature: <i>Charles H. Fernald</i>	(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: 12/28/06 Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather					PARTLY CLOUDY		
Temp.					42° F		
Wind					Calm		
Humidity					40%		

Earth Tech Personnel On-Site: **Russell Kolacek, Ryan Mentzer**

Subcontractor (include names & responsibilities): N/A

Contract Materials and Equipment on site: **Chevy 1500 pick-up, general sampling equipment, General hand tools**

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

Bi weekly O&M inspection; Bi weekly air monitoring. Drained water from SVE piping. Cleaned sampling pump – flooded by SVE-3A. Patched hole in front window (see special notes).Quality Control Activities (including field calibrations): **Calibrated MultiRae.**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**

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: 12/28/06 Earth Tech Project No.: 70536

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:

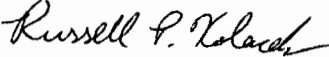
Noticed a broken window on the front of the building. The owner of New Stanton Cleaners told us he filed a police report about the broken window. The building did not seem to be breached. Called a local window contractor and received and estimate for \$191.00 for replacement. The replacement window was ordered and the contractor will call when it arrives to schedule installation.

Tomorrow's Expectations:

Bi weekly O&M Inspection; bi weekly air monitoring.**Change out of carbon in indoor air filters at the site.****Monthly system samples.****Contractor repair of front window**

By: Russell P. Kolacek

Title: Field Technician

Signature:  (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

12/12/2006

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES NO
If so, list where:
- B. Is there water on the floor? YES NO
If so, list where:
- C. Are all three (3) floor sump level switches in place? YES NO
- D. Is there any evidence of water in any of these floor sumps? YES 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 flow¹ 50 GPM
2. Recovery Well EPA-EXT-02 valve open 100 %
3. Recovery Well EPA-EXT-4R flow 0 GPM
4. Recovery Well EPA-EXT-4R valve open 0 %
5. Recovery Well pH 6.5 pH
6. Recovery Well conductivity 70 cond
7. Air Stripper pH 6.8 pH
8. Air Stripper temperature 153 deg.
9. Air Stripper air flow 469 CFM
10. Pre-vapor carbon pressure 3 "wc
11. Post carbon air flow 2742 CFM
12. Discharge conductivity 80 cond
13. Discharge pH 7.6 pH
14. Discharge flow 66 GPM
15. Discharge total gallons 141243615 Gal
16. SVE inlet vacuum 2 "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 __ 4646208 __ Gal
2. Recovery Well EPA-EXT-03 total flow __ 51 __ Gal
3. Recovery Well pH _____ 6.03 _____ pH
4. Recovery Well conductivity _____ 0.72 _____ cond
5. Air Stripper pH _____ 6.84 _____ pH
6. Air Stripper temperature _____ 15.3 _____ deg. C
7. Air Stripper Pump water flow _____ 85 _____ GPM
8. Air Stripper Pump pressure _____ 44 _____ PSI
9. Discharge conductivity _____ 0.76 _____ cond
10. Discharge pH _____ 7.62 _____ pH
11. SVE inlet vacuum (digital readout) _____ +1.7 _____ "Hg
12. SVE inlet vacuum _____ -3.0 _____ "Hg
13. SVE post knockout vacuum _____ -2.9 _____ "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

Treatment System is cycling properly.

12/28/2006

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES NO
If so, list where:
- B. Is there water on the floor? YES NO
If so, list where:
- C. Are all three (3) floor sump level switches in place? YES NO
- D. Is there any evidence of water in any of these floor sumps? YES 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 | <u>48</u> | GPM |
| 2. Recovery Well EPA-EXT-02 valve open | <u>100</u> | % |
| 3. Recovery Well EPA-EXT-4R flow | <u>0</u> | GPM |
| 4. Recovery Well EPA-EXT-4R valve open | <u>0</u> | % |
| 5. Recovery Well pH | <u>6.4</u> | pH |
| 6. Recovery Well conductivity | <u>70</u> | cond |
| 7. Air Stripper pH | <u>6.8</u> | pH |
| 8. Air Stripper temperature | <u>151</u> | deg. |
| 9. Air Stripper air flow | <u>417</u> | CFM |
| 10. Pre-vapor carbon pressure | <u>0</u> | "wc |
| 11. Post carbon air flow | <u>2599</u> | CFM |
| 12. Discharge conductivity | <u>81</u> | cond |
| 13. Discharge pH | <u>7.6</u> | pH |
| 14. Discharge flow | <u>65</u> | GPM |

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.

- 15. Discharge total gallons 142449338 Gal
- 16. SVE inlet vacuum 2 "Hg
- 17. SVE air flow 500 CFM

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

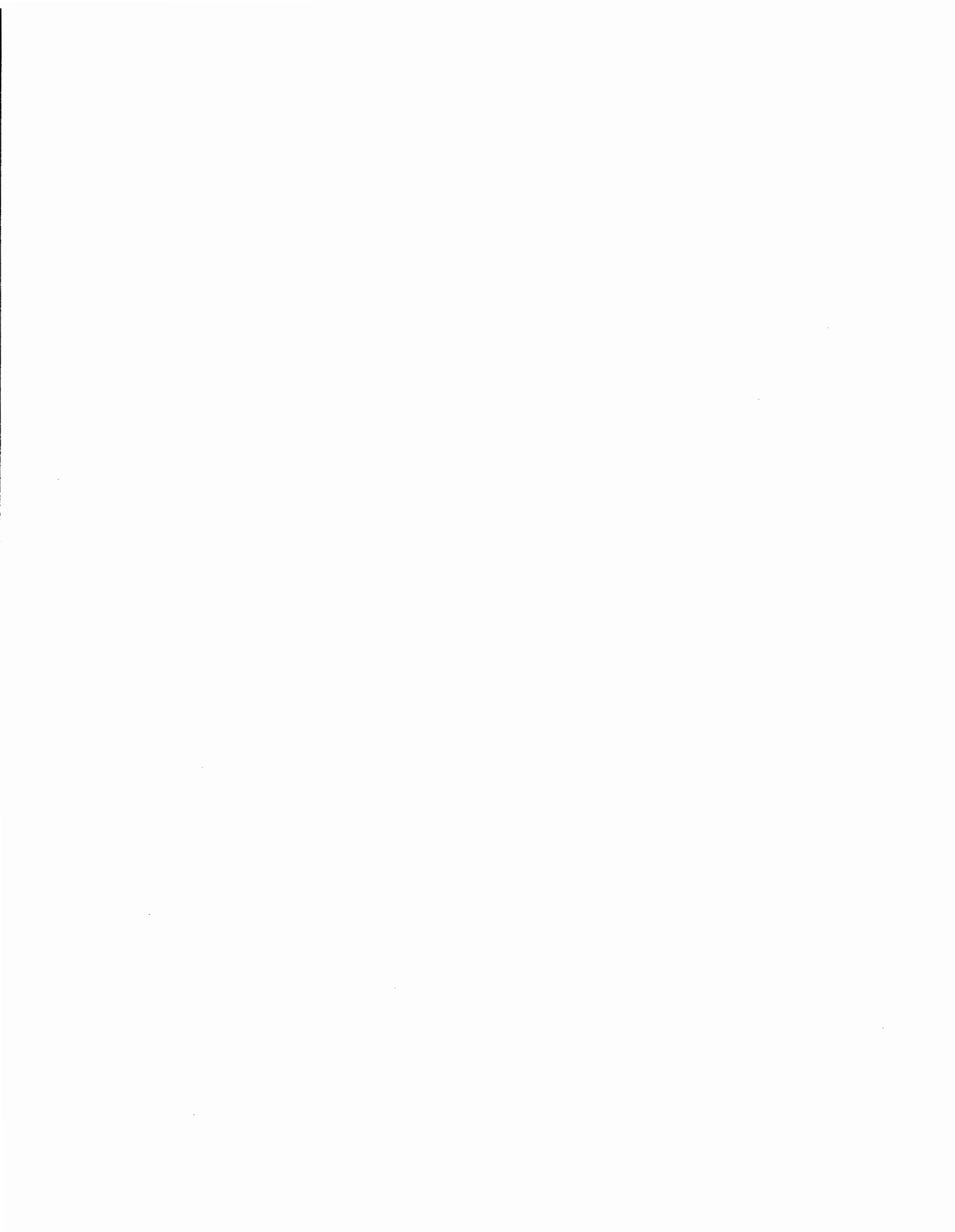
- 1. Recovery Well EPA-EXT-02 total flow 5314239 Gal
- 2. Recovery Well EPA-EXT-03 total flow 51 Gal
- 3. Recovery Well pH 5.99 pH
- 4. Recovery Well conductivity 0.73 cond
- 5. Air Stripper pH 6.81 pH
- 6. Air Stripper temperature 15.0 deg. C
- 7. Air Stripper Pump water flow 83 GPM
- 8. Air Stripper Pump pressure 43 PSI
- 9. Discharge conductivity 0.70 cond
- 10. Discharge pH 7.60 pH
- 11. SVE inlet vacuum (digital readout) +1.7 "Hg
- 12. SVE inlet vacuum -2.8 "Hg
- 13. SVE post knockout vacuum -2.5 "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

Treatment System is cycling properly.

Appendix C

Groundwater Treatment System Downloaded Operational Data



Appendix D
Sampling Trip Reports

SAMPLING TRIP REPORT

Site Name: STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE

CERCLIS ID Number: NYD047650197

Sampling Dates: December 13, 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 December 13, 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
857762606058	1	Total of 4 Aqueous Samples to include 1 duplicate sample, and 1 Trip Blank for TCL-VOAs	11/7/06 @ 13:15 TO: USEPA

Sampling Personnel (Table 3):

Name	Organization	Site Duties
Francisco Metcalf	Earth Tech, Inc.	Earth Tech Project Manager
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
(December 13, 2006 System Sampling Event)



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

Data Shipped: 12/13/2006		Chain of Custody Record		Case No:	
Customer Name: FedEx	84605705393	Relinquished By: (Date / Time)	Signature Received By: (Date / Time)	DMS No:	L
Address: USEPA Region 2 - DESA	LAB	1. <i>Mark H. Ford</i> 12/13/06 1300	<i>Mark H. Ford</i>	800 No:	
Shipped to: 2890 Woodchoppe Ave.	2890 Woodchoppe Ave.	2. _____	_____	For Lab Use Only	
Lab: 2890 Woodchoppe Ave.	2890 Woodchoppe Ave.	3. _____	_____	Lab Contract No:	
Edison NJ 08837	Edison NJ 08837	4. _____	_____	Transfer To:	
(732) 908-6888	(732) 908-6888			Lab Contract No:	

ORGANIC SAMPLE NO.	MATRIX	CONC/TYPE	ANALYTE	TRANS/ PRESERVATIVE	TRN No./ PRESERVATIVE	STATION LOCATION	DATE COLLECTED	INORGANIC SAMPLE NO.	FOR LAB USE ONLY
EFFLUENT	Ground Water/ Charles Fernald	UG	VOA (14)	(HCL) (3)		Effluent	8: 12/13/2006 / 1156		
EFFLUENT A	Field OC/ Charles Fernald	UG	VOA (14)	(HCL) (3)		Effluent A	8: 12/13/2006 / 1156		
INFLUENT(MW)	Ground Water/ Charles Fernald	UG	VOA (14)	(HCL) (3)		Influent (RAW) 24 & EPA-EXT-02	8: 12/13/2006 / 1150		
TRIP BANK	Field OC/ Charles Fernald	UG	VOA (14)	(HCL) (3)		Trips Blank	8: 12/13/2006 / 1205		

Shipment for Case Complete TN	Sample(s) to be used for laboratory QC:	Additional Sample Signatures(s):	Cooler Temperature (User Receipt):	Chain of Custody Seal Number:
Analysis Key: VOA = CLP TCL Volatiles	Concentration: L = Low, M = Medium, H = High	Type/Signature: Composite = C, Grab = G		Chain of Custody Seal Intact? <input type="checkbox"/> Statement Intact? <input type="checkbox"/>

TR Number: 2-043013577-120706-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs. Send Copy for Sample Management Office, Attn: Healthier State, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3818; Phone 703/618-4200; Fax 703/618-4802

LABORATORY COPY

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

Case No: **R**
DAS No:

Region: 2	Date Shipped: 12/13/2006	Chain of Custody Record	Signature: <i>[Signature]</i>
Project Code: .	Order Number: 848025705393	Requisitioned By: <i>[Signature]</i>	Received By: <i>[Signature]</i>
Account Code: NYD04780187	Shipper: USA EPA Region 2 - DESA	Date / Time: 12/14/06 13:44	Date / Time:
Site ID: OZLX	LAB: 2800 Woodbridge Ave.		
Site Name/State: Station Cleaners Groundwater Contaminant	Emp: 209, MS-250		
Project Leader: Francisco, Leticia	Edison NJ 08837		
Action: Operations and Maintenance	(732) 906-6886		
Sampling Co: Earth Tech			

ORGANIC SAMPLE No.	LATITUDE	CONC/ SAMPLER TYPE	ANALYSIS TURNOVER	TAG No/ PRESERVATIVE Info	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
EFFLUENT	Ground Water/ Charles Fennell	U/G	VOA (14)		Effluent	8: 12/13/2006 / 11:55		
EFFLUENT A	Field OC/ Charles Fennell	U/G	VOA (14)		Effluent A	8: 12/13/2006 / 11:56		Field Duplicate
INFLUENT/M	Ground Water/ Charles Fennell	U/G	VOA (14)		Influent (RAW-24 & EPA-EXT-02)	8: 12/13/2006 / 11:50		
TRIP BANK	Field OC/ Charles Fennell	U/G	VOA (14)		Trip Bank	8: 12/13/2006 / 12:05		Trip Bank

Diagram for Case Complete: N	Sample(s) to be used for laboratory QC:	Additional Sample Signatures:	Chain of Custody Sheet Number:
Analyte Key: VOA = G/P TCL Volatiles	Concentration: L = Low, M = Medium, H = High	Type/Designate: Complete = C, Gap = G	Shipped to: _____

TR Number: **2-043013577-120706-0002**

For further preliminary results, requests for preliminary results, or to receive analytical results, please contact the Regional Office, Air, Water, and Noise Division, U.S. EPA, Region 2, 290 Woodbridge Ave., Edison, NJ 08837, (732) 906-6886.

Send Copy To: Sample Management Office, Air, Water, and Noise Division, U.S. EPA, Region 2, 290 Woodbridge Ave., Edison, NJ 08837, (732) 906-6886.

REGION COPY
PRO-1147 Page 1 of 1

FedEx Air Bill
(December 13, 2006 System Sampling Event)

**Water Quality Parameters
(December 13, 2006 System Sampling Event)**

STANTON CLEANERS SITE LTRA

Groundwater Pump and Treatment System Water Quality Parameters Log

Date: 12/13/06

Project # 70536

	pH	COND.	TURB.	DO	TEMP.	SALINITY
Influent	5.65	.640	52.1	9.2	14.96	0.0
Discharge	6.25	.626	29.6	9.8	15.06	0.0

Total Gallons pumped:

gallons 141243615 gallons

Flow rate: 66 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: Charles Fernald

Comments:

Water samples collected by: Charles Fernald

Water monitoring performed by: Russ Kolacek

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	
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	
				Tetrachloroethene	290	D	5
Influent	SC-01	B17J3	12/10/2003	cis-1,2-Dichloroethene	2	J	
				Trichloroethene	3	J	
				None			
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
Influent	SC-01	B17Z0	2/12/2004	m&p-Xylene	0.7		
				cis-1,2-Dichloroethene	1.7		
				Trichloroethene	3.0		
				Tetrachloroethene	610.0	D	5
Effluent	SC-04	B17Z1	2/12/2004	Unknown TIC	0.53	J	
				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	NJ					

**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		
				<i>cis</i> -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		
				<i>cis</i> -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		
				<i>cis</i> -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		
				<i>cis</i> -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		
				<i>cis</i> -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		
				<i>cis</i> -1,2-Dichloroethene	0.9		
				Trichloroethene	1.6		
Trip Blank	SC-TB	B1BS9	5/20/2004	Tetrachloroethene	200		5
				Acetone	1		5
				Chloroform	0		
Influent	SC-01	B1BS6	6/15/2004	Bromodichloromethane	0		
				Carbon Disulfide	1.1		
				MTBE	2.7		
				<i>cis</i> -1,2-Dichloroethene	1.3		
				Trichloroethene	2.4		
Effluent	SC-04	B1BS7	6/15/2004	Tetrachloroethene	320		5
				Tetrachloroethene	2.1	7	5
Influent Dup	SC-67	B1BS8	6/15/2004	MTBE	2.3		
				<i>cis</i> -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		
				<i>cis</i> -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		
				<i>cis</i> -1,2-Dichloroethene	1.1		
				Trichloroethene	1.8		
Trip Blank	SC-TB	B1FJ5	7/13/2004	Tetrachloroethene	160		5
				Acetone	0.73		5
				Acetic Acid, Ethyl Ester	2.5	NJ	
Influent	SC-01	B1GH2	8/16/2004	MTBE	1.9		
				<i>cis</i> -1,2-Dichloroethene	0.7		
				Trichloroethene	1.5		
				Tetrachloroethene	200		5
Effluent	SC-04	B1GH3	8/16/2004	Acetone	2		5
				Tetrachloroethene	5.4		5
Influent Dup	SC-69	B1GH4	8/16/2004	Acetone	1.6		5
				Acetone	1.2		5
				MTBE	2		
				<i>cis</i> -1,2-Dichloroethene	0.7		
				Trichloroethene	1.5		
Influent	SC-01		9/28/2004	Tetrachloroethene	210		5
				Chloromethane	0.80		
				Acetone	1.0		5
				MTBE	1.5		
				<i>cis</i> -1,2-Dichloroethene	0.70		
Effluent	SC-04		9/28/2004	Trichloroethene	1.4		
				Tetrachloroethene	200		5
				Chloromethane	0.80		
Influent Dup	SC-70		9/28/2004	Acetone	2.1		5
				Tetrachloroethene	1.7		5
				Acetone	1.0		5
				MTBE	1.3		
				<i>cis</i> -1,2-Dichloroethene	0.60		
Trip Blank	SC-TB		9/28/2004	Trichloroethene	1.4		
				Tetrachloroethene	210		5
				Acetone	2.2		5
Influent	SC-01	B1LZ2	10/21/2004	2-Butanone	1.5		
				Acetone	5	J	5
				Methylene chloride	0.2	J	
				MTBE	0.82		
				<i>cis</i> -1,2-Dichloroethene	0.5		
				Trichloroethene	1.2		
Effluent	SC-04	B1LZ3	10/21/2004	Tetrachloroethene	220		5
				Acetone	5	J	5
				Methylene chloride	0.5	UJ	
Influent Dup	SC-71	B1LZ4	10/21/2004	Tetrachloroethene	0.2	J	5
				Acetone	5	J	5
				Methylene chloride	1.1		
				MTBE	1.1		
				<i>cis</i> -1,2-Dichloroethene	0.64		
				Trichloroethene	1.1		
Trip Blank	SC-TB	B1LZ5	10/21/2004	Tetrachloroethene	210	D	5
				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
				Acetone	3	J	5
Trip Blank	SC-TB	B1T25	11/17/2004	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
				MTBE	1.6		
Influent	SC-01	B1T79	12/15/2004	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	
				Benzene	0.5	U	
Effluent	SC-04	B1T81	12/15/2004	1,2,4-Trichlorobenzene	0.5	U	
				1,2,3-Trichlorobenzene	0.5	U	5
				Methyl tert-Butyl Ether	1.6		
Influent Dup	SC-73	B1T80	12/15/2004	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	
				Chloroform	0.1	J	
Trip Blank	SC-TB	B1T82	12/15/2004	Cyclohexane	0.15	J	
				Benzene	0.5	U	
				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
Trip Blank	SC-TB	B1W03	1/21/2005	Acetone	10		5
				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
Trip Blank	SC-TB	AG00200	2/3/2005	Acetone	1.1		5
				Acetone	4.3		5
Influent	SC-01	AG00468	3/9/2005	4-Methyl-2-pentanone	1.2		
				MTBE	1.4		
				Acetone	2.5		5
				Trichloroethene (TCE)	1.1		5
Effluent	SC-04	AG00469	3/9/2005	Tetrachloroethene	130		5
				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
Influent (EPA-EXT-4R)	SC-02	AG00826	4/22/2005	Tetrachloroethene	65		5
				2-Butanone	2.5		
				Acetone	5.1		5
				Trichloroethene (TCE)	1.3		5
Effluent	SC-04	AG00827	4/22/2005	Tetrachloroethene	9.5		5
				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	NJ	
Influent (EPA-EXT-4R)	SC-02	AG02075	6/22/2005	Tetrachloroethene	9.1		5
				Acetone	1.9	K	5
				Ethyl Acetate	3.6	NJ	
				Propane, 2-Isothiocyanto-2	0.8	NJ	
Influent		AG02076	6/22/2005	MTBE	0.64		
				Tetrachloroethene	50		5
				Acetone	2	K	5
				Trichloroethene (TCE)	0.56		5
				Ethyl Acetate	8.8	NJ	
Effluent	SC-04	AG02072	6/22/2005	Acetone	2.6	K	5
				Ethyl Acetate	6.2	NJ	
EffluentDup	SC-04	AG02073	6/22/2005	Acetone	2.6	K	5
				Ethyl Acetate	3.3	NJ	
Trip Blank	SC-TB	AG02077	6/22/2005	Acetone	2.4	K	5
				Chloroform	13		
				Bromodichloromethane	2.7		
				Ethyl Acetate	3.1	NJ	
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	NJ	
				Propane, 2-Isothiocyanto-2	1.4	NJ	
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	NJ	
EffluentDup	SC-04	AG02779	7/12/2005	Acetone	1.9	K	5
				Ethyl Acetate	5.2	NJ	
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	NJ	
Influent		AG03723	8/15/2005	Tetrachloroethene	43		5
Effluent	SC-04	AG03725	8/15/2005	Acetone	ND (5.0)		5
EffluentDup	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
Influent (EPA-EXT-4R)	SC-02	AG08954	12/6/2005	1-Butanol	0.63	NJ	
				Acetone	1.4	K	5
Influent		AG08955	12/6/2005	Tetrachloroethene	9.5		5
				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	None			
Effluent Duplicate		AH01176	2/15/2006	None			
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		5
				ACETONE	1.7		5
				ETHYL ACETATE	1.5	NJ	5
Effluent	SC-04	AH01639	4/5/2006	ACETONE	1.7		5
				EHHYL ACETATE	1.7	NJ	5
Effluent A	SC-04	AH01640	4/5/2006	ACETONE	4.6		5
				EHHYL ACETATE	5.3	NJ	5
Trip Blank	SC-TB	AH01642	4/5/2006	ACETONE	1.7		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 (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		
Influent (MW-24 & EPA-EXT-02)	SC-01	AH03367	7/12/2006	ACETONE	1.8		5
				MTBE	1.6		
				TETRACHLOROETHENE	74		5
Effluent	SC-04	AH03367	7/12/2006	None	ND		
Effluent A	SC-04	AH03368	7/12/2006	None	ND		
Trip Blank	SC-TB	AH03370	7/12/2006	None	ND		
Influent (MW-24 & EPA-EXT-02)	SC-01	AH04373	8/9/2006	ACETONE	1.3	J	5
				MTBE	1.6		
				TRICHLOROETHENE	0.55		
				TETRACHLOROETHENE	65		5
Effluent	SC-04	AH04371	8/9/2006	ACETONE	1.3	J	5
Effluent A	SC-04	AH04372	8/9/2006	ACETONE	2	J	5
Trip Blank	SC-TB	AH04374	8/9/2006	ACETONE	0.78	J	5
Influent (MW-24 & EPA-EXT-02)	SC-01	AH05500	9/6/2006	MTBE	1.7		
				TRICHLOROETHENE	0.68		
				TETRACHLOROETHENE	69		5
Effluent	SC-04	AH05498	9/6/2006		ND		
Effluent A	SC-04	AH05499	9/6/2006	CHLOROMETHANE	0.64		5
Trip Blank	SC-TB	AH05501	9/6/2006		ND		
Influent (MW-24 & EPA-EXT-02)	SC-01	AH05962	10/4/2006	MTBE	1		
				TRICHLOROETHENE	0.54		
				TETRACHLOROETHENE	68		5
Effluent	SC-04	AH05960	10/4/2006	None			
Effluent A	SC-04	AH05961	10/4/2006	None			5
Trip Blank	SC-TB	AH05963	10/4/2006	None			
Influent (MW-24 & EPA-EXT-02)	SC-01	AH06624	11/8/2006	MTBE	1.4		
				TETRACHLOROETHENE	67		5
Effluent	SC-04	AH06622	11/8/2006	None			
Effluent A	SC-04	AH06623	11/8/2006	None			5
Trip Blank	SC-TB	AH06625	11/8/2006	MTBE	0.6		
Influent (MW-24 & EPA-EXT-02)	SC-01	AH07022	12/14/2006	MTBE	1.4	J	
				TETRACHLOROETHENE	58		5
Effluent	SC-04	AH07020	12/14/2006	None			
Effluent A	SC-04	AH07021	12/14/2006	None			
Trip Blank	SC-TB	AH07023	12/14/2006	METHYLENE CHLORIDE	1.3		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
-----------------	---------	--------	----------------	--------------------	---------------	-------------	--------------------

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 qualifiers and did not perform a separate review or validation of the data.
- (D) = Detection from a dilution of the sample.
- J = qualified as estimated
- NJ = 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 = methyl tertiary - butyl ether
- 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: 12/13/06
Project # 70536

	Pipe ID	MultiRAE Plus PGM-50						VelociCalc Plus				
		VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow	
SVE-Influent	5.709	0.0	0	20.2%	0%	0%	87.5	+	33.0%	56.8	98	
Post Air Stripper	11.284	0.0	0	20.1%	0%	0%	59.8	0.22	100.0%	59.8	185	
SVE-Effluent ¹	5.706	0.0	0	19.8%	0%	0%	69.1	+	100.0%	69.1	80.5	
GW Post Vapor Effluent ²	11.294	0.0	0	19.8%	0%	0%	59.8	+	100.0%	59.8	189	
EPA-SVE-1 (shallow)	1.913	0.0	0	19.5%	0%	0%	58.7	12.0	92.7%	56.5	12.4	
EPA-SVE-1 (medium)	1.913	0.0	0	20.9%	0%	0%	52.2	12.0	96.7%	51.5	5.9	
EPA-SVE-2 (shallow)	1.913	0.2	0	20.2%	0%	0%	56.7	0.0	100.0	56.7	0	
EPA-SVE-2 (medium)	1.913	0.0	0	19.8%	0%	0%	NM	0.0	NM	NM	NM	
SS-A	1.913	0.0	0	20.9%	0%	0%	61.5	5.0	59.7%	47.7	112	
EPA-SVE-04R/SS-B(A)	1.913	0.0	0	19.1%	0%	0%	56.1	2.0	100.0%	56.1	42.7	
SS-B-C	1.913	0.0	0	20.4%	0%	0%	57.0	3.0	100.0%	57.0	6.6	
SS-C	1.913	0.0	0	20.2%	0%	0%	53.3	3.0	100.0%	53.3	170	
L1	1.913	0.0	0	20.9%	0%	0%	49.1	6.0	100.0%	49.0	290	
L2	1.913	Not measured - offline										
SS-B(B)	1.913	0.0	0	20.4%	0%	0%	56.4	2.0	100.0%	56.4	79.5	
SS Vent-LIHA	3.786	0.0	0	20.3%	0%	0%	68.2	2.0	81.3%	61.5	44.1	
Vapor Point-1/Slope 1		0.0	0	20.9	0%	0%	NM	0.0	NM	NM	NM	
SVE-3A	1.913	0.0	0	20.9%	0%	0%	51.5	11.0	95.6%	50.3	4.1	
SVE-3B	1.913	0.0	0	20.0%	0%	0%	59.9	10.0	71.8%	50.0	356	
Background		0.0	0	20.9%	0%	0%	56.4	0.0	100.0	56.1	0	

Equipment calibrated by: Chuck Fernald, Russ Kolacek

Air readings collected by: Chuck Fernald, Russ Kolacek

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)
 %RH: relative humidity

Dew Pt.: dew point in degrees Fahrenheit

AS: Air Stripper

SVE: Soil Vapor Extraction System

SVE 1
 SVE 2
 SVE 3
 SVE 4
 EPA-SVE-04R/SSB(A)
 SS-A
 SS-B(B)
 SS-B(C)
 L1
 L2

Table Comments:
 NM=Not Measured

¹Formerly Post SVE Carbon
²Formerly Post Air Stripper Carbon
³Formerly Sub-Slab A, B, and C
⁴Formerly Sub-Slab
 D
⁵Formerly Sub-Slab
 B
 NA- Not Available

	<u>Prior to 10/3/05</u>	<u>As of 12/13/06</u>
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	A & B on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	on
SS-B(C)	on	on
L1	on	on
L2	on	off

Comments:

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

Date: 12/28/06
Project # 70536

	Pipe ID	MultiRAE Plus PGM-50						VelociCalc Plus					
		VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow		
SVE-Influent	5.709	2.7	0	19.9%	0%	0%	86.4	+	84.5%	76.4	83		
Post Air Stripper	11.294	0.0	0	20.6%	0%	0%	57.6	+	100.0%	57.5	201		
SVE-Effluent ¹	5.706	0.0	0	19.9%	0%	0%	59.8	+	80.2%	50.8	85.5		
GW Post Vapor Effluent ²	11.294	0.0	0	20.5%	0%	0%	58.8	+	100.0%	56.6	194		
EPA-SVE-1 (shallow)	1.913	0.0	0	20.5%	0%	0%	46.0	12.5	86.3%	42.1	42.1		
EPA-SVE-1 (medium)	1.913	0.0	0	20.9%	0%	0%	44.1	11.5	85.4%	41.9	11.55		
EPA-SVE-2 (shallow)	1.913	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM		
EPA-SVE-2 (medium)	1.913	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM		
SS-A	1.913	0.0	0	20.9%	0%	0%	48.7	3.0	53.2%	33.8	108.5		
EPA-SVE-04R/SS-B(A)	1.913	0.0	0	20.9%	0%	0%	49.1	3.0	56.2%	36.1	34.7		
SS-B-C	1.913	0.0	0	20.9%	0%	0%	47.0	3.0	74.2%	40.4	4.46		
SS-C	1.913	0.0	0	20.9%	0%	0%	43.0	4.0	91.3%	40.4	145		
L1	1.913	0.0	0	20.9%	0%	0%	42.8	7.0	98.1%	42.3	302		
L2	1.913	Not measured - offline											
SS-B(B)	1.913	0.0	0	20.9%	0%	0%	47.7	3.0	68.5%	36.3	87.5		
SS Vent-LIHA	3.786	0.0	0	20.9%	0%	0%	48.5	1.8	58.1%	33.3	49.4		
Vapor Point-1/Slope 1		0.0	0	20.9	0%	0%	NM	0.0	NM	NM	NM		
SVE-3A	1.913	NM	NM	NM	NM	NM	50.6	12.0	94.3%	44.8	OVER		
SVE-3B	1.913	0.0	0	19.6%	0%	0%	56.3	10.5	49.9%	37.6	344		
Background		0.0	0	20.9%	0%	0%	62.5	0.0	27.7	29.7	0.471		

Equipment calibrated by: Russell Kojacek, Ryan Mentzer

Air readings collected by: Russell Kolacek, Ryan Mentzer

Table Comments:
 NM=Not Measured

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)
 %RH: relative humidity
 Dew Pt.: dew point in degrees Fahrenheit
 AS: Air Stripper
 SVE: Soil Vapor Extraction System

¹Formerly Post SVE Carbon
²Formerly Post Air Stripper Carbon
³Formerly Sub-Slab A,B, and C
⁴Formerly Sub-Slab
 D
⁵Formerly Sub-Slab
 B
 NA- Not Available

	<u>Prior to 10/3/05</u>	<u>As of 12/28/06</u>
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	not measurable
SVE 3	shallow on	A & B
SVE 4	off	on
EPA-SVE-04R/SSB(A)	on	off
SS-A	on	on
SS-B(B)	on	on
SS-B(C)	on	on
L1	on	on
L2	on	off

Comments:
 EPA-SVE-2 (shallow & medium) had no flow at the well, suspect water condensation in the line, but wouldn't drain out.
 SVE-3A water in line caused malfunction in VelociCalc and MultiRae, lost MultiRae data for well and possibly effected results for remainder of the wells. Next time we will sample this well last.

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:		JOB NUMBER:			
Stanton Cleaners		70536			
LOCATION:		DATE:			
Great Neck, NY		12/13/2006			
CLIENT:		MEASURED BY:			
USACE / USEPA		C.Fernald R. Kolacek			
SURVEY DATUM:					
ft msl					
MEASURING DEVICE: Solinet Water Level Indicator SN# 34407					
WELL NUMBER	MEASURING POINT		DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)			
EPA-MW-11D	ft BIOC	74.63	57.92	16.71	
EPA-MW-21	ft BIOC	84.13	65.33	18.80	missing 1 bolt
EPA-MW-22	ft BIOC	82.20	63.04	19.16	
EPA-MW-23	ft BIOC	82.83	63.53	19.30	
EPA-MW-27	ft BIOC	69.32	50.65	18.67	
ST-MW-02	ft BIOC	82.03	62.98	19.05	no bolts
ST-MW-06	ft BIOC	69.83	45.27	24.56	
ST-MW-09	ft BIOC	78.13	62.75	15.38	
ST-MW-11	ft BIOC	75.25			
ST-MW-12	ft BIOC	87.20	70.24	16.96	blocked by car
ST-MW-14	ft BIOC	69.73	53.95	15.78	missing 1 bolt
ST-MW-16	ft BIOC	75.78	53.84	21.94	no bolts
ST-MW-17	ft BIOC	86.53	69.64	16.89	no bolts
ST-MW-19	ft BIOC	82.50	65.59	16.91	no bolts
ST-MW-20	ft BIOC	84.53	70.05	14.48	no bolts

Notes:

During water level measurements, WAGNN Well #2A was pumping at 1,000 GPM, Well # 13 was pumping at 1,300 GPM.

**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)	12/19/2006		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)	7/20/2006		8/31/2006		9/27/2006	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	58.62	16.01	58.12	16.51	58.17	16.46
EPA-MW-21	84.13	65.57	18.56	65.42	18.71	65.43	18.70
EPA-MW-22	82.20	63.23	18.97	63.13	19.07	63.11	19.09
EPA-MW-23	82.83	63.77	19.06	63.64	19.19	63.68	19.15
EPA-MW-27	69.32	51.00	18.32	50.80	18.52	50.81	18.51
ST-MW-02	82.03	64.11					
ST-MW-06	69.83	43.43	26.40	43.61	26.22	45.00	24.83
ST-MW-09	78.13	63.18	14.95	62.92	15.21	63.97	14.16
ST-MW-11	75.25						
ST-MW-12	87.20	70.56	16.64	70.21	16.99	70.42	16.78
ST-MW-14	69.73	55.57	14.16	54.82	14.91	54.69	15.04
ST-MW-16	75.78	53.54	22.24	53.75	22.03	54.57	21.21
ST-MW-17	86.53	70.05	16.48	69.71	16.82	69.85	16.68
ST-MW-19	82.50	64.97	17.53	65.69	16.81	65.79	16.71
ST-MW-20	84.53	71.54	12.99	70.86	13.67	73.83	10.70

Notes:

- ft msl - feet mean sea level
- ft BTOC - feet below top of casing
- Not measured

Well ID	Top of PVC Elevation (ft msl)	10/25/2006		12/13/2006	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	58.92	15.71	57.92	16.71
EPA-MW-21	84.13	65.8	18.33	65.33	18.80
EPA-MW-22	82.2	63.48	18.72	63.04	19.16
EPA-MW-23	82.83	64.04	18.79	63.53	19.30
EPA-MW-27	69.32	51.29	18.03	50.65	18.67
ST-MW-02	82.03			62.98	19.05
ST-MW-06	69.83	45.18	24.65	45.27	24.56
ST-MW-09	78.13	63.45	14.68	62.75	15.38
ST-MW-11	75.25				
ST-MW-12	87.2	70.87	16.33	70.24	16.96
ST-MW-14	69.73	56.69	13.04	53.95	15.78
ST-MW-16	75.78	54.9	20.88	53.84	21.94
ST-MW-17	86.53	70.35	16.18	69.64	16.89
ST-MW-19	82.5	66.22	16.28	65.59	16.91
ST-MW-20	84.53	71.71	12.82	70.05	14.48

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 December 2006



A **tyco** International Ltd. Company

DECEMBER 2006 ACTION LIST SUMMARY

PROJECT: Stanton Cleaners **JOB NUMBER:** 70536
LOCATION: Great Neck, NY **DATE:** January 4, 2007
CLIENT: USACE / USEPA

<u>COMPLETED ITEMS</u>	<u>DATE PERFORMED</u>
O&M Inspection/System Monitoring	12/12/2006
Monthly System sampling	12/13/2006
Water Level measurements	12/13/2006
Bi-weekly Air Monitoring	12/13/2006
O&M Inspection/System Monitoring	12/28/2006
Bi-weekly Air Monitoring	12/28/2006

OUTSTANDING ITEMS / **RECOMMENDED SOLUTION**