

Monthly Operations and Monitoring Report April 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:

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

May 15, 2007

Earth Tech Project No. 70536

Monthly Operations and Monitoring Report April 2007

Site:

Stanton Cleaners Area Groundwater Contamination
Great Neck, NY

Author: _____

Prepared for:

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

Title: _____

Date: _____

Prepared by:

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

Reviewer: _____

May 15, 2007

Title: _____

Earth Tech Project No. 70536

Date: _____

Table of Contents

1.0	INTRODUCTION	1
2.0	SUMMARY OF ACTIVITIES DURING APRIL 2007	3
3.0	GROUNDWATER TREATMENT SYSTEM ACTIVITIES.....	4
3.1	Operation and Maintenance.....	4
3.2	Sampling and Analysis	5
3.2.1	Raw and Treated Groundwater.....	5
3.2.2	Process Air Stream Monitoring.....	6
4.0	MONITORING WELL SAMPLING	8
5.0	PLUME PERIMETER MONITORING	10
6.0	INDOOR AIR QUALITY SAMPLING	11
7.0	FUTURE EVENTS PLANNED	12
8.0	PROBLEM AREAS AND RECOMMENDED SOLUTIONS (OUTSTANDING ISSUES)	113

Tables

Table 1	Modification to Active SVE Wells.....	6
Table 2	Monitored Well Samples for Further Analysis.....	9

Appendices

Appendix A	Daily Quality Control Reports (DQCRs)
Appendix B	Groundwater Treatment System Operation & Maintenance Checklists
Appendix C	Groundwater Treatment System Downloaded Operational Data
Appendix D	Groundwater Treatment System Sampling Trip Report
Appendix E	Groundwater Treatment System Raw and Treated Analytical Data
Appendix F	Soil Vapor Extraction and Pump and Treat System Bi-weekly Air Monitoring Logs
Appendix G	Semi-Annual Groundwater Sampling Trip Report
Appendix H	Historical Groundwater Level Monitoring Results (Ongoing)
Appendix I	Indoor Air Quality Sampling Trip Report
Appendix J	Action List Dated April 2007

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 April 1 and April 30, 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, April 1 and April 30, 2007:

- April 3 - Bi-weekly O&M Inspection
- April 3 - Bi-weekly Air Monitoring
- April 3 - Drained SVE lines
- April 18 - Bi-weekly O&M Inspection
- April 18 - Repaired broken influent line
- April 18 - Drained SVE lines
- April 18 - Drained aqueous carbon vessels
- April 18 - Applied silicone sealant to air stripper
- April 19 - Changed out aqueous carbon
- April 19 - Replaced broken float in Air Stripper
- April 20 - Collected monthly system samples
- April 20 - Recorded water quality readings

Details of system shutdowns and alarms during the month of April 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 616,534.7 gallons during the month of April 2007. The system was operational (recovery well pumps running) for approximately 276 of the 720 hours during the month, for an average operating flow of 37.6 gallons per minute (gpm). The system has treated a total of 148,141,957 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 event for April 3 and 20, 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 April 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 April 20, 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 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 determined that the container leaked from a broken corner most likely due to improper handling by the carrier. Due to this, there will be no GWT system analytical data for the month of April 2007.

The next GWT system influent/effluent sampling event is scheduled for May 3, 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 April 3, 2007. Copies of the bi-weekly air monitoring logs are included in Appendix F. The next bi-weekly air-monitoring event is scheduled for May 3, 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.

4.0 MONITORING WELL SAMPLING

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

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

The second semi-annual groundwater sampling event was performed the week of August 29, 2005. It included sampling 29 monitoring wells, 15 of which had natural attenuation parameter analyses. Laboratory analytical results for this semi-annual groundwater sampling event were sent directly to ECC under separate cover from the laboratory.

The third semi-annual groundwater sampling event was performed the week of May 23, 2006. It included sampling sixteen (16) monitoring wells, nine (9) of which had natural attenuation parameter analyses. Laboratory analytical results for this semi-annual groundwater sampling event were sent directly to ECC under separate cover from the laboratory.

The fourth semi-annual groundwater sampling event took place the week of February 12, 2007. Below is a list of monitoring wells that were sampled (per the USEPA Remedial Project Manager selection/request). Also below is a list of monitoring well samples that were further analyzed for monitoring and natural attenuation parameters. A copy of the semi-annual groundwater sampling event trip report was included in Appendix G of the February 2007 Monthly O&M Report.

The next groundwater monitoring well sampling event is scheduled for August 2007.

Table 2 Monitored Well Samples for Further Analysis

CL-ID	CL-ID
CL-4D	EPA-MW-21
EPA-MW-21	EPA-MW-26
EPA-MW-22	EPA-MW-27
EPA-MW-23	EPA-MW-29
EPA-MW-26	ST-MW-12
EPA-MW-27	ST-MW-17
EPA-MW-29	ST-MW-19
ST-MW-02	ST-MW-20

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 not collected in the month of April 2007 due to lack of time during the scheduled O&M visits. The location and number of monitoring wells was determined by the USEPA based on the site Capture Zone Analysis Plan. Groundwater level measurements for March 7, 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 striper 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 striper tray gaskets. It is recommended that the gaskets be replaced as a permanent measure to avoid future leaking of the air striper.

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.

Tables

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

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

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

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.

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

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

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.

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

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

Notes:

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

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

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

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

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

Estimated PCE Recovery Rates (continued)

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.

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

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

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
4/3/07	13	56	58.5	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.

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

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

Notes:

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

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

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

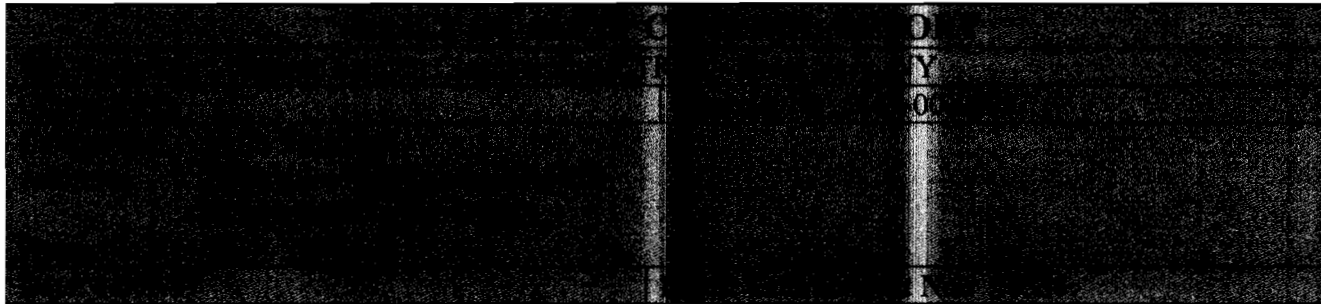
MW_x = molecular weight in grams/mole, for PCE is 166

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).

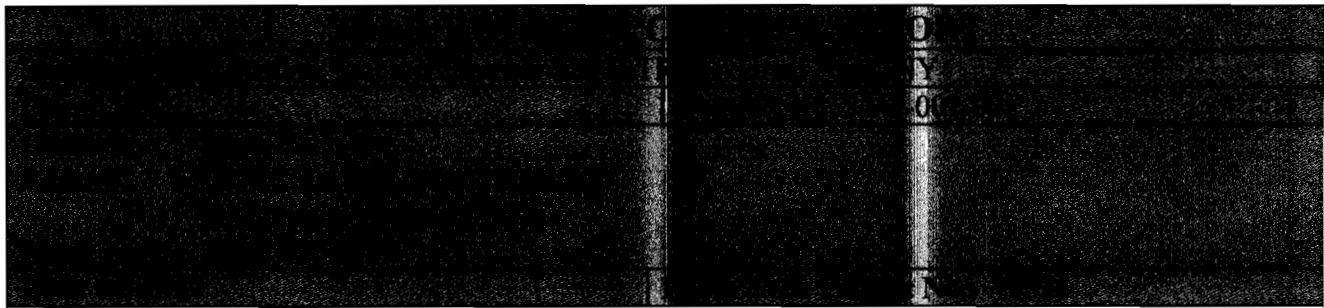
Appendices

Appendix A

Daily Quality Control Reports (DQCRs)



Day	S	M	T	W	T	F	S
Weather			PARTLY CLOUDY				
Temp.			48° F				
Wind			BREEZY				
Humidity			LOW				
Earth Tech Personnel On-Site: Russell Kolacek, Justin Self							
Subcontractor (include names & responsibilities): N/A							
Contract Materials and Equipment on site: Chevy 1500 pick-up, general hand tools. MultiRAE.							
Work Performed (include sampling; list by NAS number if applicable): Bi weekly O&M inspection; Bi weekly air monitoring; Observed proper system functions; No abnormal leaks coming from aqueous carbon unit since the bypass valves were installed; Drained SVE lines;							
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: **The LCD display for the plant PLC is not operational; System is showing no abnormal leaks after the bypass valves were installed in the second aqueous carbon unit.**

Tomorrow's Expectations:

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

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

Explore options for repairing leak in air stripper.

Change out of aqueous carbon vessels.

By: Russell Kolacek

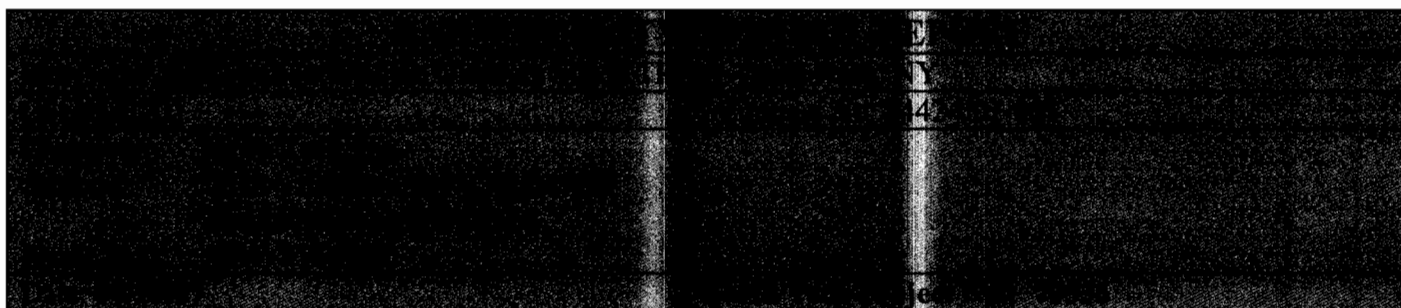
Title: Environmental Technician

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				PARTLY CLOUDY			
Temp.				48° F			
Wind				BREEZY			
Humidity				LOW			
Earth Tech Personnel On-Site: Russell Kolacek, Justin Self							
Subcontractor (include names & responsibilities): N/A							
Contract Materials and Equipment on site: Chevy 1500 pick-up, general hand tools. DeWalt power tools 12' A-frame ladder							
Work Performed (include sampling; list by NAS number if applicable): Bi weekly O&M inspection; Repaired broken influent line (see Special Notes); Drained SVE lines; drained aqueous carbon vessels; applied silicon sealant to air stripper; prepared for carbon changeout;							
Quality Control Activities (including field calibrations):							
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: The LCD display for the plant PLC is not operational; The leak coming from the influent line was actually back-pressure from the other influent wells that was escaping from the manifold valves. Tightening one of the gate-valves stopped the water from running back into the old influent line; found an additional break in the same old influent line that will need to be repaired later due to lack of materials;

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

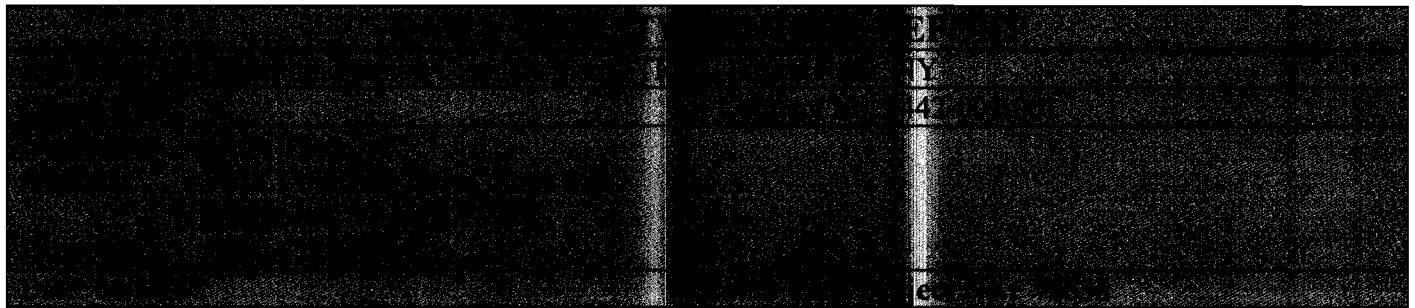
Title: Environmental Technician

Signature:

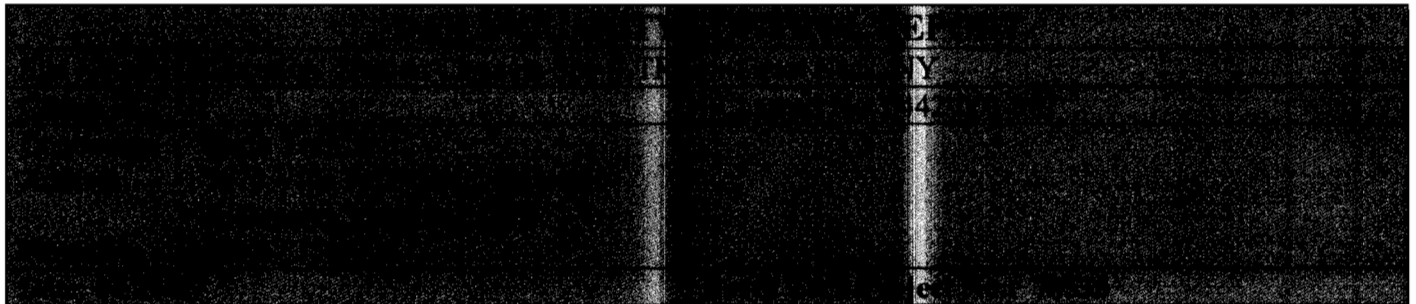
(Quality Control Representative/Manager)

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.

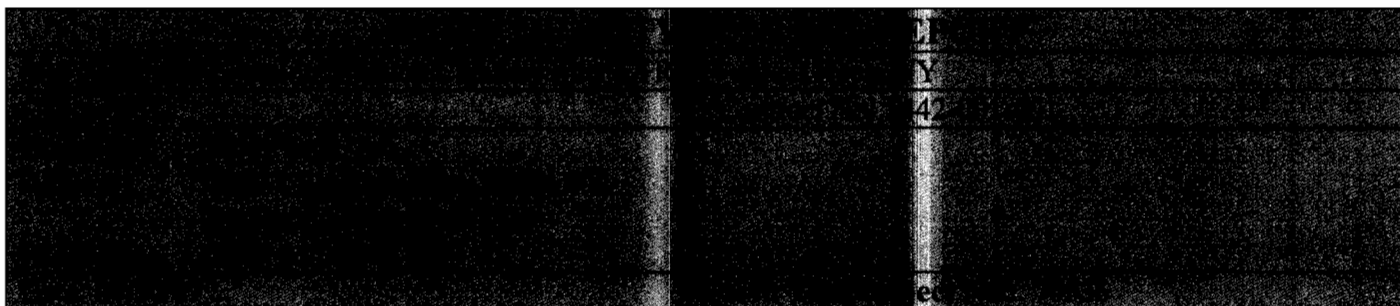
Day	S	M	T	W	T	F	S
Weather					PARTLY CLOUDY		
Temp.					48° F		
Wind					calm		
Humidity					LOW		
Earth Tech Personnel On-Site: Russell Kolacek, Justin Self							
Subcontractor (include names & responsibilities): Farrar Filter Co – Ronald & Juan							
Contract Materials and Equipment on site: Chevy 1500 pick-up, general hand tools. DeWalt power tools 12' A-frame ladder							
Work Performed (include sampling; list by NAS number if applicable): Bi weekly O&M inspection; Met contractor for carbon change-out; removed system components to allow carbon change; observed carbon evacuation and filling; disassembled the bottom of the leaking aqueous vessel (see special notes); reassembled the system components to carbon vessels; pumped water into aqueous carbon vessel to de-gas; restarted system, but found one of the floats had been broken in the AS; replaced the float with one from the SVE High-High poly tank; re-primed the AS transfer pump;							
Quality Control Activities (including field calibrations):							
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: The LCD display for the plant PLC is not operational; The leak in the aqueous carbon vessel was caused by a broken plastic ring which was part of the threaded nipple attaching to the 90 degree fitting and the strainer on the inside of the tank; got the manufacturer data from the O&M manual and took pictures of the broken parts;	
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: <i>Russell P. Kolacek</i> (Quality Control Representative/Manager)	
The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.	



Day	S	M	T	W	T	F	S
Weather						SUNNY	
Temp.						53° 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. DeWalt power tools							
12' A-frame ladder							
Work Performed (include sampling; list by NAS number if applicable): Bi weekly O&M inspection; Collected monthly system samples; Recorded water quality readings; dropped samples at Fedex location;							
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: **The previous days activities to get the system running ran past the Fedex pick-up time so the samples were taken today instead;**

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.

Appendix B

Groundwater Treatment System Operation & Maintenance Checklists

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST **DATE:04/03/07**

1. A. Is any part of the system leaking? **YES** **NO**
If so, list where: Air stripper between some seals and at a weld seam. Slow leak.

B. Is there water on the floor? **YES** **NO**
If so, list where: Below the air stripper, slight accumulation. Some residual from carbon leak.

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 _____ GPM
 2. Recovery Well EPA-EXT-02 valve open _____ %
 3. Recovery Well EPA-EXT-4R flow _____ GPM
 4. Recovery Well EPA-EXT-4R valve open _____ %
 5. Recovery Well pH _____ pH
 6. Recovery Well conductivity _____ cond
 7. Air Stripper pH _____ pH
 8. Air Stripper temperature _____ deg.
 9. Air Stripper air flow _____ CFM
 10. Pre-vapor carbon pressure _____ "wc
 11. Post carbon air flow _____ CFM
 12. Discharge conductivity _____ cond
 13. Discharge pH _____ pH
 14. Discharge flow _____ GPM
 15. Discharge total gallons _____ Gal
 16. SVE inlet vacuum _____ "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 _____ CFM

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

1. Recovery Well EPA-EXT-02 total flow 9804269 Gal

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

3. Recovery Well pH 6.08 pH

4. Recovery Well conductivity 0.74 cond

5. Air Stripper pH 6.86 pH

6. Air Stripper temperature 15.2 deg. C

7. Air Stripper Pump water flow 75.5 GPM

8. Air Stripper Pump pressure 44.5 PSI

9. Discharge conductivity 0.38 cond

10. Discharge pH 7.74 pH

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

12. SVE inlet vacuum 2.8 "Hg

13. SVE post knockout vacuum 2.5 "Hg

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

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST **DATE:04/03/07**

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 flow¹ _____ GPM
2. Recovery Well EPA-EXT-02 valve open _____ %
3. Recovery Well EPA-EXT-4R flow _____ GPM
4. Recovery Well EPA-EXT-4R valve open _____ %
5. Recovery Well pH _____ pH
6. Recovery Well conductivity _____ cond
7. Air Stripper pH _____ pH
8. Air Stripper temperature _____ deg.
9. Air Stripper air flow _____ CFM
10. Pre-vapor carbon pressure _____ "wc
11. Post carbon air flow _____ CFM
12. Discharge conductivity _____ cond
13. Discharge pH _____ pH
14. Discharge flow _____ GPM
15. Discharge total gallons _____ Gal
16. SVE inlet vacuum _____ "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 _____ CFM

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

1. Recovery Well EPA-EXT-02 total flow 9883793 Gal
2. Recovery Well EPA-EXT-03 total flow 52.0 Gal
3. Recovery Well pH 6.02 pH
4. Recovery Well conductivity 0.62 cond
5. Air Stripper pH 6.86 pH
6. Air Stripper temperature 14.96 deg. C
7. Air Stripper Pump water flow 84.0 GPM
8. Air Stripper Pump pressure 43.0 PSI
9. Discharge conductivity 0.39 cond
10. Discharge pH 7.95 pH
11. SVE inlet vacuum (digital readout) 1.7 "Hg
12. SVE inlet vacuum 1.6 "Hg
13. SVE post knockout vacuum -2.7 "Hg

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

Appendix C

Groundwater Treatment System Downloaded Operational Data

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 (deg 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	SVI Air Flow
4/6/2007	0:00	0	0	0	0	20	148	65	42	6.5	6.7	7.6	147762271.2	41	20	976
4/6/2007	4:00	0	0	0	0	20	148	56	41	6.5	6.7	7.6	147762271.2	21	20	976
4/6/2007	8:00	0	0	0	0	20	147	42	40	6.5	6.7	7.6	147762271.2	23	20	976
4/6/2007	12:00	0	0	0	0	20	147	59	39	6.5	6.7	7.6	147762271.2	21	20	976
4/6/2007	16:00	0	0	0	0	20	146	65	40	6.6	6.7	7.6	147762271.2	27	20	976
4/6/2007	20:00	0	0	0	0	20	146	65	41	6.6	6.7	7.6	147762271.2	31	20	976
4/7/2007	0:00	0	0	0	0	20	145	64	40	6.5	6.7	7.6	147762271.2	47	20	976
4/7/2007	4:00	0	0	0	0	23	145	64	40	6.6	6.7	7.6	147762271.2	21	23	976
4/7/2007	8:00	0	0	0	0	20	144	54	40	6.6	6.7	7.6	147762271.2	26	20	976
4/7/2007	12:00	0	0	0	0	23	144	64	38	6.6	6.7	7.6	147762271.2	19	23	976
4/7/2007	16:00	0	0	0	0	23	144	65	39	6.5	6.7	7.6	147762271.2	21	23	976
4/7/2007	20:00	0	0	0	0	20	144	65	40	6.5	6.7	7.6	147762271.2	32	20	976
4/8/2007	0:00	0	0	0	0	20	143	64	39	6.5	6.7	7.6	147762271.2	21	20	976
4/8/2007	4:00	0	0	0	0	20	143	64	38	6.6	6.7	7.6	147762271.2	24	20	976
4/8/2007	8:00	0	0	0	0	20	142	63	37	6.6	6.7	7.6	147762271.2	37	20	976
4/8/2007	12:00	0	0	0	0	20	142	63	37	6.6	6.7	7.6	147762271.2	21	20	976
4/8/2007	16:00	0	0	0	0	20	142	54	38	6.6	6.8	7.6	147762271.2	22	20	976
4/8/2007	20:00	0	0	0	0	20	142	64	39	6.6	6.7	7.6	147762271.2	46	20	976
4/9/2007	0:00	0	0	0	0	20	142	64	39	6.6	6.7	7.6	147762271.2	39	20	976
4/9/2007	4:00	0	0	0	0	23	141	65	38	6.6	6.7	7.6	147762271.2	21	23	976
4/9/2007	8:00	0	0	0	0	20	141	63	38	6.6	6.7	7.6	147762271.2	29	20	976
4/9/2007	12:00	0	0	0	0	20	141	63	37	6.6	6.7	7.6	147762271.2	44	20	976
4/18/2007	16:00	0	0	0	0	20	144	69	48	6.7	6.8	7.3	147762275.6	21	20	976
4/18/2007	20:00	0	0	0	0	20	145	58	49	6.7	6.8	7.3	147762275.6	41	20	976
4/19/2007	0:00	0	0	0	0	20	144	63	48	6.7	6.8	7.4	147762275.6	38	20	976
4/19/2007	4:00	0	0	0	0	20	145	61	48	6.7	6.8	7.5	147762275.6	27	20	976
4/19/2007	8:00	0	0	0	0	20	144	63	48	6.7	6.8	7.6	147762275.6	27	20	976
4/19/2007	12:00	0	0	32	0	23	148	72	48	6.4	6.5	7.6	147762275.6	16	23	976
4/19/2007	16:00	0	0	0	0	20	149	79	43	6.5	6.3	9.6	147762720.9	42	20	976
4/19/2007	20:00	0	0	30	68	2288	151	64	39	6.5	6.8	9.4	147765062.3	455	2288	500
4/20/2007	0:00	0	0	30	0	2394	150	46	48	6.5	6.9	8.1	147773714.3	526	2394	500
4/20/2007	4:00	0	0	33	16	2544	150	35	47	6.5	6.8	8	147782430.9	403	2544	500
4/20/2007	8:00	0	0	34	70	2447	150	58	48	6.5	6.8	7.9	147790893.9	427	2447	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 (deg F)	Influent Conductivity	Effluent Conductivity	Influent Water pH	Discharge Water pH	Total Gallons Discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow
4/20/2007	12:00	0	0	32	0	2548	151	46	48	6.5	6.9	147799416.2	447	2548	500
4/20/2007	16:00	0	0	32	6	2307	153	72	49	6.6	6.9	147808103.6	520	2307	500
4/20/2007	20:00	0	0	32	70	2459	150	49	47	6.5	6.9	147816560.3	474	2459	500
4/21/2007	0:00	0	0	26	0	2719	149	54	47	6.5	6.9	147825044.9	494	2719	500
4/21/2007	4:00	0	0	31	6	2394	149	43	48	6.5	6.8	147833756.5	454	2394	500
4/21/2007	8:00	0	0	34	69	2394	150	44	48	6.5	6.8	147842196.2	357	2394	500
4/21/2007	12:00	0	0	33	0	2532	153	72	49	6.6	6.9	147850676.5	354	2532	500
4/21/2007	16:00	0	0	33	5	2396	153	73	50	6.6	6.9	147859340.1	393	2396	500
4/21/2007	20:00	0	0	33	69	2399	153	73	49	6.6	6.9	147867761.1	382	2399	500
4/22/2007	0:00	0	0	30	0	2601	152	45	48	6.5	6.9	147876221.4	376	2601	500
4/22/2007	4:00	0	0	26	4	2599	151	50	47	6.5	6.8	147884919.7	430	2599	500
4/22/2007	8:00	0	0	35	71	2396	151	72	48	6.5	6.8	147893397.1	387	2396	500
4/22/2007	12:00	0	0	31	0	2744	153	72	49	6.6	6.9	147901836.2	367	2744	500
4/22/2007	16:00	0	0	28	0	2914	154	72	49	6.6	6.9	147910465.9	396	2914	500
4/22/2007	20:00	0	0	33	70	2447	152	72	48	6.6	6.9	147918920	449	2447	500
4/23/2007	0:00	0	0	27	0	2691	152	70	48	6.5	6.9	147927306.7	359	2691	500
4/23/2007	4:00	0	0	31	0	2907	152	72	48	6.5	6.9	147936006	399	2907	500
4/23/2007	8:00	0	0	30	70	2601	153	70	49	6.5	6.8	147944531	361	2601	500
4/23/2007	12:00	0	0	33	0	2535	155	71	50	6.6	6.9	147952956.2	388	2535	500
4/23/2007	16:00	0	0	29	0	2753	156	72	51	6.6	6.9	147961630.6	349	2753	500
4/23/2007	20:00	0	0	32	73	2746	155	72	50	6.6	6.9	147970110.6	406	2746	500
4/24/2007	0:00	0	0	31	0	2742	154	71	49	6.5	6.9	147978608	327	2742	500
4/24/2007	4:00	0	0	30	7	2551	154	71	50	6.5	6.9	147987307.2	384	2551	500
4/24/2007	8:00	0	0	32	69	2744	156	72	51	6.6	6.9	147995750.1	398	2744	500
4/24/2007	12:00	0	0	32	0	2502	155	71	49	6.6	6.9	148004212.5	353	2502	500
4/24/2007	16:00	0	0	29	0	2447	154	72	49	6.6	6.9	148012868.5	338	2447	500
4/24/2007	20:00	0	0	31	69	2601	153	71	48	6.6	6.9	148021345.4	366	2601	500
4/25/2007	0:00	0	0	27	0	2691	152	71	47	6.5	6.9	148029804.4	463	2691	500
4/25/2007	4:00	0	0	28	6	2691	151	71	46	6.5	6.9	148038523.8	354	2691	500
4/25/2007	8:00	0	0	30	70	2599	151	71	46	6.5	6.8	148047017.3	404	2599	500
4/25/2007	12:00	0	0	35	0	2691	153	71	48	6.5	6.9	148055513.2	406	2691	500
4/25/2007	16:00	0	0	30	8	2742	152	71	47	6.5	6.9	148064255.8	337	2742	500
4/25/2007	20:00	0	0	29	69	2774	152	72	47	6.5	6.8	148072734.8	369	2774	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 (deg 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
4/26/2007	0:00	0	0	27	0	2891	152	72	47	6.5	6.8	7.7	148081285.3	408	2691	500
4/26/2007	4:00	0	0	28	0	2896	152	71	46	6.5	6.8	7.7	148089977.4	382	2896	500
4/26/2007	8:00	0	0	31	70	2905	151	44	46	6.5	6.8	7.7	148098572.3	467	2905	500
4/26/2007	12:00	0	0	32	76	2691	152	71	47	6.5	6.8	7.7	148106982.9	376	2691	500
4/26/2007	16:00	0	0	31	0	2774	152	71	47	6.5	6.9	7.8	148115717.9	447	2774	500
4/26/2007	20:00	0	0	23	71	2546	151	47	46	6.5	6.9	7.8	148124246	368	2546	500
4/27/2007	0:00	0	0	33	0	2599	151	40	46	6.5	6.9	7.7	148132737.9	410	2599	500
4/27/2007	4:00	0	0	31	7	2859	152	72	47	6.5	6.8	7.7	148141501.7	429	2859	500
4/27/2007	8:00	0	0	0	0	20	151	60	45	6.5	6.8	7.7	148141957.7	22	20	976
4/27/2007	12:00	0	0	0	0	20	151	60	44	6.5	6.8	7.7	148141957.7	27	20	976
4/27/2007	16:00	0	0	0	0	20	151	63	46	6.6	6.8	7.7	148141957.7	27	20	976
4/27/2007	20:00	0	0	0	0	20	151	62	46	6.6	6.8	7.7	148141957.7	23	20	976
4/28/2007	0:00	0	0	0	0	20	151	64	46	6.6	6.8	7.7	148141957.7	8	20	976
4/28/2007	4:00	0	0	0	0	20	151	61	46	6.6	6.8	7.7	148141957.7	27	20	976
4/28/2007	8:00	0	0	0	0	23	150	63	46	6.6	6.8	7.7	148141957.7	22	23	976
4/28/2007	12:00	0	0	0	0	20	151	64	52	6.7	6.9	7.8	148141957.7	31	20	976
4/28/2007	16:00	0	0	0	0	20	151	75	55	6.7	6.9	7.7	148141957.7	24	20	976
4/28/2007	20:00	0	0	0	0	20	152	75	54	6.7	6.9	7.7	148141957.7	21	20	976
4/29/2007	0:00	0	0	0	0	20	152	63	50	6.7	6.9	7.7	148141957.7	8	20	976
4/29/2007	4:00	0	0	0	0	20	153	58	49	6.7	6.9	7.7	148141957.7	28	20	976
4/29/2007	8:00	0	0	0	0	20	153	60	48	6.7	6.8	7.7	148141957.7	12	20	976
4/29/2007	12:00	0	0	0	0	20	153	62	50	6.8	6.9	7.7	148141957.7	1	20	976
4/29/2007	16:00	0	0	0	0	20	153	62	52	6.7	6.9	7.7	148141957.7	29	20	976
4/29/2007	20:00	0	0	0	0	20	153	66	53	6.8	6.9	7.7	148141957.7	11	20	976
4/30/2007	0:00	0	0	0	0	18	154	61	48	6.7	6.9	7.7	148141957.7	26	18	976
4/30/2007	4:00	0	0	0	0	18	153	51	44	6.7	6.8	7.7	148141957.7	23	18	976
4/30/2007	8:00	0	0	0	0	20	153	58	45	6.8	6.9	7.7	148141957.7	17	20	976
4/30/2007	12:00	0	0	0	0	20	153	64	51	6.8	6.9	7.7	148141957.7	21	20	976
4/30/2007	16:00	0	0	0	0	20	154	76	57	6.8	6.9	7.7	148141957.7	21	20	976
4/30/2007	20:00	0	0	0	0	20	155	62	58	6.8	6.9	7.7	148141957.7	19	20	976

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: April 20, 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 April 20, 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
799125944093	1	Total of 4 Aqueous Samples to include 1 duplicate sample, and 1 Trip Blank for TCL-VOAs	4/20/07 @ 0800 am 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

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.

Chain of Custody
(April 20, 2007, System Sampling Event)



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

Region: 2		Date Shipped: 4/20/2007		Chain of Custody Record		Case No: R	
Project Code: NYD047650197		Carrier Name: FedEx		Relinquished By: Russell Kolczak		DAS No:	
CERCLUS ID: 02LH		Arrival: 799125944083		Date / Time:		Sampler Signature: Russell Kolczak	
Site Name/State: Stanton Area Cleaners Groundwater Contam. Francisco, Meical		Shipped to: USEPA Region 2 - DESA LAB		Date / Time:		Received By:	
Project Leader: Operations and Maintenance		2880 Woodbridge Ave.		2			
Action: Earth Tech		Blag. 209, MS-230		3			
Sampling Co:		Edison NJ 08837		4			
		(732) 905-5885					

ORGANIC SAMPLE NO.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS TURNAROUND	TAG No/ PRESERVATION/ BOTTLE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE NO.	QC Type
EFFLUENT	Ground Water/ Russell Kolczak	L/G	VOA (14)	(HCL) (3)	Effluent	S. 4/20/2007 7:35		-
EFFLUENT A	Ground Water/ Russell Kolczak	L/G	VOA (14)	(HCL) (3)	Effluent A	S. 4/20/2007 7:30		Field Duplicate
INFLUENT	Ground Water/ Russell Kolczak	L/G	VOA (14)	(HCL) (3)	Influent (MM-24 & EPA-EXT-02)	S. 4/20/2007 7:40		-
TRIP BLANK	Field QC/ Russell Kolczak	L/G	VOA (14)	(HCL) (2)	Trip Blank	S. 4/20/2007 7:45		Trip Blank

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

IR Number: 2-043013577-042007-0001

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

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/618-4200; Fax 703/618-4602

REGION COPY



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

Date Shipped: 4/20/2007		Chain of Custody Record		Case No: L	
Carrier Name: FedEx		Received By: <i>Russell Kolczak</i>		DAS No:	
Airbill: 700125044093		Date / Time: 4/20/07 0900		SDG No:	
Shipped to: USEPA Region 2 - DESA		Signature: <i>Russell Kolczak</i>		For Lab Use Only	
LAB		2		Lab Contract No:	
2090 Woodbridge Ave.		3		Unit Price:	
Bldg. 209, MS-230		4		Transfer To:	
Edison NJ 08837				Lab Contract No:	
(732) 908-6966				Unit Price:	

ORGANIC SAMPLE No.	BATCH/ SAMPLER	CONC TYPE	ANALYSIS TURNOVER	TAQ No./ PRESERVATIVE Dishes	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
EFFLUENT	Ground Water/ Russell Kolczak	L/G	VOA (14)	(HCL) (3)	Effluent	S: 4/20/2007 7:35		
EFFLUENT A	Ground Water/ Russell Kolczak	L/G	VOA (14)	(HCL) (3)	Effluent A	S: 4/20/2007 7:30		
INFLUENT	Ground Water/ Russell Kolczak	L/G	VOA (14)	(HCL) (3)	Influent (MMW-24 & EPA-EXT-02)	S: 4/20/2007 7:40		
TRIP BLANK	Field QC/ Russell Kolczak	L/G	VOA (14)	(HCL) (2)	Trip Blank	S: 4/20/2007 7:45		

Signature for Case Complete: <i>[Signature]</i>	Sample(s) to be used for Laboratory GC:	Additional Sample Signatures:	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: VOA = CLP TCL Volatiles	Concentration: L = Low, M = Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? ☒

TR Number: 2-043013577-042007-0001
PR provides preliminary results. Requests for preliminary results will require analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3818; Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY

FedEx Air Bill
(April 20, 2007, System Sampling Event)

Shipping Label

Page 1 of 1

From: Origin ID: GTYA (717)795-8029
Russell Kolesak
EarthTech
2 Market Plaza Way
Berks County, PA 17805



Ship Date: 20APR07
Actual: 8 LB
System: 7447067/NET2600
Account: 5

Dimmed: 11 X 8 X 12 IN

Delivery Address Bar Code



Ref # Standard 70536 07.01
Invoice #
PO #
Dept #

SHIP TO: (732)805-0000 BILL SENDER

John Birri
USEPA Region 2 DESA Lab
Building 200, MS-230
2800 Woodbridge Ave
Edison, NJ 08837



STANDARD OVERNIGHT

MON

TRK# 7991 2594 4093

FORM 001

Deliver By
23APR07

EWR A1

08837 -NJ-US
DSR

KQ LDJA



Shipping Label

This shipping label constitutes the air waybill for this shipment.

[View all labels](#)

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 claims 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 strict time limits, see current FedEx Service Guide.

**Water Quality Parameters
(April 20, 2007, System Sampling Event)**

Groundwater Pump and Treatment System Water Quality Parameters Log

	5.39	0.673	12.3	9.8	14.74	0.0
	5.81	0.644	33.6	10.8	13.52	0.0

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

No samples collected in April 2007

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**

4/3/2007
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	20.3%	0%	0%	96.7	+	30.1%	60.3	56.0
Post Air Stripper	11.294	0.0	0	20.9%	0%	0%	59.2	+	96.4%	56.6	119.0
SVE-Effluent ¹	5.706	0.0	0	20.2%	0%	0%	61.2	+	51.6%	46.8	36.7
GW Post Vapor Effluent ²	11.294	0.0	0	20.9%	0%	0%	60.1	+	93.4%	56.6	125.0
EPA-SVE-1 (shallow)	1.913	0.0	0	20.9%	0%	0%	59.3		53.5%	42.7	19.3
EPA-SVE-1 (medium)	1.913	0.0	0	20.9%	0%	0%	58.2		56.9%	42.7	3.8
EPA-SVE-2 (shallow)	1.913	0.0	0	19.3%	0%	0%	58.0		59.6%	43.9	23.1
EPA-SVE-2 (medium)	1.913	0.0	0	20.9%	0%	0%	59.1		84.5%	53.2	9.7
SS-A	1.913	0.0	0	20.9%	0%	0%	62.4		55.2%	44.6	52.8
EPA-SVE-04R/SS-B(A)	1.913	0.0	0	20.9%	0%	0%	62.2		53.0%	44.6	50.1
SS-B-C	1.913	0.0	0	20.9%	0%	0%	62.6		62.6%	51.1	3.0
SS-C	1.913	0.0	0	20.3%	0%	0%	56.7		59.8%	43.0	81.5
L1	1.913	0.0	0	20.9%	0%	0%	54.3		73.4%	45.7	153.0
L2	1.913	Not Measured - Offline									
SS-B(B)	1.913	0.0	0	20.9%	0%	0%	67.7		41.7%	43.6	34.2
SS Vent-LIHA	3.786	0.0	0	20.9%	0%	0%	78.9		47.2%	57.0	24.5
Vapor Point-1/Slope 1		0	0	20.9%	0	0	NM	NM	NM	NM	NM
SVE-3A	1.913		water flooded meters				67.2		53.9%	28.3	4.0
SVE-3B	1.913	0.0	0	19.4%	0%	0%	63.2		63.2%	46.4	184.0
Background		0.0	0	20.9%	0%	0%	59.4		53.3%	42.2	0.0

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

Comments: Vac gauge not working. Variable vacuum box unavailable for measurement.
NM=Not Measured

¹Formerly Post SVE Carbon

²Formerly Post Air Stripper Carbon

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

4/3/2007
Project # 70536

%RH: relative humidity

Dew Pt.: dew point in degrees Fahrenheit

AS: Air Stripper

SVE: Soil Vapor Extraction System

³Formerly Sub-Slab A,B, and C

⁴Formerly Sub-Slab D

⁵Formerly Sub-Slab B

NA- Not Available

	<u>Prior to 10/3/05</u>	<u>As of 04/03/07</u>
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	not measurable A & B
SVE 3	shallow on	on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	on
SS-B(C)	on	on
L1	on	on
L2	on	off

Comments:

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: Stanton Cleaners		Job Number: 70536.07.04		
Location: Great Neck, NY		Date: 2/12/2007		
Client: U.S. EPA Region II		Measured By: Metcalf, Morgan, Szura,		
Survey Datum: Below top of casing, except where noted		Guenther, Kolacek, and Law		
Measuring Device: Solinst Water Level Indicator				
Well Number	Time (Military)	Depth to Water (ft)	PID	Comments
CL-1S	1003	10.5	0.0	Bolts will not screw into the holes
CL-1D	1000	10.98	0.0	No gasket
CL-3	1003	7.81	0.0	
CL-4S	1015	2.19	0.0	Vault flooded and frozen. Needs bolts
CL-4D	1010	2.46	0.0	Under pressure. Needs bolts
EPA-MW-9A	1224	61.44	0.0	Man hole crushed. Needs bolts
EPA-MW-11D	1205	50.13	0.0	Missing bolts
EPA-MW-21	1040	64.89	0.0	Bolt holes stripped
EPA-MW-22	1033	62.71	0.1	Bolt holes stripped. Needs bolts
EPA-MW-23	1045	63.19	0.0	Bolt holes stripped
EPA-MW-25	1107	53.03	0.2	Bolt holes stripped
EPA-MW-26	1208	58.34	0.0	Bolt holes stripped
EPA-MW-27	1123	49.89	0.0	Bolt holes stripped. Needs ID tag
EPA-MW-28	1330	n/a	n/a	Cover broken. Filled with frozen dirt
EPA-MW-29	1009	13.61	0.0	Needs ID tag. Pad cracked. No seal
EPA-MW-30	1030	n/a	n/a	Paved over. No longer exists
EPA-MW-31	1102	28.55	0.0	Needs bolts. Pad cracked.
EPA-MW-32	1115	30.36	0.0	Bolts broken off. Needs ID tag
EPA-MW-33	1120	n/a	n/a	No cover or bolts. Filled with frozen dirt and ice
ST-MW-01	1055	n/a	n/a	Abandoned
ST-MW-02	1029	62.73	0.1	In city water vault. No bolts
ST-MW-06	1126	46.44	0.1	In city water vault. Manhole shifted, lid will not fit
ST-MW-09	1215	n/a	n/a	Cemented over
ST-MW-11	1210	57.39	0.0	Needs bolts
ST-MW-12	1155	69.38	0.1	Bolt holes stripped
ST-MW-13	1340	85.27	0.0	No bolts. Damaged seal
ST-MW-14	1120	50.21	0.0	Bolt holes are broken off
ST-MW-15	1130	71.82	0.0	No ID tag. Missing bolts. Filled with sand
ST-MW-16	1100	54.21	0.0	Bolt holes stripped. No gasket
ST-MW-17	1148	68.38	0.1	Bolt holes stripped
ST-MW-18	1200	65.31	0.1	Bolt holes stripped
ST-MW-19	1230	63.72	0.0	No bolts
ST-MW-20	1145	65.04	0.1	Bolt holes stripped
Comments:		Water Authority of Great Neck New York (WAGNN) pumps were off from 0800-1200 WAGNN pumps were turned back on after 1200		

**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	
		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
EPA-MW-21	84.13	65.84	18.29	65.35	18.78		84.13
EPA-MW-22	82.2	63.51	18.69	63.11	19.09	62.89	19.31
EPA-MW-23	82.83	64.09	18.74	63.63	19.2	63.42	19.41
EPA-MW-27	69.32	51.38	17.94	50.7	18.62	50.58	18.74
ST-MW-02	82.03	63.39	18.64	62.94	19.09	62.79	19.24
ST-MW-06	69.83	44.85	24.98	46.28	23.55	45.05	24.78
ST-MW-09	78.13	63.54	14.59	62.59	15.54	62.36	15.77
ST-MW-11	75.25	--	--	58.95	16.3	58.58	16.67
ST-MW-12	87.2	70.89	16.31	70.3	16.9	70.02	17.18
ST-MW-14	69.73	55.64	14.09	55.2	14.53	54.39	15.34
ST-MW-16	75.78	54.1	21.68	54.14	21.64	54.17	21.61
ST-MW-17	86.53	70.37	16.16	67.7	18.83	69.49	17.04
ST-MW-19	82.5	66.26	16.24	64.7	17.8	65.42	17.08
ST-MW-20	84.53	71.63	12.9	71.17	13.36	70.63	13.90

Notes:

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

Appendix I

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

Appendix J

Action List Dated April 2007

April 2007 ACTION LIST SUMMARY

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

JOB NUMBER: 70536
DATE: May 15, 2007

COMPLETED ITEMS	DATE PERFORMED
• Bi-weekly O&M Inspection	• April 3
• Bi-Weekly Air Monitoring	• April 3
• Drained SVE lines	• April 3
• Bi-weekly O&M Inspection	• April 18
• Repaired broken influent line	• April 18
• Drained SVE lines	• April 18
• Drained aqueous carbon vessels	• April 18
• Applied silicone sealant to air stripper	• April 18
• Changed out aqueous carbon in vessels	• April 19
• Replaced broken float in air stripper	• April 19
• Collected monthly system samples	• April 20
• Recorded water quality readings	• April 20

OUTSTANDING ITEMS / **RECOMMENDED SOLUTION**

On April 19, 2007, during a carbon change out on the aqueous carbon vessels, it was observed that a plastic ring was broken on a carbon vessel which was part of the threaded nipple attaching to the 90 degree fitting and the strainer on the inside of the tank.	Repair broken carbon vessel. Replace worn out air stripper gaskets. Replace the high-high float from the poly tank located above the SVE system.