

Monthly Operations and Monitoring Report May 2007

Site:

Stanton Cleaners Area Groundwater Contamination
Great Neck, NY

Prepared for:

Environmental Chemical Corporation
1125 Route 22 West
Bridgewater, New Jersey 08807

Prepared by:

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June 12, 2007

Earth Tech Project No. 70536

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1.0 INTRODUCTION

This Monthly Operations and Monitoring Report, April 2007 (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 EPA installed a temporary soil vapor interceptor system, adjacent to the tennis club, to mitigate impacts from PCE vapors to the indoor air of this facility.

In 2001, the EPA completed the construction and installation of a soil vapor extraction (SVE) system and a ground water treatment (GWT) system on the SCP. Both the SVE and GWT systems are housed in the treatment building that was constructed on the SCP. The SVE was installed to remediate the 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 United States Environmental Protection Agency (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 system and SVE system, 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,
- Sampling of indoor air quality of buildings adjacent to the site in order to identify all the adjacent buildings being impacted by site related contaminants and the effectiveness of the remedial actions being instituted at the site.

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

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

As required by the Scope of Work for this project, monthly summary reports are prepared to document and summarize the activities taking place. These reports provide a concise description of work performed during the reporting period and include pertinent deliverables as appendices. This monthly summary report covers the period between May 1 and May 31, 2007.

2.0 SUMMARY OF ACTIVITIES DURING ARIL 2007

The following list summarizes activities performed and milestone dates under this contract during the reporting period, May 1 and May 31, 2007:

- May 2 - Repaired broken influent line located behind the drycleaners;
- May 3 - Bi-weekly Air Monitoring;
- May 3 - Bi-weekly O & M inspection;
- May 3 - Monthly GWT System sampling;
- May 15 - Bi-weekly O&M Inspection;
- May 15 - Bi-weekly Air Monitoring;
- May 29 - Bi-weekly Air Monitoring;
- May 29 - Bi-weekly O & M inspection;

Details of system shutdowns and alarms during the month of May 2007 are discussed in section 3.1. Daily Quality Control Reports (DQCRs), which include projected work for the following two weeks, are completed for each day of site activities. Copies of these reports are included as Appendix A.

3.0 GROUNDWATER TREATMENT SYSTEM ACTIVITIES

3.1 Operation and Maintenance

The GWTS treated and discharged 1,270,532 gallons during the month of May 2007. The system was operational (recovery well pumps running) for approximately 596 of the 744 hours during the month, for an average operating flow of 35.5 gallons per minute (gpm). The system has treated a total of 149,412,489.7 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 Mirrielees Road. Extraction well MW-24 had been pumping from the triangle location until it was turned off and April 20, 2005. Extraction well EPA-EXT-4R was activated on April 20, 2005. EPA-EXT-4R is located in the parking lot directly in front of the Stanton Dry Cleaners building. The decision to turn off extraction well MW-24 and replace it with EPA-EXT-4R in April 2005 was made by the USEPA. Later, in early 2006, based on an evaluation of laboratory analytical results obtained from extraction well EPA-EXT-4R and monitoring well sampling results for monitoring wells located in the area of EPA-MW-24, the decision was made to shut down extraction well EPA-EXT-4R and re-activate EPA-MW-24. Therefore, EPA-EXT-4R was taken offline and EPA-MW-24 was activated on February 2, 2006.

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

The Treatment System Operation and Maintenance Checklist was completed during the O&M inspection events for May 3, 15 and 29, 2007 and is 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 (Russell Kolacek). If he requires guidance or notes any serious conditions, the inspector notifies the Project Manager (Francisco Metcalf). The checklists are completed on site and sent to Project Manager 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 May 2007 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.

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).

On February 7, 2007, the GWT system was shut down due to influent pipeline freezing. Heat tape was installed around the pipe to prevent future freezing and the system was restarted on February 20, 2007.

In March 2007 the GWT System was shut down due to wet floor alarms triggered by water leaking from one of the 400-lb aqueous phase carbon vessels. The damaged aqueous phase carbon vessel has been taken offline for maintenance. The GWT System continues to operate with just one 400-lb aqueous phase carbon vessel at a reduce flow (influent at 38 GPM and effluent at 66 GPM).

On April 19, 2007, the activated carbon was changed out in the aqueous carbon vessels in the treatment system.

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 May 3, 2007. The samples were shipped to the USEPA 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 June 13, 2007.

3.2.2 Process Air Stream Monitoring

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);
- 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 May 3, 15 and 29, 2007. Copies of the bi-weekly air monitoring logs are included in Appendix F. The next bi-weekly air-monitoring event is scheduled for June 13, 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 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.

ST-MW-11
ST-MW-12
ST-MW-14
ST-MW-15
ST-MW-17
ST-MW-19
ST-MW-20

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 (Water Authority of Great Neck North) 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 May 3, 2007 during the scheduled O&M visit. The location and number of monitoring wells was determined by the USEPA based on the site Capture Zone Analysis Plan. Groundwater level measurements for May 3, 2007 and historical groundwater level measurements are provided in Appendix H.

6.0 INDOOR AIR QUALITY SAMPLING

Indoor air quality samples from select locations within the treatment building and buildings along the perimeter of the site are collected using summa canisters on a quarterly basis and shipped to a laboratory for analysis (as of May 2006 indoor air sampling is performed on a semi-annual basis). 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.

Indoor air quality samples were collected on February 13 and February 14, 2007 by Earth Tech personnel. This sampling event was conducted to address air quality issues within the Long Island Hebrew Academy, the Silverstein Hebrew Academy, and the Stanton Cleaners Treatment Building. A copy of the Indoor Air Sampling Trip Report was included in Appendix I of the February 2007 Monthly O&M Report.

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; and,
- Obtain groundwater level measurements as directed by USACE/ECC/USEPA.

8.0 PROBLEM AREAS AND RECOMMENDED SOLUTIONS (OUTSTANDING ISSUES)

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

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

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 was secured (using ply wood from the inside) and a contractor was scheduled to replace it with a new one. The window replacement will take place on the second week of January 2007.

On January 10, 2007, a pinhole sized leak was observed at the base of an air stripper. It appears to be caused by a corroded weld at the seam between the front and bottom of the air stripper. The leak is not affecting the floor sump pumps or systems operations at this point. Options are being explored for a repair.

On January 18, 2007, the broken window on the GWT system building was replaced.

On February 7, 2007, the GWT system was shut down due to influent pipeline freezing. Heat tape was installed around the influent pipe to prevent freezing and the system was restarted on February 20, 2007.

On February 20, 2007, it was noted that the SVE lines for SS-B(B) & SS-B(A) had broken due to the weight of the SVE line above it that had fallen onto it. Repairs to these lines are planned during the next trip to the site.

On March 28, 2007, the GWT System was shut down due to wet floor alarms triggered by water leaking from one of the 400-lb aqueous phase carbon vessels. The damaged aqueous phase carbon vessel has been taken offline for maintenance. The GWT System continues to operate with just one 400-lb aqueous phase carbon vessel at a reduce flow (influent at 38 GPM and effluent at 66 GPM). Maintenance on the leaking vessel will be performed to coincide with the next spent carbon change out (vessel needs to be empty in order to perform maintenance).

On April 4, 2007, a wet floor alarm shut down the GWT system. An O&M crew responded to the alarm to determine the source of the water setting off the wet floor alarm. It was determined that the water source was from leaking gasket in the air stripper trays. The necessary materials for a temporary fix were ordered for the next O&M visit.

On April 18, 2007, gasket sealant was applied, as a temporary measure, to the air stripper to address the leaks on the air stripper tray gaskets. It is recommended that the gaskets be replaced as a permanent measure to avoid future leaking of the air stripper.

On April 19, 2007, during the spent carbon change out event, it was observed that one of the aqueous phase carbon vessels had a crack on the influent piping portion, on the inside of the tank. The damaged aqueous phase carbon vessel was left off-line until replacement parts can be ordered. When restarting the

system, one of the floats in the air stripper was observed to be broken. That float was replaced with one from the SVE High-High poly tank. The GWT system was left on-line pumping at reduced flow (approximately 35 GPM).

On April 27, 2007, the GWT system was shut down due to a wet floor alarm. On May 2, 2007, O&M crew responded to the alarm to determine the source of the water setting off the wet floor alarm. It was determined that the water source was from rain water seeping in through the treatment system building wall where the influent lines come in. Silicone sealant was applied at the source of seepage and the GWT system was brought back on-line.

The GWT system influent/effluent water samples collected on April 20, 2007, were returned by the currier to the Earth Tech office due to leaking container. When the container was received, it was inspected to determine the source of the leak. It was determine that the container leaked from a broken corner most likely due to improper handling by the currier. Due to this, there will be no GWT system analytical data for the month of April 2007.

On May 11, 2007, the GWT system was shut down due to a wet floor alarm. On May 15, 2007, O&M crew responded to the alarm to determine the source of the water setting off the wet floor alarm. It was determined that the water source was from rain water seeping in through the treatment system building wall where the influent lines come in. Silicone sealant was applied at the source of seepage and the GWT system was brought back on-line. Should water continue to leak into the building at this location other alternatives to waterproof this area should be evaluated.

Tables

Estimated PCE Recovery Rates
Stanton Cleaners Area Groundwater Contamination Site
250 CFM SVE SYSTEM
September 2003 – May 2007

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

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 Celcius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

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

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.

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

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

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 Celcius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

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

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.

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

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

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 Celcius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

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

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.

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

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

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 Celcius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

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
1/10/2007	13	55.5	69.25	0	1.35	0.1	0.8
1/23/2007	13	23	39.25	MultiRAE not operational			
2/20/2007	25	52	37.5	0	0	0.0	0.0
3/7/2007	15	61	56.5	0	0	0.0	0.0
3/17/2007	System down						
3/21/2007	10	61	61	0	0	0.0	0.0
4/3/2007	13	56	58.5	0	0	0.0	0.0
5/3/2007	8	139	97.5	0	0	0.0	0.0
5/15/2007	9	52.8	95.9	0	0	0.0	0.0
5/29/2007	15	54	53.4	0	0	0.0	0.0

Notes:

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

SVE system off from 2/7/2007 through 2/20/07 due to frozen lines.

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.

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

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

6 24.1 L m³ g

Notes:

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

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

Cair = contaminant concentration (mg/m³)

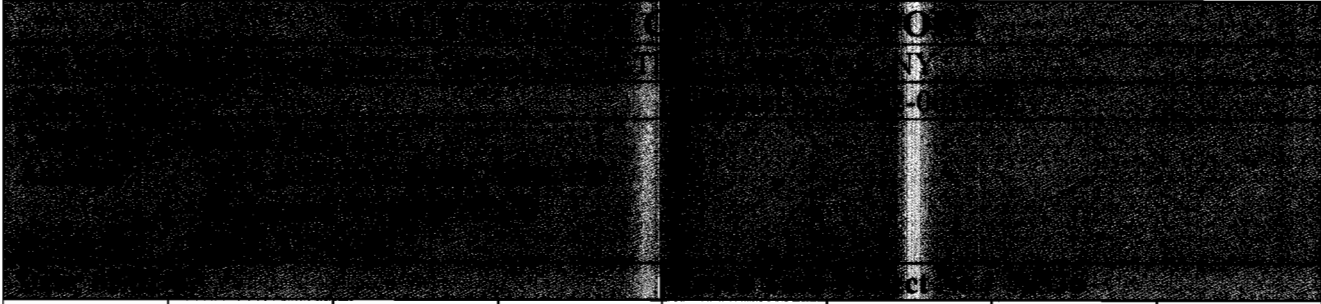
MWx = molecular weight in grams/mole, for PCE is 166

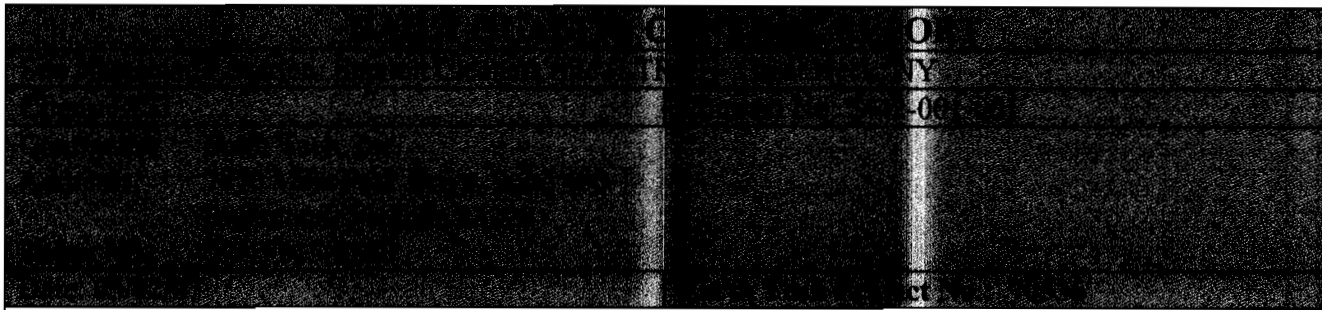
Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Fahrenheit (0 degrees Celcius), the conversion is (1 mole air)/(22.4 L).

Appendices

Appendix A

Daily Quality Control Reports (DQCRs)

							
Day	S	M	T	W	T	F	S
Weather				SUNNY			
Temp.				65° F			
Wind				CALM			
Humidity				LOW			
Earth Tech Personnel On-Site: Russell Kolacek, Justin Self							
Subcontractor (include names & responsibilities): NA							
Contract Materials and Equipment on site: Chevy 1500 pick-up, general hand tools.							
12' A-frame ladder							
Work Performed (include sampling; list by NAS number if applicable): Repaired broken influent line behind the dry cleaner; moved PLC monitor to on top of the control enclosure; restarted system & checked for leaks (see special notes);							
Quality Control Activities (including field calibrations): N/A							
Health and Safety Levels and Activities: Level D							
Problems Encountered/Correction Action Taken: N/A							
Explain Developments Leading to Change in SOW or Finding of Fact: N/A							
Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): N/A							
Have all required submittals and samples of construction been approved? Yes							
Do the materials and equipment to be used conform to the submittals? Yes							
Has all preliminary work been inspected, tested, and completed? Yes							
Test required and inspection techniques to be executed to prove contract compliance (include both expected and actual results): N/A							
Has a phase hazard analysis been performed? Included in the Site Specific Health & Safety Plan.							



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.

See special notes

Special Notes:

Noticed a few very slow leaks coming from the air stripper where it had pushed out through the new silicon sealant; noticed a slow leak coming from the top gasket that had been opened to change out the aqueous carbon vessel; left the system run overnight to evaluate the accumulation of water tomorrow;

Tomorrow's Expectations:

Bi weekly O&M Inspection; bi weekly air monitoring.

Change out of carbon in indoor air filters at the site.

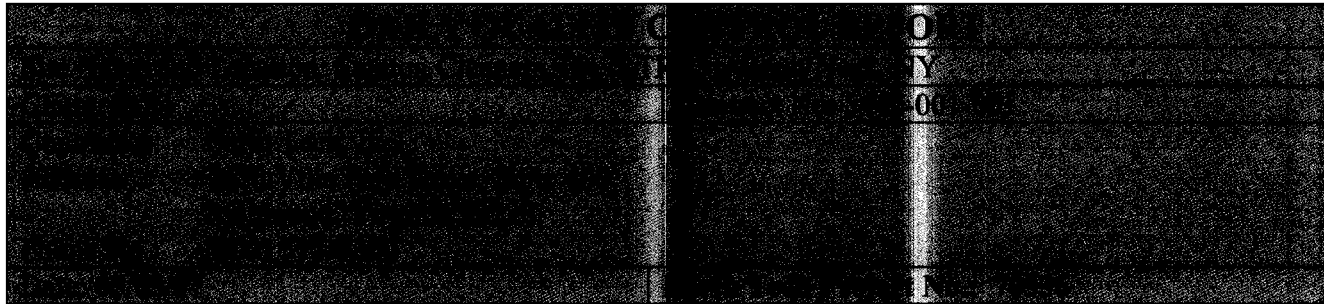
By: Russell Kolacek

Title: Environmental Technician

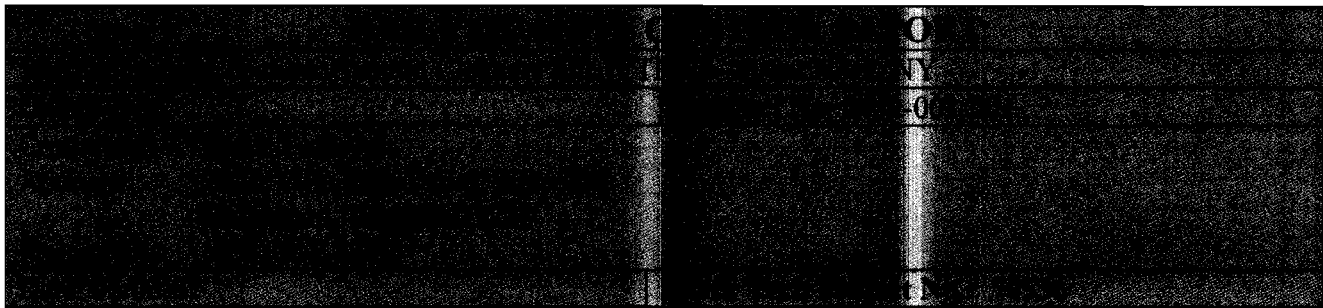
Signature:

(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.



Day	S	M	T	W	T	F	S
Weather					SUNNY		
Temp.					62° F		
Wind					NE 7MPH		
Humidity					25%		
Earth Tech Personnel On-Site: Russell Kolacek, Justin Self							
Subcontractor (include names & responsibilities): NA							
Contract Materials and Equipment on site: Chevy 1500 pick-up, general hand tools.							
12' A-frame ladder							
Work Performed (include sampling; list by NAS number if applicable): Bi weekly O&M inspection; picked up silicon sealant for air stripper and clear recycling bags for sampling; Collected monthly system samples; Recorded water quality readings; dropped samples at Fedex location; removed piping from aqueous carbon vessel and cleaned threads and gasket – reconnected; added silicon sealant to spots on the air stripper that were leaking; replaced the High-High horizontal float in the SVE poly tank; cleaned building; grouped sampling bottles on downstairs metal rack; photographed interior of building;							
Quality Control Activities (including field calibrations): 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.

See special notes

Special Notes:

Tomorrow's Expectations:

Bi weekly O&M Inspection; bi weekly air monitoring.

Change out of carbon in indoor air filters at the site.

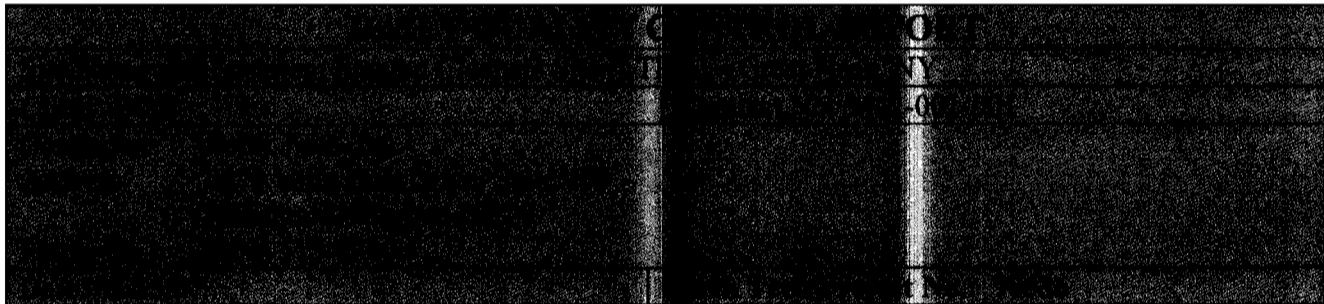
By: Russell Kolacek

Title: Environmental Technician

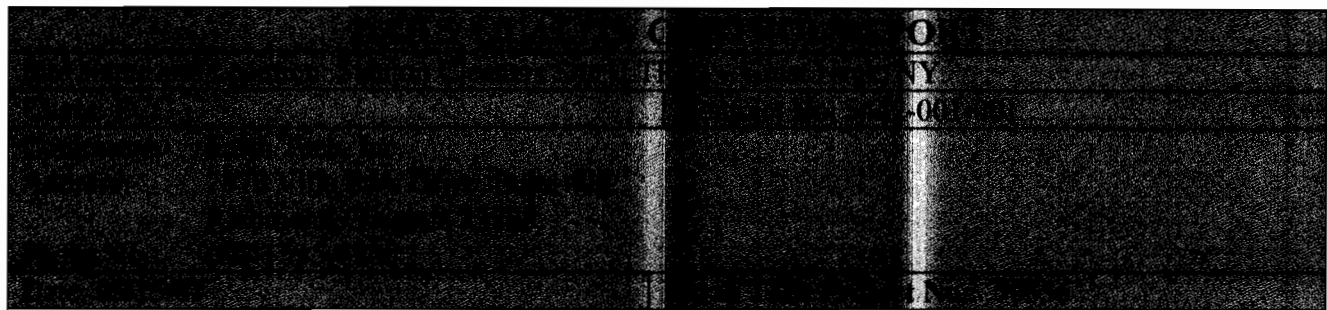
Signature:

(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.



Day	S	M	T	W	T	F	S
Weather			SUNNY				
Temp.			84° F				
Wind			MILD				
Humidity			MEDIUM				
Earth Tech Personnel On-Site: Russell Kolacek, Justin Self							
Subcontractor (include names & responsibilities): NA							
Contract Materials and Equipment on site: Chevy 1500 pick-up, general hand tools.							
Work Performed (include sampling; list by NAS number if applicable): Bi weekly O&M inspection; picked up silicon sealant for air stripper; added more silicon sealant to spots on the air stripper that were leaking; applied silicon sealant to outside seams on the influent cover attached to building; also sealed any flexible conduits that were exposed;							
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							



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.

See special notes

Special Notes:

Tomorrow's Expectations:

Bi weekly O&M Inspection; bi weekly air monitoring.

Change out of carbon in indoor air filters at the site.

Continue investigating cause of sump alarms near influent manifold;

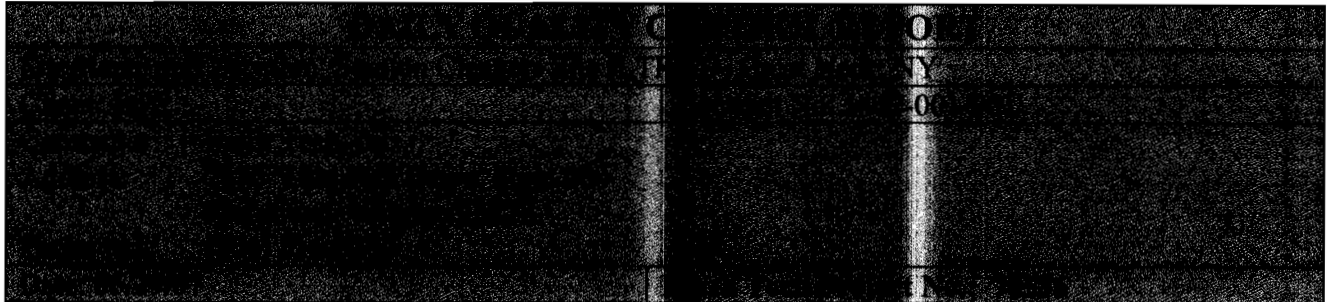
By: Russell Kolacek

Title: Environmental Technician

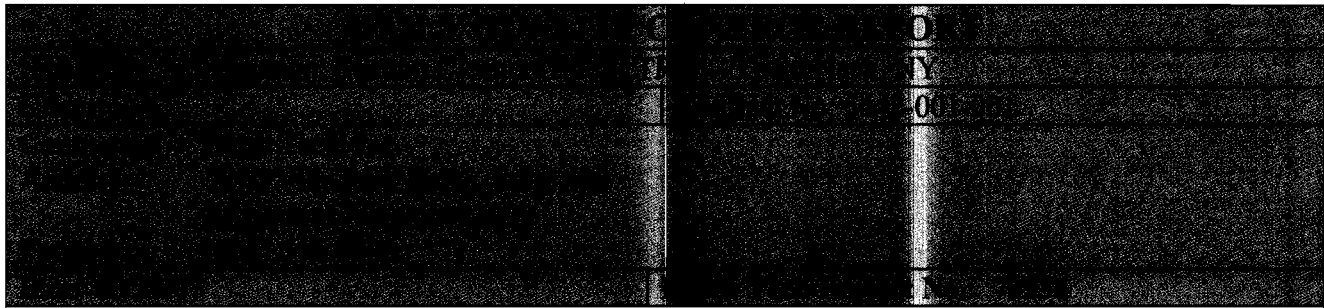
Signature:

(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.



Day	S	M	T	W	T	F	S
Weather			SUNNY				
Temp.			84° F				
Wind			MILD				
Humidity			MEDIUM				
Earth Tech Personnel On-Site: Russell Kolacek, Donald Applegate							
Subcontractor (include names & responsibilities): NA							
Contract Materials and Equipment on site: Chevy 1500 pick-up, general hand tools.							
Work Performed (include sampling; list by NAS number if applicable): Bi weekly O&M inspection; Bi-weekly air monitoring;							
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							
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.

See special notes

Special Notes:

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.

By: Russell Kolacek

Title: Environmental 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.

Appendix B

Groundwater Treatment System Operation & Maintenance Checklists

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST **DATE: 05/03/07**

1. A. Is any part of the system leaking? YES NO
 If so, list where: Liquid Carbon vessel #1 – repair made.
- B. Is there water on the floor? YES NO
 If so, list where: Near Liquid Carbon vessel #1
- 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>29</u>	GPM
2. Recovery Well EPA-EXT-02 valve open	<u>30</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>6.7</u>	pH
6. Recovery Well conductivity	<u>72</u>	cond
7. Air Stripper pH	<u>6.9</u>	pH
8. Air Stripper temperature	<u>15.2</u>	deg.
9. Air Stripper air flow	<u>409</u>	CFM
10. Pre-vapor carbon pressure	<u>0</u>	"wc
11. Post carbon air flow	<u>2546</u>	CFM
12. Discharge conductivity	<u>48</u>	cond
13. Discharge pH	<u>7.9</u>	pH
14. Discharge flow	<u>3</u>	GPM **
15. Discharge total gallons	<u>148187257</u>	Gal
16. SVE inlet vacuum	<u>2</u>	"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 021712 Gal

2. Recovery Well EPA-EXT-03 total flow 51.5 Gal

3. Recovery Well pH 6.09 pH

4. Recovery Well conductivity 0.74 cond

5. Air Stripper pH 6.91 pH

6. Air Stripper temperature 15.26 deg. C

7. Air Stripper Pump water flow 84 GPM

8. Air Stripper Pump pressure 43 PSI

9. Discharge conductivity 0.39 cond

10. Discharge pH 7.93 pH

11. SVE inlet vacuum (digital readout) 1.6 "Hg

12. SVE inlet vacuum 3.3 "Hg

13. SVE post knockout vacuum -2.5 "Hg

3. A. Have you checked that the treatment building general housekeeping meets standards?

YES NO

B. Did you perform any housekeeping activities before leaving the site? YES NO

If so, list them: General facility clean-up. Reorganized the sampling containers.

4. 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

** This data seems off; It's possible that the data may have been taken while the effluent pump was not running.

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST **DATE: 05/15/07**

1. A. Is any part of the system leaking? **YES** NO
 If so, list where: Very small leak in the middle of the broad side of the air stripper;

- 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 25 GPM
 2. Recovery Well EPA-EXT-02 valve open 30 %
 3. Recovery Well EPA-EXT-4R flow 0 GPM
 4. Recovery Well EPA-EXT-4R valve open 0 %
 5. Recovery Well pH 6.6 pH
 6. Recovery Well conductivity 71 cond
 7. Air Stripper pH 6.9 pH
 8. Air Stripper temperature 15.8 deg.
 9. Air Stripper air flow 337 CFM
 10. Pre-vapor carbon pressure 0 "wc
 11. Post carbon air flow 2691 CFM
 12. Discharge conductivity 95 cond
 13. Discharge pH 7.9 pH
 14. Discharge flow 70 GPM
 15. Discharge total gallons 148588973 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 0533786 Gal

2. Recovery Well EPA-EXT-03 total flow 51.0 Gal

3. Recovery Well pH 6.17 pH

4. Recovery Well conductivity 0.73 cond

5. Air Stripper pH 6.99 pH

6. Air Stripper temperature 15.88 deg. C

7. Air Stripper Pump water flow 84 GPM

8. Air Stripper Pump pressure 42 PSI

9. Discharge conductivity 0.41 cond

10. Discharge pH 7.99 pH

11. SVE inlet vacuum (digital readout) 1.5 "Hg

12. SVE inlet vacuum 5.4 "Hg

13. SVE post knockout vacuum -2.5 "Hg

4. A. Have you checked that the treatment building general housekeeping meets standards?

YES NO

- B. Did you perform any housekeeping activities before leaving the site? YES NO

If so, list them: General facility clean-up. Reorganized the sampling containers.

4. 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

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST **DATE: 05/15/07**

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>30</u> | GPM |
| 2. Recovery Well EPA-EXT-02 valve open | <u>30</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>6.6</u> | pH |
| 6. Recovery Well conductivity | <u>69</u> | cond |
| 7. Air Stripper pH | <u>6.9</u> | pH |
| 8. Air Stripper temperature | <u>156</u> | deg. |
| 9. Air Stripper air flow | <u>297</u> | CFM |
| 10. Pre-vapor carbon pressure | <u>0</u> | "wc |
| 11. Post carbon air flow | <u>2546</u> | CFM |
| 12. Discharge conductivity | <u>48</u> | cond |
| 13. Discharge pH | <u>7.8</u> | pH |
| 14. Discharge flow | <u>71</u> | GPM |
| 15. Discharge total gallons | <u>149305513</u> | Gal |
| 16. SVE inlet vacuum | <u>2</u> | "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 1049132 Gal

2. Recovery Well EPA-EXT-03 total flow 51.0 Gal

3. Recovery Well pH 6.12 pH

4. Recovery Well conductivity 0.70 cond

5. Air Stripper pH 6.93 pH

6. Air Stripper temperature 15.6 deg. C

7. Air Stripper Pump water flow 90 GPM

8. Air Stripper Pump pressure 41 PSI

9. Discharge conductivity 0.79 cond

10. Discharge pH 7.83 pH

11. SVE inlet vacuum (digital readout) 1.5 "Hg

12. SVE inlet vacuum 5.0 "Hg

13. SVE post knockout vacuum -2.5 "Hg

5. A. Have you checked that the treatment building general housekeeping meets standards?

YES NO

B. Did you perform any housekeeping activities before leaving the site? YES NO

If so, list them:

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

Appendix C

Groundwater Treatment System Downloaded Operational Data

Stanton Cleaners Area Groundwater Contamination Site - May 2007 - Site Operation Data

Date	Time	Recovery			Influent Water Temperature (°F)	Influent Conductivity	Effluent Conductivity	Influent pH	Stripper Water pH	Discharge Water pH	Total Gallons Discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow (CFM)
		Well 1 Flow (GPM)	Well 2 Flow (GPM)	Well 3 Flow (GPM)										
5/1/2007	0:00	0	0	0	155	62	53	6.8	6.9	7.7	148141957.7	41	20	976
5/1/2007	4:00	0	0	0	155	62	48	6.8	6.9	7.7	148141957.7	49	16	976
5/1/2007	8:00	0	0	0	155	56	45	6.9	6.8	7.6	148141957.7	12	20	976
5/1/2007	12:00	0	0	0	154	85	50	6.9	6.9	7.7	148141957.7	4	20	976
5/1/2007	16:00	0	0	0	155	84	56	6.9	6.9	7.7	148141957.7	13	20	976
5/1/2007	20:00	0	0	0	156	84	54	6.9	6.9	7.7	148141957.7	33	20	976
5/2/2007	0:00	0	0	0	156	62	50	6.9	6.9	7.6	148141957.7	7	20	976
5/2/2007	4:00	0	0	0	155	62	47	8.9	6.9	7.6	148141957.7	8	20	976
5/2/2007	8:00	0	0	0	155	81	46	6.9	6.8	7.8	148141957.7	38	20	976
5/2/2007	12:00	0	0	0	154	66	47	6.9	6.9	7.7	148141957.7	8	20	976
5/2/2007	16:00	0	0	0	155	83	51	8.9	6.9	7.7	148141957.7	0	23	978
5/2/2007	20:00	0	0	0	154	74	53	8.5	6.9	7.6	148148186.1	403	2735	500
5/3/2007	0:00	0	0	0	152	72	48	6.5	6.5	7.7	148154660.0	433	2907	500
5/3/2007	4:00	0	0	0	150	72	48	6.4	6.8	7.8	148163401.7	425	2859	500
5/3/2007	8:00	0	0	0	152	73	46	6.4	6.8	7.8	148171958.3	424	2928	500
5/3/2007	12:00	0	0	0	152	73	48	6.5	6.9	7.9	148190375.0	325	2742	500
5/3/2007	16:00	0	0	0	152	72	48	8.8	6.9	7.9	148199082.8	382	2546	500
5/3/2007	20:00	0	0	0	151	73	47	6.5	6.9	7.8	148194488.5	348	2601	500
5/4/2007	0:00	0	0	0	151	73	47	8.5	8.8	7.8	148202955.8	440	2988	500
5/4/2007	4:00	0	0	0	150	72	46	6.4	6.8	7.8	148211862.3	470	2699	500
5/4/2007	8:00	0	0	0	151	73	48	6.5	6.8	7.8	148220241.4	423	2544	500
5/4/2007	12:00	0	0	0	151	72	47	6.5	6.9	7.9	148228703.8	418	2886	500
5/4/2007	16:00	0	0	0	152	71	46	6.5	6.9	7.9	148237431.9	362	2601	500
5/4/2007	20:00	0	0	0	152	72	47	8.5	8.9	7.9	148245883.0	338	2881	500
5/5/2007	0:00	0	0	0	151	72	47	8.5	6.8	7.8	148254398.1	433	2737	500
5/5/2007	4:00	0	0	0	150	72	46	6.5	6.8	7.8	148263136.9	459	2988	500
5/5/2007	8:00	0	0	0	151	72	46	6.5	6.8	7.8	148271813.7	435	2869	500
5/5/2007	12:00	0	0	0	152	72	47	6.5	6.9	7.8	148290154.6	427	2744	500
5/5/2007	16:00	0	0	0	153	71	47	6.8	6.9	7.9	148288851.0	363	2398	500
5/5/2007	20:00	0	0	0	152	71	47	8.5	6.9	7.8	148297246.8	418	2523	500
5/6/2007	0:00	0	0	0	152	72	47	6.5	6.8	7.8	148305881.3	434	2774	500
5/6/2007	4:00	0	0	0	150	71	46	6.5	6.8	7.8	148314489.6	398	2599	500
5/6/2007	8:00	0	0	0	150	72	46	6.4	6.8	7.8	148322902.1	408	2889	500
5/6/2007	12:00	0	0	0	151	71	46	8.5	6.8	7.8	148331873.1	480	2883	500
5/6/2007	16:00	0	0	0	152	71	45	6.5	6.9	7.8	148340116.7	369	2742	500
5/6/2007	20:00	0	0	0	151	71	46	6.5	6.8	7.8	148346659.5	429	2928	500
5/7/2007	0:00	0	0	0	150	72	48	6.5	6.8	7.8	148357336.4	499	2928	500
5/7/2007	4:00	0	0	0	149	71	46	6.4	6.8	7.7	148365740.2	454	2905	500
5/7/2007	8:00	0	0	0	151	72	46	6.4	6.8	7.7	148374432.7	371	2916	500
5/7/2007	12:00	0	0	0	151	71	47	6.5	6.8	7.8	148383052.1	433	2774	500
5/7/2007	16:00	0	0	0	152	71	47	6.5	6.9	7.8	148391452.1	378	2744	500
5/7/2007	20:00	0	0	0	151	70	46	6.5	6.8	7.8	148400169.8	340	2907	500
5/8/2007	0:00	0	0	0	150	71	46	6.5	6.8	7.7	148408701.2	418	2739	500
5/8/2007	4:00	0	0	0	150	71	46	6.4	6.8	7.7	148417204.2	514	2905	500
5/8/2007	8:00	0	0	0	151	71	46	6.5	6.8	7.7	148425841.1	483	2771	500
5/8/2007	12:00	0	0	0	153	71	47	6.5	6.9	7.7	148434319.4	419	2401	500
5/8/2007	16:00	0	0	0	155	71	48	6.6	6.9	7.8	148442977.2	362	2746	500
5/8/2007	20:00	0	0	0	154	70	47	6.5	6.9	7.8	148451501.8	452	2447	500
5/9/2007	0:00	0	0	0	154	71	48	6.5	6.9	7.7	148459869.0	448	2551	500
5/9/2007	4:00	0	0	0	154	71	48	6.5	6.9	7.7	148468710.2	361	2863	500

Date	Time	Recovery Well 1 Flow (GPM)	Recovery Well 2 Flow (GPM)	Recovery Well 3 Flow (GPM)	Discharge Flow (GPM)	Discharge Flow (CFM)	Influent Water Temperature (°F)	Influent Conductivity	Effluent Conductivity	Influent Water pH	Air Stripper Water pH	Discharge Water pH	Total Gallons Discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow (CFM)
5/9/2007	6:00	0	0	31	70	2691	156	71	49	6.5	6.8	7.7	148477237.3	415	2891	500
5/9/2007	12:00	0	0	26	0	2748	158	70	51	6.6	6.9	7.8	148485708.6	388	2748	500
5/9/2007	18:00	0	0	30	4	2753	158	70	51	6.6	6.9	7.8	148484409.3	388	2763	500
5/9/2007	24:00	0	0	33	71	2691	157	71	50	6.6	6.9	7.8	148502837.6	321	2891	500
5/10/2007	0:00	0	0	31	0	2830	157	70	50	6.5	6.9	7.8	148511347.1	406	2830	500
5/10/2007	4:00	0	0	31	0	2804	156	71	50	6.5	6.9	7.6	148520058.7	381	2804	500
5/10/2007	8:00	0	0	28	68	2446	157	71	51	6.5	6.9	7.7	148526546.1	413	2546	500
5/10/2007	12:00	0	0	28	0	2553	159	70	51	6.6	6.9	7.8	148537015.8	386	2553	500
5/10/2007	18:00	0	0	23	1	2555	158	70	50	6.6	6.9	7.8	148545714.2	414	2555	500
5/10/2007	20:00	0	0	32	70	2812	158	70	50	6.6	6.9	7.8	148554175.6	388	2812	500
5/11/2007	0:00	0	0	25	0	2742	158	70	46	6.5	6.9	7.8	148562657.0	381	2742	500
5/11/2007	4:00	0	0	22	0	2544	155	50	46	6.5	6.9	7.6	148571383.9	382	2544	500
5/11/2007	8:00	0	0	0	0	20	158	61	50	8.5	8.9	7.6	148578886.1	6	20	976
5/11/2007	12:00	0	0	12	0	23	156	67	54	6.6	6.9	7.8	148578886.1	19	23	976
5/11/2007	16:00	0	0	0	0	20	158	76	58	6.6	6.9	7.8	148578886.1	41	20	976
5/11/2007	20:00	0	0	0	0	20	159	78	57	6.8	6.9	7.7	148578886.1	12	20	976
5/12/2007	0:00	0	0	0	0	20	159	86	54	6.6	6.9	7.7	148578886.1	33	20	976
5/12/2007	4:00	0	0	0	0	20	159	84	51	6.6	6.9	7.7	148578886.1	11	20	976
5/12/2007	8:00	0	0	0	0	20	159	83	50	6.7	6.9	7.7	148578886.2	19	20	976
5/12/2007	12:00	0	0	0	0	20	160	83	55	6.7	6.9	7.7	148578886.2	39	20	976
5/12/2007	16:00	0	0	0	0	20	161	66	57	6.6	6.9	7.7	148578886.2	19	20	976
5/12/2007	20:00	0	0	0	0	20	161	87	54	6.6	6.9	7.7	148578886.2	1	20	976
5/13/2007	0:00	0	0	0	0	20	160	63	49	6.6	6.8	7.7	148578886.2	17	20	976
5/13/2007	4:00	0	0	0	0	20	160	62	46	6.7	6.8	7.7	148578886.2	9	20	976
5/13/2007	8:00	0	0	0	0	20	159	55	45	6.7	6.8	7.6	148578886.2	21	20	976
5/13/2007	12:00	0	0	0	0	20	159	55	50	8.7	8.9	7.7	148578886.2	13	20	976
5/13/2007	16:00	0	0	0	0	23	159	61	54	6.7	6.9	7.7	148578886.2	19	23	976
5/13/2007	20:00	0	0	0	0	20	159	78	55	6.7	6.8	7.7	148578886.2	27	20	976
5/14/2007	0:00	0	0	0	0	20	158	55	49	6.7	6.8	7.8	148578886.2	29	20	976
5/14/2007	4:00	0	0	0	0	20	157	47	44	6.7	6.8	7.8	148578886.2	11	20	976
5/14/2007	8:00	0	0	0	0	18	156	41	41	6.8	6.8	7.6	148578886.2	34	18	976
5/14/2007	12:00	0	0	0	0	20	156	72	51	6.6	6.9	7.7	148578886.2	28	20	976
5/14/2007	16:00	0	0	0	0	20	157	74	54	6.7	6.8	7.7	148578886.2	0	20	976
5/14/2007	20:00	0	0	0	0	20	157	76	54	6.7	6.6	7.6	148578886.2	28	20	976
5/15/2007	0:00	0	0	0	0	20	157	73	50	6.7	6.6	7.6	148578886.2	23	20	976
5/15/2007	4:00	0	0	0	0	20	157	71	46	6.7	6.8	7.8	148578886.2	6	20	976
5/15/2007	8:00	0	0	0	0	20	156	71	48	6.6	6.8	7.8	148578886.2	28	20	976
5/15/2007	12:00	0	0	0	0	20	157	75	54	6.8	6.9	7.7	148578886.2	19	20	976
5/15/2007	16:00	0	0	0	0	20	158	72	97	6.6	7	7.8	148582832.7	286	2470	500
5/15/2007	20:00	0	0	25	70	2546	156	72	51	6.8	6.9	7.9	148591221.9	344	2546	500
5/16/2007	0:00	0	0	30	0	2546	157	71	50	6.6	6.9	7.9	148596607.2	308	2546	500
5/16/2007	4:00	0	0	25	70	2693	157	70	50	6.5	6.9	7.9	148606444.5	340	2693	500
5/16/2007	8:00	0	0	28	0	2447	159	70	52	6.8	6.9	7.6	148625545.9	325	2447	500
5/16/2007	12:00	0	0	27	71	2604	158	71	51	6.6	6.9	7.9	148634025.4	300	2604	500
5/16/2007	16:00	0	0	31	0	2746	158	71	51	6.5	6.9	7.6	148642538.1	286	2746	500
5/16/2007	20:00	0	0	24	6	2546	156	70	50	6.5	6.9	7.8	148651222.7	420	2546	500
5/17/2007	0:00	0	0	25	69	2719	154	71	48	6.5	6.8	7.8	14865709.6	356	2719	500
5/17/2007	4:00	0	0	20	0	2548	154	71	48	6.5	6.8	7.8	14866321.6	408	2548	500
5/17/2007	8:00	0	0	34	68	2891	155	70	49	8.5	8.9	7.8	148678946.5	453	2891	500
5/17/2007	12:00	0	0	28	0	2546	156	48	49	6.5	6.9	7.8	148685366.1	376	2546	500
5/17/2007	16:00	0	0	28	6	2601	153	70	47	6.5	6.8	7.8	148694123.6	429	2601	500
5/17/2007	20:00	0	0	26	69	2737	153	71	47	6.5	6.8	7.7	148702542.5	407	2737	500
5/18/2007	0:00	0	0	28	1	2374	152	39	48	8.4	8.8	7.7	148711249.9	351	2374	500
5/18/2007	4:00	0	0	28	66	2544	151	46	46	6.4	6.6	7.7	148719765.6	427	2544	500
5/18/2007	8:00	0	0	25	0	2774	151	70	48	6.4	6.6	7.7	148726339.8	483	2774	500

Date	Time	Recovery			Influent Water Temperature (°F)	Influent Conductivity	Effluent Conductivity	Influent Water pH	Air Striper Water pH	Discharge Water pH	Total Gallons Discharged	Air Striper Air Flow	Combined Discharge Air Flow	SVE Air Flow (CFM)
		Well 1 Flow (OPM)	Well 2 Flow (OPM)	Well 3 Flow (OPM)										
5/16/2007	16:00	0	0	25	152	70	46	6.4	6.8	7.7	148737036.1	387	2689	500
5/16/2007	20:00	0	0	23	152	71	46	6.4	6.8	7.7	148745488.8	485	2801	500
5/19/2007	0:00	0	0	27	151	70	46	6.4	6.8	7.7	148754168.5	459	2544	500
5/19/2007	4:00	0	0	24	152	71	46	6.4	6.8	7.7	148762717.3	408	2599	500
5/19/2007	8:00	0	0	28	152	71	47	6.4	6.8	7.7	148771305.2	470	2544	500
5/19/2007	12:00	0	0	27	152	70	46	6.5	6.8	7.7	148779844.2	358	2771	500
5/19/2007	16:00	0	0	22	152	70	47	6.5	6.8	7.7	148786426.1	481	2739	500
5/19/2007	20:00	0	0	29	153	70	48	6.5	6.8	7.7	148797195.9	412	2737	500
5/20/2007	0:00	0	0	26	153	55	47	6.5	6.8	7.7	148805631.9	383	2688	500
5/20/2007	4:00	0	0	21	153	70	48	6.5	6.8	7.7	148814333.9	445	2774	500
5/20/2007	8:00	0	0	24	153	71	46	6.5	6.8	7.7	148822697.9	483	2544	500
5/20/2007	12:00	0	0	30	154	70	46	6.5	6.9	7.7	148831425.7	351	2809	339
5/20/2007	16:00	0	0	29	155	55	48	6.5	6.9	7.8	148840076.5	379	2546	500
5/20/2007	20:00	0	0	31	155	70	48	6.5	6.9	7.7	148848457.0	353	2693	500
5/21/2007	0:00	0	0	31	154	48	48	6.5	6.8	7.7	148857232.3	428	2907	500
5/21/2007	4:00	0	0	23	153	54	47	8.5	6.8	7.7	148865692.8	401	2599	500
5/21/2007	8:00	0	0	23	153	70	48	6.5	6.8	7.7	148874353.8	444	2691	500
5/21/2007	12:00	0	0	28	154	71	47	6.5	6.9	7.7	148882927.7	382	2546	500
5/21/2007	16:00	0	0	24	154	69	48	6.5	6.9	7.8	148891439.9	282	2553	500
5/21/2007	20:00	0	0	28	154	46	47	6.5	6.9	7.8	148900072.0	404	2870	500
5/22/2007	0:00	0	0	32	153	70	47	6.5	6.8	7.7	148908458.2	397	2788	500
5/22/2007	4:00	0	0	21	153	71	46	6.5	6.8	7.7	148917199.0	412	2599	500
5/22/2007	8:00	0	0	30	153	70	47	6.5	6.8	7.7	148925812.7	484	2599	500
5/22/2007	12:00	0	0	30	154	52	48	6.5	6.9	7.7	148934266.8	417	2546	500
5/22/2007	16:00	0	0	28	156	70	48	6.8	6.9	7.8	148942780.1	386	2735	500
5/22/2007	20:00	0	0	34	154	70	47	6.5	6.9	7.7	148951299.7	327	2691	500
5/23/2007	0:00	0	0	31	154	71	47	6.5	6.8	7.7	148959916.0	450	2739	500
5/23/2007	4:00	0	0	27	153	70	47	6.5	6.8	7.7	148968374.0	387	2548	500
5/23/2007	8:00	0	0	26	155	70	48	6.5	6.8	7.7	148977126.1	472	2663	500
5/23/2007	12:00	0	0	29	156	70	49	6.5	6.9	7.7	148985517.9	378	2744	500
5/23/2007	16:00	0	0	25	155	70	48	6.5	6.9	7.8	148994122.0	389	2700	500
5/23/2007	20:00	0	0	27	154	70	47	6.5	6.9	7.8	149002877.1	422	2744	500
5/24/2007	0:00	0	0	23	154	71	48	6.5	6.8	7.7	149011141.4	444	2774	500
5/24/2007	4:00	0	0	27	153	70	47	6.5	6.8	7.7	149019664.9	371	2990	500
5/24/2007	8:00	0	0	25	155	70	48	6.5	6.8	7.7	149028290.2	308	2693	500
5/24/2007	12:00	0	0	26	157	70	50	6.5	6.8	7.7	149036802.7	372	2445	500
5/24/2007	16:00	0	0	28	156	69	50	6.6	6.9	7.8	149045361.1	332	2604	500
5/24/2007	20:00	0	0	26	158	70	49	6.6	6.9	7.8	149053909.0	296	2512	500
5/25/2007	0:00	0	0	17	157	69	49	6.6	6.9	7.8	149062486.2	359	2447	500
5/25/2007	4:00	0	0	28	156	69	48	6.5	6.9	7.7	149070817.0	388	2744	500
5/25/2007	8:00	0	0	21	157	70	48	6.5	6.8	7.7	149079684.8	311	2601	500
5/25/2007	12:00	0	0	21	159	70	50	6.6	6.9	7.8	149088002.0	336	2604	500
5/25/2007	16:00	0	0	23	158	70	50	6.6	6.9	7.8	149096673.4	316	2604	500
5/25/2007	20:00	0	0	27	156	70	50	6.6	6.9	7.8	149105087.4	374	2758	500
5/26/2007	0:00	0	0	24	158	70	49	6.6	6.9	7.8	149113636.1	351	2555	500
5/26/2007	4:00	0	0	27	157	70	48	6.5	6.8	7.7	149122199.5	371	2553	500
5/26/2007	8:00	0	0	25	158	69	48	6.5	6.9	7.7	149130654.8	316	2778	500
5/26/2007	12:00	0	0	32	159	69	50	6.6	6.9	7.8	149139385.0	359	2512	500
5/26/2007	16:00	0	0	27	159	69	50	6.6	6.9	7.8	149147688.0	283	2447	500
5/26/2007	20:00	0	0	24	157	70	48	6.6	6.9	7.8	149156371.4	307	2640	500
5/27/2007	0:00	0	0	26	156	69	48	6.5	6.8	7.6	149164808.5	389	2748	500
5/27/2007	4:00	0	0	23	156	70	48	6.5	6.8	7.7	149173401.8	327	2502	500
5/27/2007	8:00	0	0	23	158	69	48	6.5	6.8	7.7	149181936.0	331	2691	500
5/27/2007	12:00	0	0	17	167	68	49	6.5	6.9	7.8	149190478.4	349	2447	500
5/27/2007	16:00	0	0	28	156	68	49	6.6	6.9	7.8	149198010.8	348	2544	500

Date	Time	Recovery Well 1 Flow (GPM)	Recovery Well 2 Flow (GPM)	Recovery Well 3 Flow (GPM)	Discharge Flow (GPM)	Discharge Flow (CFM)	Influent Water Temperature (°F)	Influent Conductivity	Effluent Conductivity	Influent Water pH	Air Stripper Water pH	Discharge Water pH	Total Gallons Discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow (CFM)
5/27/2007	20:00	0	0	25	0	2546	159	68	50	6.6	6.9	7.8	149207466.1	325	2546	500
5/28/2007	0:00	0	0	30	71	2546	158	70	48	6.5	6.9	7.7	149216142.9	404	2546	500
5/28/2007	4:00	0	0	26	0	2502	158	70	50	6.5	6.9	7.7	149224505.0	413	2502	500
5/28/2007	8:00	0	0	30	8	2447	158	70	50	6.5	6.9	7.7	149233254.1	342	2447	500
5/28/2007	12:00	0	0	29	71	2344	159	68	50	6.5	6.9	7.8	149241622.5	305	2344	500
5/28/2007	16:00	0	0	24	0	2401	159	70	50	6.6	6.9	7.8	149250270.9	394	2401	500
5/28/2007	20:00	0	0	25	71	2401	157	70	49	6.6	6.9	7.8	149258716.2	368	2401	500
5/29/2007	0:00	0	0	33	0	2398	155	69	47	6.5	6.8	7.8	149267292.2	381	2398	500
5/29/2007	4:00	0	0	20	68	2544	155	70	47	6.5	6.8	7.7	149275791.2	386	2544	500
5/29/2007	8:00	0	0	30	0	2742	154	70	48	6.5	6.8	7.7	149284362.6	399	2742	500
5/29/2007	12:00	0	0	30	68	2693	156	70	46	6.5	6.9	7.8	149292874.4	315	2693	500
5/29/2007	16:00	0	0	28	0	2546	155	69	48	6.5	6.9	7.8	149307388.3	384	2546	500
5/29/2007	20:00	0	0	24	69	2702	156	70	92	6.5	6.9	7.8	149309912.4	410	2702	500
5/30/2007	0:00	0	0	26	0	2812	155	69	89	6.5	6.8	7.7	149319409.7	369	2812	500
5/30/2007	4:00	0	0	22	70	2693	155	69	89	6.5	6.8	7.7	149327063.8	369	2693	500
5/30/2007	8:00	0	0	21	0	2551	156	70	91	6.5	6.8	7.7	149335577.5	349	2551	500
5/30/2007	12:00	0	0	26	68	2447	156	70	93	6.5	6.9	7.8	149344215.8	313	2447	500
5/30/2007	16:00	0	0	21	0	2755	157	68	94	6.6	6.9	7.8	149352639.2	326	2755	500
5/30/2007	20:00	0	0	26	69	2509	157	69	92	6.5	6.9	7.8	149361215.8	331	2509	500
5/31/2007	0:00	0	0	28	0	2746	156	69	92	6.5	6.8	7.7	149369663.2	349	2746	500
5/31/2007	4:00	0	0	22	68	2551	156	70	92	6.5	6.8	7.7	149376317.3	403	2551	500
5/31/2007	8:00	0	0	28	0	2546	158	70	95	6.5	6.6	7.7	149386752.6	295	2546	500
5/31/2007	12:00	0	0	28	67	2447	158	70	95	6.6	6.9	7.8	149395434.4	280	2447	500
5/31/2007	16:00	0	0	21	0	2560	159	69	98	6.6	6.9	7.8	149403799.9	322	2560	500
5/31/2007	20:00	0	0	18	69	2606	158	69	94	6.5	6.9	7.8	149412489.7	316	2606	500

Appendix D

**Groundwater Treatment System
Sampling Trip Report**

SAMPLING TRIP REPORT

Site Name: STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE

CERCLIS ID Number: NYD047650197

Sampling Dates: May 3, 2007

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 SOM01.1	John Birri USEPA Region II DESA LAB Building 209 MS-230 2890 Woodbridge Avenue Edison, N.J. 08837

Sample Dispatch Data (Table 2):

On May 3, 2007, 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
790239409906	1	Total of 4 Aqueous Samples to include 1 duplicate sample, and 1 Trip Blank for TCL-VOAs	05/03/07 @ 1200 pm TO: USEPA

Sampling Personnel (Table 3):

Name	Organization	Site Duties
Francisco Metcalf	Earth Tech, Inc.	Earth Tech Project Manager
Russell Kolacek	Earth Tech, Inc.	Sampler
Justin Self	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
			Trip Blank	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.

Appendix A

Chain of Custody (May 3, 2007, System Sampling Event)



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

USEPA REV:
DAS No:
808 No:

Date Shipped: 5/3/2007 Carrier Name: FedEx Airbill: 790223400000 Shipped to: USEPA Region 2 - DESA LAB 2880 Woodbridge Ave. Suite 200, MS-200 Edison, NJ 08837 (732) 804-6886		Chain of Custody Record Received By: <i>[Signature]</i> Date / Time: 5/3/2007 / 1:40		For Lab Use Only Lab Contract No: Unit Price: Transfer Tax: Lab Contract No: Unit Price:	
---	--	--	--	---	--

ORGANIC SAMPLE No.	ENTERED SAMPLE	COMB TYPE	ANALYST	TURNAROUND	TEST METHOD	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
EFFLUENT	Ground Water/ Russell Koloszek	LG	VOA (14)	(HCL) (3)	EFFLUENT	S: 5/3/2007	11:40		
EFFLUENT A	Ground Water/ Russell Koloszek	LG	VOA (14)	(HCL) (3)	EFFLUENT A	S: 5/3/2007	11:45		
INFLUENT (MM-24 & EP)	Ground Water/ Russell Koloszek	LG	VOA (14)	(HCL) (3)	INFLUENT (MM-24 & EPA-EXT-02)	S: 5/3/2007	11:30		
TRIP BLANK	Field QC/ Russell Koloszek	LG	VOA (14)	(HCL) (2)	TRIP BLANK	S: 5/3/2007	11:50		

Signature for Case Complete: <i>[Signature]</i> Analysis Note: VOA = CLP TCL Volatiles	Samples to be used for laboratory QC: Concentrations: L = Low, M = Medium, H = High Type/Designation: Composite = C, Grab = G	Cooler Temperature Upon Receipt: Chain of Custody Seal Number:
---	---	---

TR Number: 2-043013577-050307-0001

For provision of preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to Sample Management Office, Attn: Heather Bauer, CSC, 16000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/618-4200; Fax 703/618-4002

LABORATORY COPY

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

Case No: **K**
 DAS No:

Project: Project Code: Assessment Code: CERCLIS ID: Site ID: Site Name/Address: Project Leader: Address: Sampling Co:	2 NY0047650187 G2LH Station Area Cleaners Groundwater Contamination Francisco, Missouri Operations and Maintenance Earth Tech	Date Shipped: 5/3/2007 Carrier Name: FedEx Account: 700229409006 Shipped to: USEPA Region 2 - DESA LAB 2850 Woodbridge Ave. Bldg. 200, MS-230 Edison NJ 08837 (732) 906-6006	Chain of Custody Record Requisitioned By: <i>Russell Kolczak</i> Date / Time: <i>5/3/2007</i> Received By: <i>Russell Kolczak</i> Date / Time: <i>5/3/2007</i> 2 3 4	Sampler Signature: Received By: <i>Russell Kolczak</i> Date / Time: <i>5/3/2007</i> 2 3 4
---	---	--	---	--

ORGANIC SAMPLE No.	METHOD	COMPOUND TYPE	ANALYSIS TURNOVER	PREPARATION	Tube/Preservative	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	GC Type
EFFLUENT	Ground Water/ Russell Kolczak	UG	VOA (14)	(HCL) (3)		EFFLUENT	S: 5/3/2007 11:40		-
EFFLUENT A	Ground Water/ Russell Kolczak	UG	VOA (14)	(HCL) (3)		EFFLUENT A	S: 5/3/2007 11:45		-
INFLUENT (MM-34 & EP)	Ground Water/ Russell Kolczak	UG	VOA (14)	(HCL) (3)		INFLUENT (MM-34 & EPA-EXT-02)	S: 5/3/2007 11:30		-
TRIP BLANK	Field QC/ Russell Kolczak	UG	VOA (14)	(HCL) (2)		TRIP BLANK	S: 5/3/2007 11:50		Trip Blank

Signature for Case Completion	Signature for Laboratory QC	Signature for Sample Management	Chain of Custody Seal Number:
		<i>Russell Kolczak</i>	
Analysis Key: VOA = GLP TCL Volatiles	Concentration: L = Low, M = Medium, H = High	Typical Dilution: Composite = 1 Grab = 0	Shipment Label?

TR Number: **2-043013577-050307-0001**
 PE provides preliminary results. Requests for preliminary results will become simplified costs.
 Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3815; Phone 703/618-4200; Fax 703/618-4602

REGION COPY

Appendix B

**FedEx Air Bill
(May 3, 2007, System Sampling Event)**

Shipping Label

Page 1 of 1

From: Origin ID: GTYA (717)706-4029
Rusell Kotzick
EarthTech
2 Market Plaza Way
Mechanicburg, PA 17055



Ship Date: 03MAY07
Address: 12 LB
System: 7447042/NET2806
Account: S

Dimmed: 23 X 16 X 13 IN

Delivery Address Bar Code



Ref # 70636.07.01 Stanton
Invoice #
PO #
Dept #

SHIP TO: (732)606-8806 BILL SENDER
John Eliri
USEPA Region 2 DESA Lab
Building 208, MS-230
2890 Woodbridge Ave
Edison, NJ 08837



STANDARD OVERNIGHT

FRI

TRK# 7902 3940 9906

FORM 9291

EWR

Deliver By:
04MAY07
A1

08837 -NJ-US
CSR

Z3 LDJA



Shipping Label

This shipping label constitutes the air waybill for this shipment.

790239409906

1. Use the "Print" feature from your browser to send this page to your laser printer.

2. Fold the printed page along the horizontal line.

3. Place label in shipping label pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within select time limits, see current FedEx Service Guide.

Appendix C

Water Quality Parameters (May 3, 2007, System Sampling Event)

STANTON CLEANERS SITE LTRA

Groundwater Pump and Treatment System Water Quality Parameters Log

Date: 05/03/07
Project # 70536

	5.37	0.643	9.6	10.2	14.86	0.0
	5.94	0.632	22.0	11.3	14.70	0.0

Total Gallons pumped: 148187257 gallons
Flow rate: 32 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.

Equipment Calibrated by:	Justin Self	Comments:
	Russell	
Water samples collected by:	Kolacek/Justin Self	
Water monitoring performed by:	Justin Self	

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	
Influent	SC-01	B17J3	12/10/2003	Tetrachloroethene	290	D	5
				cis-1,2-Dichloroethene	2	J	
				Trichloroethene	3	J	
Effluent	SC-04	B17J4	12/10/2003	None			
Influent Dup	SC-61	B17J5	12/10/2003	Tetrachloroethene	280	D	5
				cis-1,2-Dichloroethene	2	J	
				Trichloroethene	3	J	
Trip Blank	SC-TB	B17J6	12/10/2003	MTBE	5	J	
				Toluene	2	J	
				Ethylbenzene	2	J	
Influent	SC-01	B1000	1/12/2004	MTBE	2.7		
				cis-1,2-Dichloroethene	1.5		
				Trichloroethene	2.5		
				Tetrachloroethene	280		5
Effluent	SC-04	B1001	1/12/2004	None			
Influent Dup	SC-62	B1002	1/12/2004	MTBE	2.6		
				cis-1,2-Dichloroethene	1.5		
				Trichloroethene	2.5		
				Tetrachloroethene	300		5
Trip Blank	SC-TB	B1003	1/12/2004	Methylene chloride	0.6	K	
				MTBE	3.7		
				Tetrachloroethene	7.9		5
				m&p-Xylene	0.7		
Influent	SC-01	B17Z0	2/12/2004	cis-1,2-Dichloroethene	1.7		
				Trichloroethene	3.0		
				Tetrachloroethene	610.0	D	5
				Unknown TIC	0.53	J	
Effluent	SC-04	B17Z1	2/12/2004	Acetone	3.8	J	5
Influent Dup	SC-63	B17Z2	2/12/2004	Acetone	25	J	5
				cis-1,2-Dichloroethene	1.7		
				Trichloroethene	2.8		
				Tetrachloroethene	440	D	5
Trip Blank	SC-TB	B17Z3	2/12/2004	Methylene chloride	0.16	J	
				MTBE	4.7		
				Chloroform	0.26	J	
				Tetrachloroethene	7.1		5
				Xylene (total)	0.56		
				1,3-Dichlorobenzene	0.40	J	
				1,4-Dichlorobenzene	0.38	J	
				Unknown TIC	0.58	J	
				Benzene, 1-ethyl-3-methyl-	0.72	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		
				cis-1,2-Dichloroethene	1.2		
				Trichloroethene	2.3		
				Tetrachloroethene	260		5
Effluent	SC-04	B17Z7	3/10/2004	Tetrachloroethene	0.70		5
Influent Dup	SC-64	B17Z8	3/10/2004	MTBE	2.8		
				cis-1,2-Dichloroethene	1.2		
				Trichloroethene	2.3		
				Tetrachloroethene	260		5
Trip Blank	SC-TB	B17Z9	3/10/2004	Acetone	1.8		5
				Toluene	0.50		
				Isobutane	41	NJ	
Influent	SC-01	B1BS2	4/14/2004	MTBE	1.9		
				cis-1,2-Dichloroethene	0.83		
				Trichloroethene	1.5		
				Tetrachloroethene	380	D	5
Effluent	SC-04	B1BS3	4/14/2004	Tetrachloroethene	1.9		5
Influent Dup	SC-65	B1BS4	4/14/2004	Acetone	1.2	J	5
				MTBE	1.5		
				cis-1,2-Dichloroethene	0.67	J	
				Trichloroethene	1.1		
				Tetrachloroethene	260	D	5
Trip Blank	SC-TB	B1BS5	4/14/2004	Methylene chloride	0.17	J	
				Chloroform	2.8		
				Bromodichloromethane	0.80		
Influent	SC-01	B1BS6	5/20/2004	MTBE	2.1		
				cis-1,2-Dichloroethene	1.0		
				Trichloroethene	1.8		
				Tetrachloroethene	190		5
Effluent	SC-04	B1BS7	5/20/2004	Acetone	1.2		5
				Acetone	0		5
Influent Dup	SC-66	B1BS8	5/20/2004	MTBE	2.1		
				cis-1,2-Dichloroethene	0.9		
				Trichloroethene	1.6		
				Tetrachloroethene	200		5
Trip Blank	SC-TB	B1BS9	5/20/2004	Acetone	1		5
				Chloroform	0		
				Bromodichloromethane	0		
Influent	SC-01	B1BS6	6/15/2004	Carbon Disulfide	1.1		
				MTBE	2.7		
				cis-1,2-Dichloroethene	1.3		
				Trichloroethene	2.4		
				Tetrachloroethene	320		5
Effluent	SC-04	B1BS7	6/15/2004	Tetrachloroethene	2.1	7	5
Influent Dup	SC-67	B1BS8	6/15/2004	MTBE	2.3		
				cis-1,2-Dichloroethene	1.2		
				Trichloroethene	2.2		
				Tetrachloroethene	330		5
Trip Blank	SC-TB	B1BS9	6/15/2004	None			

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B1FJ2	7/13/2004	Acetone	0.8		5
				MTBE	2.3		
				cis-1,2-Dichloroethene	1.1		
				Trichloroethene	1.7		
				Tetrachloroethene	170		5
Effluent	SC-04	B1FJ3	7/13/2004	Acetone	0.72		5
				Tetrachloroethene	2		5
				MTBE	2.4		
Influent Dup	SC-67	B1FJ4	7/13/2004	cis-1,2-Dichloroethene	1.1		
				Trichloroethene	1.8		
				Tetrachloroethene	160		5
				Acetone	0.73		5
Trip Blank	SC-TB	B1FJ5	7/13/2004	Acetic Acid, Ethyl Ester	2.5	NJ	
Influent	SC-01	B1GH2	8/16/2004	MTBE	1.9		
				cis-1,2-Dichloroethene	0.7		
				Trichloroethene	1.5		
				Tetrachloroethene	200		5
				Acetone	2		5
Effluent	SC-04	B1GH3	8/16/2004	Tetrachloroethene	5.4		5
				Acetone	1.6		5
				Acetone	1.2		5
Influent Dup	SC-69	B1GH4	8/16/2004	MTBE	2		
				cis-1,2-Dichloroethene	0.7		
				Trichloroethene	1.5		
				Tetrachloroethene	210		5
Influent	SC-01		9/28/2004	Chloromethane	0.80		
				Acetone	1.0		5
				MTBE	1.5		
				cis-1,2-Dichloroethene	0.70		
				Trichloroethene	1.4		
Effluent	SC-04		9/28/2004	Tetrachloroethene	200		5
				Chloromethane	0.80		
				Acetone	2.1		5
Influent Dup	SC-70		9/28/2004	Tetrachloroethene	1.7		5
				Acetone	1.0		5
				MTBE	1.3		
				cis-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		
				cis-1,2-Dichloroethene	0.5		
Effluent	SC-04	B1LZ3	10/21/2004	Trichloroethene	1.2		
				Tetrachloroethene	220		5
				Acetone	5	J	5
Influent Dup	SC-71	B1LZ4	10/21/2004	Methylene chloride	0.5	UJ	
				Tetrachloroethene	0.2	J	5
				Acetone	5	J	5
				MTBE	1.1		
				cis-1,2-Dichloroethene	0.64		
Trip Blank	SC-TB	B1LZ5	10/21/2004	Trichloroethene	1.1		
				Tetrachloroethene	210	D	5
				Acetone	5.7		5
Trip Blank	SC-TB	B1LZ5	10/21/2004	Methylene chloride	0.68		
				Toluene	0.39	J	

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B1T22	11/17/2004	Acetone	3	J	5
				Methylene chloride	1.3	U	
				MTBE	1.3		
				cis-1,2-Dichloroethene	0.64		
				Trichloroethene	1.2		
				Tetrachloroethene	170	D	5
Effluent	SC-04	B1T23	11/17/2004	Methyl Acetate	0.5	UJ	
				Methylene chloride	0.5	U	
Influent Dup	SC-72	B1T24	11/17/2004	Methylene chloride	0.85	U	
				MTBE	1.3		
				cis-1,2-Dichloroethene	0.5		
				Trichloroethene	0.83		
				Tetrachloroethene	160	D	5
Trip Blank	SC-TB	B1T25	11/17/2004	Acetone	3	J	5
				Methyl Acetate	0.5	UJ	
				Methylene chloride	0.46	J	
				2-Butanone	2.4	J	
				Tetrachloroethene	9.6		5
				1,2,3-Trichlorobenzene	0.5	UJ	5
Influent	SC-01	B1T79	12/15/2004	MTBE	1.6		
				cis-1,2-Dichloroethene	0.45	J	
				Trichloroethene (TCE)	1.0	J	5
				Tetrachloroethene	100	D	5
				Methylcyclohexane	1	UJ	
				Bromomethane	1	UJ	
				Bromodichloromethane	1	UJ	
				Chloromethane	1	UJ	
				1,2-Dichloroethene	1	UJ	
				1,2-Dichloropropane	1	UJ	
				2-Hexanone	10	R	
Effluent	SC-04	B1T81	12/15/2004	4-Methyl-2-pentanone	10	R	
				Benzene	0.5	U	
				1,2,4-Trichlorobenzene	0.5	U	
				1,2,3-Trichlorobenzene	0.5	U	5
Influent Dup	SC-73	B1T80	12/15/2004	Methyl tert-Butyl Ether	1.6		
				cis-1,2-Dichloroethene	0.48	J	
				Trichloroethene	0.98	J	
				4-Methyl-2-pentanone	10	R	
				Tetrachloroethene	98	D	5
				2-Hexanone	10	R	
Trip Blank	SC-TB	B1T82	12/15/2004	Chloroform	0.1	J	
				Cyclohexane	0.15	J	
				Benzene	0.5	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-Isothiocyano-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-Isothiocyano-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-Isothiocyano-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		
				Acetone	1.4	K	
Influent (EPA-EXT-02)	SC-01	AG08530	11/14/2005	MTBE	0.92		
				Trichloroethene (TCE)	0.81		5
				Tetrachloroethene	95		5
Influent (EPA-EXT-4R)	SC-02	AG08531	11/14/2005	Acetone	1.0	K	5
				Tetrachloroethene	10		5
Influent		AG08532	11/14/2005	MTBE	0.9		
				Acetone	1.4	K	5
				Trichloroethene (TCE)	0.74		5
				Tetrachloroethene	91		5
Effluent	SC-04	AG08528	11/14/2005	Acetone	ND		5
EffluentDup	SC-04	AG08529	11/14/2005	Acetone	ND		5
Trip Blank	SC-TB	AG08533	11/14/2005	Acetone	2.0	K	5

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent (EPA-EXT-02)	SC-01	AG08953	12/6/2005	Acetone	4.1		
				MTBE	0.85		
				Trichloroethene (TCE)	0.67		5
				Tetrachloroethene	90		5
				1-Butanol	0.63	NJ	
Influent (EPA-EXT-4R)	SC-02	AG08954	12/6/2005	Acetone	1.4	K	5
				Tetrachloroethene	9.5		5
Influent		AG08955	12/6/2005	MTBE	0.9		
				Acetone	1.4	K	5
				Trichloroethene (TCE)	0.77		5
				Tetrachloroethene	89		5
Effluent	SC-04	AG08951	12/6/2005	Acetone	1.5	K	5
EffluentDup	SC-04	AG08952	12/6/2005	Acetone	3.0	K	5
Trip Blank	SC-TB		12/6/2005	Acetone	ND		5
Influent (EPA-EXT-02)	SC-01	AH00216	1/10/2006	Acetone	ND		5
				MTBE	0.98		
				Trichloroethene (TCE)	0.79		5
				Tetrachloroethene	93		5
Influent (EPA-EXT-4R)	SC-02	AH00217	1/10/2006	Acetone	ND (1.0)		5
				Tetrachloroethene	8.2		5
Influent		AH00218	1/10/2006	MTBE	0.94		
				Acetone	ND (1.0)		5
				Trichloroethene (TCE)	0.85		5
				Tetrachloroethene	90		5
Effluent	SC-04	AH00214	1/10/2006	Acetone	ND (1.0)		5
EffluentDup	SC-04	AH00215	1/10/2006	Furan, Tetrahydro	0.52	NJ	
Trip Blank	SC-TB	AH00219		Acetone	ND (1.0)		5
Influent	SC-01	AH01177	2/15/2006	MTBE	1.2		
				Trichloroethene (TCE)	0.72		5
				Tetrachloroethene	80		5
MW-19		AH01178	2/15/2006	Acetone	1.2		5
				Trichloroethene (TCE)	1.2		5
				Tetrachloroethene	85		5
MW-21		AH01179	2/15/2006	Trichloroethene (TCE)	2.6		5
				Tetrachloroethene	27		5
Effluent		AH01175	2/15/2006	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
				Acetone	2		5
Trip Blank	SC-TB	AH01257	3/8/2006	Bromodichloromethane	5		
				Chloroform	14		
				MTBE	1.5		
Influent	SC-01	AH01641	4/5/2006	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
Effluent A	SC-04	AH01640	4/5/2006	Ethyl Acetate	1.7	NJ	5
			4/5/2006	Acetone	4.6		5
Trip Blank	SC-TB	AH01642	4/5/2006	Ethyl Acetate	5.3	NJ	5
				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 (TCE)	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 (TCE)	70		
				Ethyl 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	None			
Influent (MW-24 & EPA-EXT-02)	SC-01	AH03367	7/12/2006	Acetone	1.8		5
				MTBE	1.6		
				Tetrachloroethene	74		5
				None			
Effluent	SC-04	AH03367	7/12/2006	None			
Effluent A	SC-04	AH03368	7/12/2006	None			
Trip Blank	SC-TB	AH03370	7/12/2006	None			
Influent (MW-24 & EPA-EXT-02)	SC-01	AH04373	8/9/2006	Acetone	1.3	J	5
				MTBE	1.6		
				Trichloroethene (TCE)	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 (TCE)	0.68		
				Tetrachloroethene	69		5
				None			
Effluent	SC-04	AH05498	9/6/2006	None			
Effluent A	SC-04	AH05499	9/6/2006	Chloromethane	0.64		5
Trip Blank	SC-TB	AH05501	9/6/2006	None			
Influent (MW-24 & EPA-EXT-02)	SC-01	AH05962	10/4/2006	MTBE	1		
				Trichloroethene (TCE)	0.54		
				Tetrachloroethene	68		5
				None			
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
				None			
				None			5
Effluent	SC-04	AH06622	11/8/2006	None			
Effluent A	SC-04	AH06623	11/8/2006	None			
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
				None			
				None			
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
Influent (MW-24 & EPA-EXT-02)	SC-01	AJ00067	1/11/2007	MTBE	1.1	K	
				Tetrachloroethene	51		5
				None			
				None			
Effluent	SC-04	AJ00065	1/11/2007	None			
Effluent A	SC-04	AJ00066	1/11/2007	None			
Trip Blank	SC-TB	AJ00068	1/11/2007	Methylene Chloride	1.3		5
Influent (MW-24 & EPA-EXT-02)	SC-01	AJ00524	2/20/2007	MTBE	0.59		
				Tetrachloroethene	54		5
				None			
				None			5
Effluent	SC-04	AJ00522	2/20/2007	None			
Effluent A	SC-04	AJ00523	2/20/2007	None			5
Trip Blank	SC-TB	AJ00525	2/20/2007	Methylene Chloride	0.81	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 (MW-24 & EPA-EXT-)	SC-01	AJ01186	3/7/2007	MTBE	1		
				Tetrachloroethene	57		5
Effluent	SC-04	AJ01184	3/7/2007	None			
Effluent A	SC-04	AJ01185	3/7/2007	None			
Trip Blank	SC-TB	AJ01187	3/7/2007	None			
Influent (MW-24 & EPA-EXT-)	SC-01	AJ02250	5/3/2007	Methylene Chloride	0.69		
				Tetrachloroethene	62		5
Effluent	SC-04	AJ02248	5/3/2007	None			
Effluent A	SC-04	AJ02249	5/3/2007	Methylene Chloride	0.65		
Trip Blank	SC-TB	AJ02251	5/3/2007	None			

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**

5/3/2007
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	20.1%	0%	0%	85.2	+	47.1%	60.2	139.0
Post Air Stripper	11.294	0.0	0	20.9%	0%	0%	59.1	+	94.8%	57.3	117.0
SVE-Effluent ¹	5.706	0.0	0	20.2%	0%	0%	81.7	+	64.6%	24.2	45.1
GW Post Vapor Effluent ²	11.294	0.0	0	20.9%	0%	0%	59.5	+	94.5%	57.7	124.0
EPA-SVE-1 (shallow)	1.913	0.0	0	20.9%	0%	0%	78.0		17.3%	27.6	257.0
EPA-SVE-1 (medium)	1.913	0.0	0	20.9%	0%	0%	67.7		22.1%	27.7	64.0
EPA-SVE-2 (shallow)	1.913	0.0	0	20.9%	0%	0%	72.2		53.8%	48.4	81.0
EPA-SVE-2 (medium)	1.913	0.0	0	20.9%	0%	0%	68.4		57.6%	50.1	67.0
SS-A	1.913	0.6	0	20.6%	0%	0%	77.2		16.8%	28.7	1430.0
EPA-SVE-04R/SS-B(A)	1.913	0.0	0	20.2%	0%	0%	78.2		18.6%	31.6	515.0
SS-B-C	1.913	0.0	0	20.9%	0%	0%	71.8		51.9%	48.7	27.0
SS-C	1.913	0.0	0	20.4%	0%	0%	78.1		15.9%	27.9	2280.0
L1	1.913	0.0	0	20.9%	0%	0%	75.2		31.9%	42.6	3550.0
L2	1.913	Not Measured - Offline									
SS-B(B)	1.913	0.0	0	20.9%	0%	0%	75.8		44.1%	52.3	452.0
SS Vent-LIHA	3.786	0.0	0	20.9%	0%	0%	67.7		28.4%	33.9	0.0
Vapor Point-1/Slope 1		0	0	20.9%	0	0	NM	NM	NM	NM	NM
SVE-3A	1.913	0.0	0	20.9%	0%	0%	72		21.4%	30.7	1.5
SVE-3B	1.913	0.0	0	19.4%	0%	0%	72.3		34.9%	44.6	4015.0
Background		0.0	0	20.9%	0%	0%	74.5		41.8%	49.6	0.0

Equipment calibrated by: Russell Kolacek, Justin Self
Air readings collected by: Justin Self

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

Comments: Vac gauge not working. Variable
vacuum box unavailable for measurement. I
believe
Justin may have been mistakenly measured

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

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

<u>Prior to 10/3/05</u>	<u>As of 05/03/07</u>
shallow on	shallow and medium on
shallow on	not measurable
shallow on	A & B on
off	off
on	on
on	on
on	on
on	on
on	off

Comments:
L2 is offline

The site vacuum gauge is broken and our office's vacuum box was unavailable for use.

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

5/15/2007
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%	108.8	+	28.2%	68.1	52.8
Post Air Stripper	11.294	0.0	0	20.9%	0%	0%	62.4	+	48.9%	57.4	114.0
SVE-Effluent ¹	5.706	0.0	0	20.1%	0%	0%	83.4	+	62.1%	70.2	46.2
GW Post Vapor Effluent ²	11.294	0.0	0	20.9%	0%	0%	65.1	+	87.6%	58.0	117.5
EPA-SVE-1 (shallow)	1.913	0.0	0	19.8%	0%	0%	83.6		41.3%	58.8	6.3
EPA-SVE-1 (medium)	1.913	0.0	0	20.9%	0%	0%	83.1		42.2%	57.6	42.7
EPA-SVE-2 (shallow)	1.913	0.0	0	19.7%	0%	0%	81.6		56.9%	66.9	17.1
EPA-SVE-2 (medium)	1.913	0.0	0	20.4%	0%	0%	73.4		60.6%	57.5	33.1
SS-A	1.913	0.0	0	20.9%	0%	0%	82.2		42.6%	56.9	43.3
EPA-SVE-04R/SS-B(A)	1.913	0.0	0	20.1%	0%	0%	79.6		57.7%	63.9	53.5
SS-B-C	1.913	0.0	0	20.9%	0%	0%	80.4		46.0%	57.8	2.4
SS-C	1.913	0.0	0	20.4%	0%	0%	81.3		47.1%	59.4	75.0
L1	1.913	0.0	0	20.9%	0%	0%	77.4		70.2%	66.6	148.5
L2	1.913	Not Measured - Offline									
SS-B(B)	1.913	0.0	0	20.9%	0%	0%	80.5		47.8%	59.1	28.1
SS Vent-LIHA	3.786	0.0	0	20.9%	0%	0%	80.2		49.9%	59.9	0.0
Vapor Point-1/Slope 1		0.0	0	20.9%	0%	0%	NM	NM	NM	NM	NM
SVE-3A	1.913	0.0	0	20.9%	0%	0%	79.6		58.7%	62.8	1.8
SVE-3B	1.913	0.0	0	19.6%	0%	0%	82.5		46.3%	58.8	189.0
Background		0.0	0	20.9%	0%	0%	81.8		42.0%	56.4	12.1

Equipment calibrated by: Russell Kolacek, Justin Self
Air readings collected by: Justin Self

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

Comments: Vac gauge not working.
Variable vacuum box unavailable for measurement. The LIHA vent does not seem to be running.
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

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

Prior to 10/3/05

shallow on
shallow on
shallow on
off
on
on
on
on
on
on

As of 05/15/07

shallow and medium on
not measurable
A & B on
off
on
on
on
on
on
off

Comments:
L2 is offline

The site vacuum gauge is broken and our office's vacuum box was unavailable for use.

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

5/29/2007
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	20.3%	0%	0%	105.0	+	28.5%	64.5	54.0
Post Air Stripper	11.294	0.0	0	20.9%	0%	0%	60.6	+	78.8%	55.1	118.0
SVE-Effluent ¹	5.706	0.0	0	20.2%	0%	0%	92.7	+	39.2%	66.2	46.5
GW Post Vapor Effluent ²	11.294	0.0	0	20.9%	0%	0%	69.0	+	77.5%	55.5	121.0
EPA-SVE-1 (shallow)	1.913	0.0	0	20.4%	0%	0%	80.1	8.50	30.5%	46.2	6.2
EPA-SVE-1 (medium)	1.913	0.0	0	20.9%	0%	0%	80.2	8.00	29.6%	48.3	1.5
EPA-SVE-2 (shallow)	1.913	0.0	0	19.5%	0%	0%	78.1	2.10	40.5%	58.4	30.9
EPA-SVE-2 (medium)	1.913	0.0	0	20.5%	0%	0%	73.4	2.00	54.1%	56.3	6.2
SS-A	1.913	0.0	0	20.9%	0%	0%	84.3	2.30	44.5%	56.4	41.7
EPA-SVE-04R/SS-B(A)	1.913	0.0	0	19.7%	0%	0%	87.2	1.00	37.5%	60.4	40.8
SS-B-C	1.913	0.0	0	20.9%	0%	0%	87.5	2.00	41.5%	62.5	4.2
SS-C	1.913	0.0	0	20.5%	0%	0%	80.9	2.00	30.4%	46.8	73.0
L1	1.913	0.0	0	20.9%	0%	0%	83.1	4.10	34.1%	47.9	132.0
L2	1.913	Not Measured - Offline									
SS-B(B)	1.913	0.0	0	20.9%	0%	0%	85.7	1.20	31.1%	51.5	25.8
SS Vent-LIHA	3.786						Offline				
Vapor Point-1/Slope 1		0.0	0	20.9%	0%	0%	NM	NM	NM	NM	NM
SVE-3A	1.913	0.0	0	20.9%	0%	0%	67.6	9.00	82.0%	58.6	0.0
SVE-3B	1.913	0.0	0	20.9%	0%	0%	72.4	7.20	51.3%	53.8	179.0
Background		0.0	0	20.9%	0%	0%	78.0	0.0	35.8%	49.4	0.0

Equipment calibrated by: Russell Kolacek, Justin Self
Air readings collected by: Justin Self

Comments: The LIHA vent does not seem to be running.

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

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

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

Prior to 10/3/05

shallow on
shallow on
shallow on
off
on
on
on
on
on
on

As of 05/29/07

shallow and medium on
not measurable
A & B on
off
on
on
on
on
on
off

Comments:
L2 is offline

The site vacuum gauge is broken and our office's vacuum box was unavailable for use.

Appendix G

Semi-Annual Groundwater Sampling Trip Report (submitted under separate cover)

Appendix H

Historical Groundwater Level Monitoring Results (Ongoing)

WATER LEVEL DATA SUMMARY

PROJECT: <u>Stanton Cleaners</u>			JOB NUMBER: <u>70536</u>		
LOCATION: <u>Great Neck, NY</u>			DATE: <u>5/3/2007</u>		
CLIENT: <u>USACE / USEPA</u>			MEASURED BY: <u>R. Kolacek</u>		
SURVEY DATUM: <u>ft msl</u>			<u>J. Self</u>		
MEASURING DEVICE: <u>Solinst Water Level Indicator S/N# 34407</u>					

WELL NUMBER	MEASURING POINT		DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)			
EPA-MW-11D	ft BTOC	74.63	57.82	16.81	no bolts
EPA-MW-21	ft BTOC	84.13	64.89	19.24	no bolts
EPA-MW-22	ft BTOC	82.20	62.91	19.29	
EPA-MW-23	ft BTOC	82.83	63.13	19.70	
EPA-MW-27	ft BTOC	69.32	50.32	19.00	no bolts
ST-MW-02	ft BTOC	82.03	62.46	19.57	top of PVC
ST-MW-06	ft BTOC	69.83	43.21	26.62	top of PVC
ST-MW-09	ft BTOC	78.13	63.02	15.11	
ST-MW-11	ft BTOC	75.25	58.47	16.78	no bolts
ST-MW-12	ft BTOC	87.20	69.92	17.28	missing 2 bolt
ST-MW-14	ft BTOC	69.73	54.59	15.14	no bolts
ST-MW-16	ft BTOC	75.78	53.42	22.36	no bolts
ST-MW-17	ft BTOC	86.53	74.71	11.82	no bolts
ST-MW-19	ft BTOC	82.50	64.32	18.18	no bolts
ST-MW-20	ft BTOC	84.53	70.57	13.96	no bolts

Notes:

During water level measurements, WAGNN Well # 9 was pumping at 950 GPM, Well #10 was pumping at 1250 GPM, and Well #12 was pumping at 1250 GPM.

**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

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

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

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

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

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

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	4/11/2006		5/2/2006	
		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
EPA-MW-22	82.20	63.89	18.31	63.59	18.61
EPA-MW-23	82.83	64.44	18.39	68.99	13.84
EPA-MW-27	69.32	51.72	17.60	51.28	18.04
ST-MW-02	82.03	--	--	--	--
ST-MW-06	69.83	46.54	23.29	44.58	25.25
ST-MW-09	78.13	63.96	14.17	63.50	14.63
ST-MW-11	75.25	--	--	--	--
ST-MW-12	87.20	71.35	15.85	73.87	13.33
ST-MW-14	69.73	56.10	13.63	55.71	14.02
ST-MW-16	75.78	54.58	21.20	54.63	21.15
ST-MW-17	86.53	70.76	15.77	70.35	16.18
ST-MW-19	82.50	67.13	15.37	66.69	15.81
ST-MW-20	84.53	72.13	12.40	71.80	12.73

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

Well ID	Top of PVC Elevation (ft msl)	6/22/06		7/20/2006		8/31/2006	
		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
EPA-MW-21	84.13	65.44	18.69	65.57	18.56	65.42	18.71
EPA-MW-22	82.20	63.10	19.10	63.23	18.97	63.13	19.07
EPA-MW-23	82.83	63.70	19.13	63.77	19.06	63.64	19.19
EPA-MW-27	69.32	51.78	17.54	51.00	18.32	50.80	18.52
ST-MW-02	82.03	--	--	64.11	17.92	--	--
ST-MW-06	69.83	43.81	26.02	43.43	26.40	43.61	26.22
ST-MW-09	78.13	62.92	15.21	63.18	14.95	62.92	15.21
ST-MW-11	75.25	--	--	--	--	--	--
ST-MW-12	87.20	70.24	16.96	70.56	16.64	70.21	16.99
ST-MW-14	69.73	54.38	15.35	55.57	14.16	54.82	14.91
ST-MW-16	75.78	53.85	21.93	53.54	22.24	53.75	22.03
ST-MW-17	86.53	69.74	16.79	70.05	16.48	69.71	16.82
ST-MW-19	82.50	65.70	16.80	64.97	17.53	65.69	16.81
ST-MW-20	84.53	73.45	11.08	71.54	12.99	70.86	13.67

Well ID	Top of PVC Elevation (ft msl)	9/27/2006		10/25/2006		12/13/2006	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	58.17	16.46	58.92	15.71	57.92	16.71
EPA-MW-21	84.13	65.43	18.70	65.80	18.33	65.33	18.80
EPA-MW-22	82.20	63.11	19.09	63.48	18.72	63.04	19.16
EPA-MW-23	82.83	63.68	19.15	64.04	18.79	63.53	19.30
EPA-MW-27	69.32	50.81	18.51	51.29	18.03	50.65	18.67
ST-MW-02	82.03	--	--	--	--	62.98	19.05
ST-MW-06	69.83	45.00	24.83	45.18	24.65	45.27	24.56
ST-MW-09	78.13	63.97	14.16	63.45	14.68	62.75	15.38
ST-MW-11	75.25	--	--	--	--	--	--
ST-MW-12	87.20	70.42	16.78	70.87	16.33	70.24	16.96
ST-MW-14	69.73	54.69	15.04	56.69	13.04	53.95	15.78
ST-MW-16	75.78	54.57	21.21	54.90	20.88	53.84	21.94
ST-MW-17	86.53	69.85	16.68	70.35	16.18	69.64	16.89
ST-MW-19	82.50	65.79	16.71	66.22	16.28	65.59	16.91
ST-MW-20	84.53	73.83	10.70	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)	1/10/2007		2/7/2007		3/7/2007		5/3/2007	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	--	--	58.29	16.34	58.01	16.62	57.82	16.81
EPA-MW-21	84.13	65.84	18.29	65.35	18.78			64.89	19.24
EPA-MW-22	82.2	63.51	18.69	63.11	19.09	62.89	19.31	62.91	19.29
EPA-MW-23	82.83	64.09	18.74	63.63	19.2	63.42	19.41	63.13	19.70
EPA-MW-27	69.32	51.38	17.94	50.7	18.62	50.58	18.74	50.32	19.00
ST-MW-02	82.03	63.39	18.64	62.94	19.09	62.79	19.24	62.46	19.57
ST-MW-06	69.83	44.85	24.98	46.28	23.55	45.05	24.78	43.21	26.62
ST-MW-09	78.13	63.54	14.59	62.59	15.54	62.36	15.77	63.02	15.11
ST-MW-11	75.25	--	--	58.95	16.3	58.58	16.67	58.47	16.78
ST-MW-12	87.2	70.89	16.31	70.3	16.9	70.02	17.18	69.92	17.28
ST-MW-14	69.73	55.64	14.09	55.2	14.53	54.39	15.34	54.59	15.14
ST-MW-16	75.78	54.1	21.68	54.14	21.64	54.17	21.61	53.42	22.36
ST-MW-17	86.53	70.37	16.16	67.7	18.83	69.49	17.04	74.71	11.82
ST-MW-19	82.5	66.26	16.24	64.7	17.8	65.42	17.08	64.32	18.18
ST-MW-20	84.53	71.63	12.9	71.17	13.36	70.63	13.9	70.57	13.96

Appendix I

**Indoor Air Quality Sampling Trip Report
(submitted under separate cover)**

Appendix J

Action List Dated May 2007

May 2007 ACTION LIST SUMMARY

PROJECT: Stanton Cleaners
LOCATION: Great Neck, NY
CLIENT: USACE / USEPA

JOB NUMBER: 70536
DATE: June 12, 2007

COMPLETED ITEMS	DATE PERFORMED
• Repaired broken influent line located behind the drycleaners	• May 2
• Bi-weekly Air Monitoring	• May 3
• Bi-weekly O & M inspection;	• May 3
• Monthly GWT System sampling	• May 3
• Bi-weekly O&M Inspection	• May 15
• Bi-weekly Air Monitoring	• May 15
• Bi-weekly Air Monitoring	• May 29
• Bi-weekly O & M inspection	• May 29

OUTSTANDING ITEMS / **RECOMMENDED SOLUTION**

On May 11, 2007, the GWT system was shut down due to a wet floor alarm caused by rain water seeping in through the treatment system building wall where the influent lines come in. Silicone sealant was applied at the source of seepage and the GWT system was brought back on-line. Should water continue to leak into the building at this location other alternatives to waterproof this area should be evaluated.	Repair broken carbon vessel. Replace worn out air stripper gaskets.