Monthly Operations and Monitoring Report
March 2004

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

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

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

April 4, 2004

ET Project No. 70536.02.01.01

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Author: John Huisman

Title: Environmental Scientist

Date: April 4, 2004

Reviewer: _____

Title: _____

Date: _____

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1.0 INTRODUCTION

This Monthly Operations and Monitoring Report, March 2004 (Monthly Report) has been prepared by Earth Tech, Inc., as a subcontractor to Environmental Chemical Corporation (ECC), under Contract No.5442-001-001.

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

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

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

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

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

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

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

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

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

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

- Work Plan for Long-Term Remedial Action Support;
- Site-Specific Health and Safety Plan (HASP), dated July 23, 2001 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 March 1 and March 31, 2004.

2.0 SUMMARY OF ACTIVITIES DURING MARCH 2004

The following list summarizes activities performed and milestone dates under this contract during the reporting period, March 2004:

- March 3 – SVE system turned of for less than 24 hours while blower belts are replaced.
- March 8 through 10 – Install new PLC Computer Screen, flow meters, and light fixture.
- March 10 – Influent / effluent treatment system water sampling event.
- March 25 – Install and calibrate additional flow meters.
- March 29 – Monthly Plume Perimeter Monitoring

Details of system shutdowns and alarms during the month of March 2004 are discussed in section 3.1. Daily Quality Control Reports (DQCRs), which include projected work for the following two weeks are completed for each day of site activities. Copies of these reports are included as Appendix A.

3.0 GROUNDWATER TREATMENT SYSTEM ACTIVITIES

3.1 Operation and Maintenance

The GWTS treated and discharged 2,655,750 gallons during the month of March 2004. The system was operational (recovery well pumps running) for approximately 740 of the 744 hours during the month, for an average operating flow of 59.8 gallons per minute (gpm). The system has treated a total of 61,847,996 gallons since the plant startup in November 2001.

The SVE system was shutdown for less than 24 hours between March 3 and 4, 2004 after it was determined during the weekly O&M inspection that the existing blower belt needed to be replaced. There were numerous systems alarms on March 25, 2004 due to site activities that included making adjustments to the PLC program.

There are currently two recovery wells pumping water into the system. (EPA-EXT-02 and MW-24) Both wells are located in the triangle, the corner of New Cuttermill Road and Mirrielees Road. The two wells are manifolded 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. The decision to have two wells pumping from the triangle into the system was made by the USEPA.

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

The Treatment System Operation and Maintenance Checklist were completed during each O&M inspection event and the checklists for March 2, 10, 18 and 25, 2004 are provided in Appendix B. When the system is operational, any abnormal conditions or parameters outside of the normal operating range are addressed by the lead operator and/or monitoring/environmental technician on site (Jim Simmonds or John Huisman). If they require guidance or notes any serious conditions, the inspector notifies the task manager (Tom Williams). The checklists are completed on site and sent to the task 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 PLC. This data is downloaded every two weeks. The Martch 2004 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.

3.2 Sampling and Analysis

3.2.1 Raw and Treated Groundwater

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

Earth Tech personnel conducted the GWTS influent and effluent sampling for this report period on March 10, 2004. The samples were shipped to the EPA Region II lab located in Edison, New Jersey for analysis of TCL volatile organic compounds. A copy of the full sampling trip report containing the chain of custody forms and FedEx airbills is included in Appendix D. Laboratory analytical results for the GWTS sampling event during this reporting period will be forwarded to ECC under separate cover from the laboratory.

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

The next GWTS influent / effluent sampling event is scheduled for April 14, 2004.

3.2.2 Process Air Stream Monitoring

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

- Combined SVE - Influent (pre-treatment),
- Post groundwater Air-Stripper (pre-treatment),
- Post vapor phase carbon vessel - discharge (post-treatment).

Bi-weekly air monitoring activities were conducted on March 10 and 25, 2004. The bi-weekly air monitoring logs are included in Appendix F. The SVE system was manually shutdown per the USEPA OSC's request during soil gas and indoor air sampling performed at the site. The SVE system will remain shutdown until otherwise directed by the OSC. Estimated PCE removal rates for the SVE system are presented in Table 1. A Graph showing the estimated PCE removal rate trend over time is presented in Figure 2. The next bi-weekly air monitoring event is scheduled for April 6, 2004.

4.0 Monitoring Well Sampling

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

The first quarterly groundwater sampling event performed under this contract by Earth Tech personnel was conducted January 13 through 16, 2004. A total of 29 groundwater monitoring wells were sampled for analysis of the presence of TCL volatiles and natural attenuation parameters. The next quarterly groundwater sampling event is scheduled for April 2004.

5.0 Plume Perimeter Monitoring

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

Water level measurements were collected from 15 monitoring wells on March 29, 2004. 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 2004 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 designated EPA, CLP lab for analysis. The location and number of indoor air quality samples to be collected as well as analytical parameters will be determined by the USEPA, USACE and ECC.

The next quarterly indoor air quality sampling event will be performed by Earth Tech personnel in April 2004.

7.0 FUTURE EVENTS PLANNED

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

- Continue to perform GWTS inspection and maintenance as required;
- Continue to perform bi-weekly system air monitoring;
- Collect system influent and effluent samples as directed by USACE/ECC/USEPA;
- Obtain groundwater level measurements as directed by USACE/ECC/USEPA;
- Collect groundwater samples from monitoring wells as directed by USACE/ECC/USEPA;
- Collect indoor air quality samples as directed by USACE/ECC/USEPA.

8.0 PROBLEM AREAS AND RECOMMENDED SOLUTIONS (OUTSTANDING ISSUES)

An Action List of ongoing and completed items is provided in Appendix J to track work tasks that have been targeted as issues to be addressed.

Tables

TABLE 1
ESTIMATED PCE RECOVERY RATES
STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
250 CFM SVE SYSTEM
September 2003 - March 2004

Date	# of Days	Flow Rate (cfm)	Flow Rate Avg (cfm)	VOC Concentration (ppm)	VOC Average (ppm)	VOC Discharge Rate (lbs/day)	VOC Total Discharge (lbs)
9/11/2003	1	225	225	4.2	4.20	0.6	0.6
9/25/2003	13	210	217.5	4.7	4.45	0.6	7.8
10/8/2003	13	213	211.5	5	4.85	0.6	8.2
10/23/2003	15	210	210	12.2	8.6	1.1	16.7
11/5/2003	13	215	212.5	6.8	9.5	1.2	16.2
11/22/2003	17	211	213	6	6.4	0.8	14.3
12/4/2003	12	205	208	5.9	5.95	0.8	9.2
12/17/2003	13	200	202.5	4	4.95	0.6	8.0
12/30/2003	13	210	205	4	4.95	0.6	8.1
1/15/2004	16	205	207.5	4.1	4.05	0.5	8.3
2/5/2004	SVE System Manually Shutdown Since 1/16/04						
2/12/2004	8	200	200	3.5	3.5	0.4	3.5
2/26/2004	14	205	202.5	5.3	4.4	0.6	7.7
3/10/2004	12	200	202.5	5	5.15	0.6	7.7
3/25/2004	15	199	199.5	5.1	5.05	0.6	9.3
						Total	**125.7**

Notes:

The SVE system was manually shutdown on 3/3/04 for less than 24 hours to replace the SVE Blower Belts. The SVE System was turned back on 3/4/04.

VOC readings taken before vapor phase carbon off-gas treatment.
Deep SVE Wells Closed on 12/10/03 Per OSC's Request

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

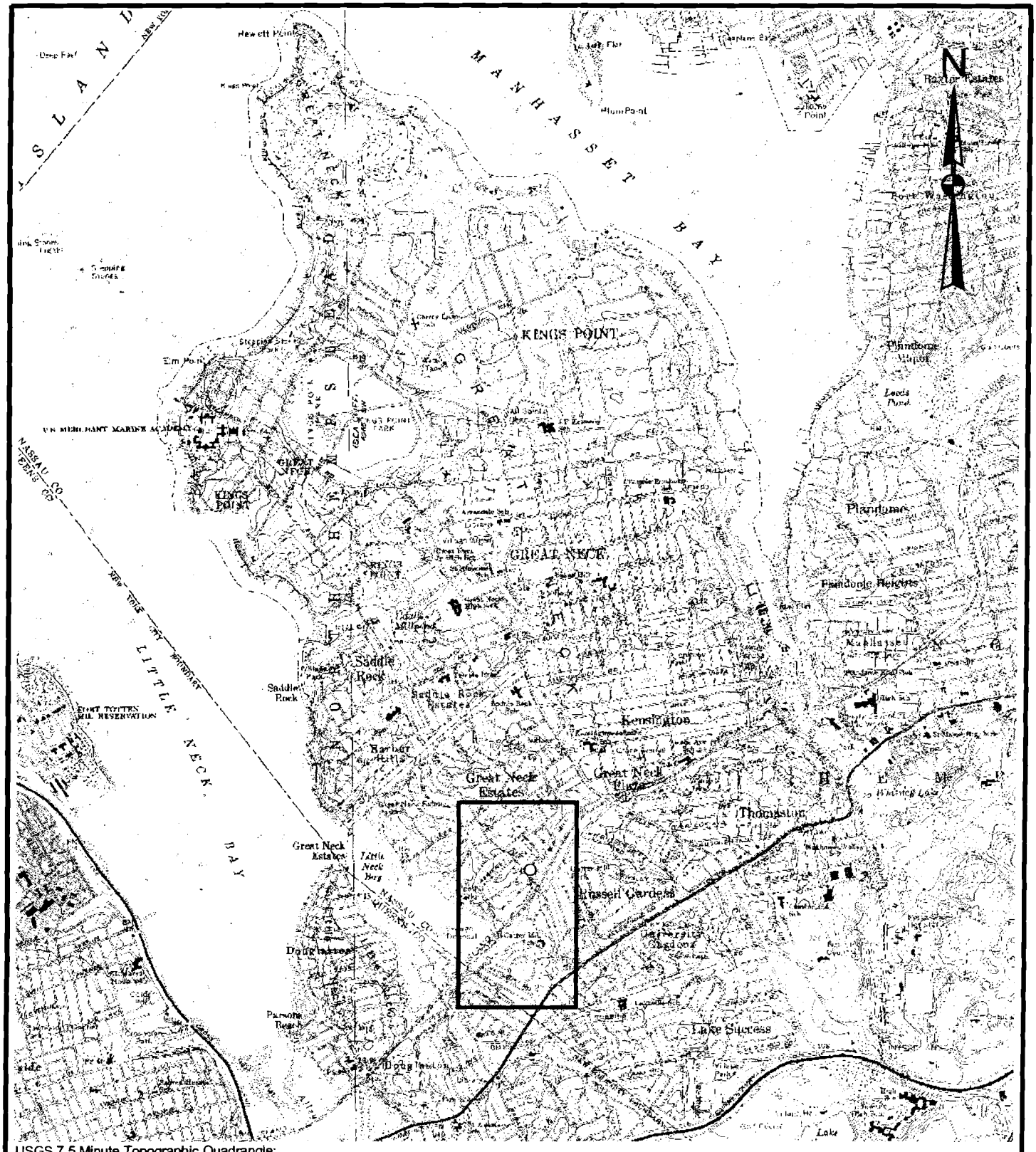
$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m3}{ft3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

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

Notes:
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 Farenheit (0 degrees Celcius), the conversion is (1 mole air)/(22.4 L).

Figures



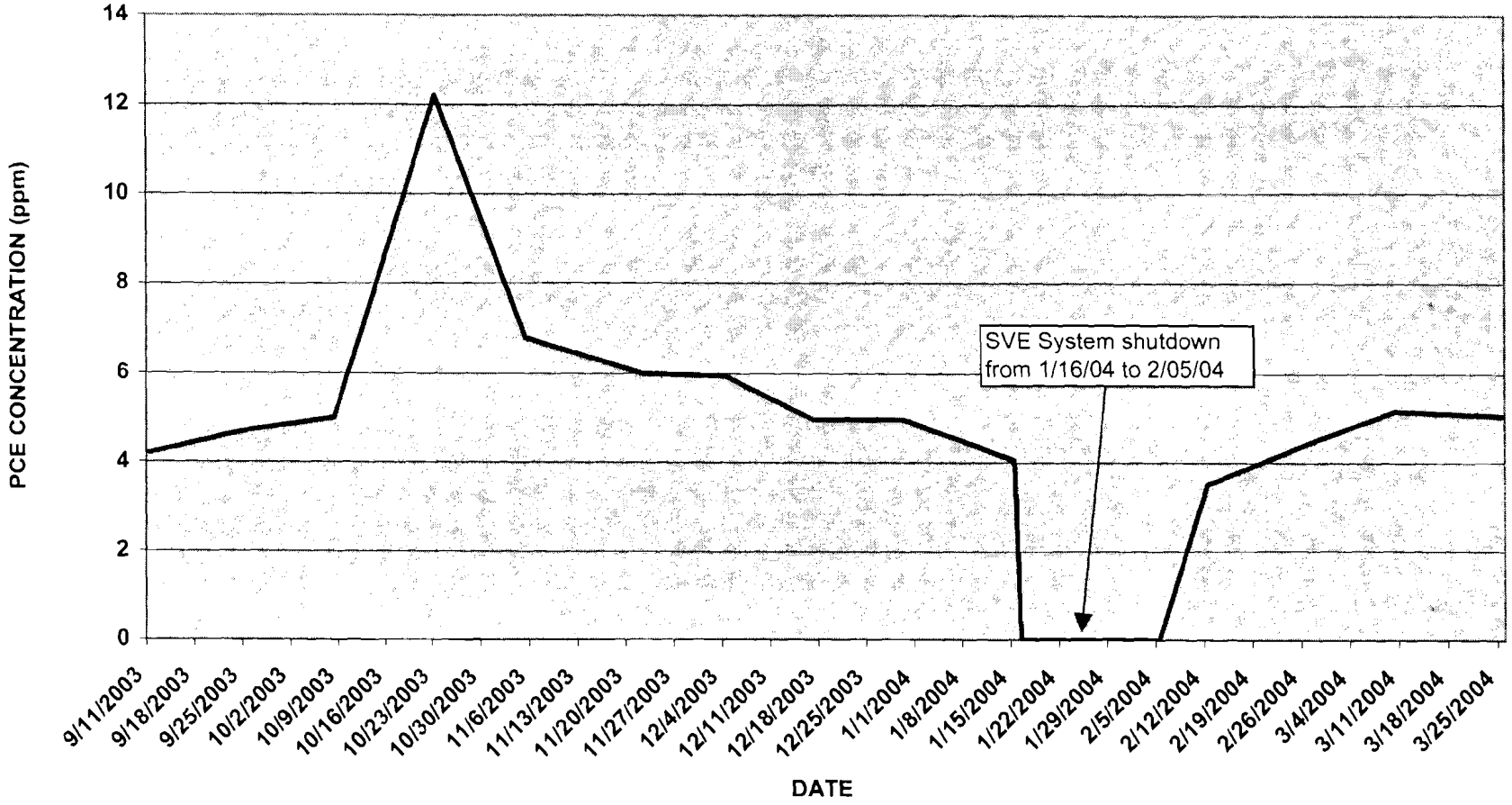
EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

Figure 1
Site Location Map
Stanton Cleaners Area
Groundwater Contamination Site

Stanton Cleaners Area
Groundwater Contamination Site
Great Neck, Nassau County, New York

Figure 2
STANTON CLEANERS AREA GOUNDWATER CONTAMINATION SITE
AVERAGE PCE CONCENTRATIONS (ppm)
250 CFM FINAL SVE SYSTEM
September 2003 - March 2004



Appendix A

Daily Quality Control Reports (DQCRs)

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/2/04 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather			**Cloudy**				
Temp.			**41°F**				
Wind			**Mild**				
Humidity			**Low**				

Earth Tech Personnel On-Site: **Jimmy Simmonds, Randy Bryant**

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

Contract Materials and Equipment on site: **Ford F-250, Ford F-150, and general hand tools**

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

Repair upstairs sink

Perform Weekly O&M Inspection

Begin placing aluminum backed water proof tape on SVE and Air stripper joints.

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**

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY	
Client: ECC	Contract No: 5442-001-001
Contractor: Earth Tech, Inc. Address: 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228 Phone No.: (804) 515-8300	
Date: 3/2/04	Earth Tech Project No.: 70536

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

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

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

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

Explained in work performed section.

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

Special Notes:

Treatment room cleanup activities are being performed in preparation for press conference scheduled at The site on 3/11/04

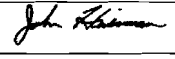
Tomorrow's Expectations:

Monthly Influent / Effluent Sampling (3/10/04)

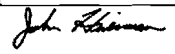
Bi-weekly system air monitoring (3/10/04)

Weekly O&M Inspection and facility Repairs (3/10/04)

By: John Huisman Title: Environmental Scientist

Signature:  (Quality Control Representative/Manager)

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

Signature:  (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/4/04 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather				**Overcast**			
Temp.				**40°F**			
Wind				**Mild**			
Humidity				**Low**			

Earth Tech Personnel On-Site: **Randy Bryant**

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

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

Work Performed (include sampling; list by NAS number if applicable):
Replaced SVE blower belts.

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

DAILY QUALITY CONTROL REPORT

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

Client: ECC	Contract No: 5442-001-001
Contractor: Earth Tech, Inc. Address: 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228 Phone No.: (804) 515-8300	
Date: 3/4/04	Earth Tech Project No.: 70536

actual results): **N/A**

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

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

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

Explained in work performed section.

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

Special Notes:

SVE system was shutdown on 3/3/04 because SVE belts were in need of replacement. System was off for just over 24 hours.

Tomorrow's Expectations:

Monthly Influent / Effluent Sampling (Week Ending 3/12/04)

Bi-weekly system air monitoring (Week Ending 3/12/04)

Weekly O&M Inspection and facility Repairs (Week Ending 3/12/04)

By: John Huisman Title: Environmental Scientist

Signature: John Huisman (Quality Control Representative/Manager)

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

Signature: John Huisman (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/8/04 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather		**Cloudy**					
Temp.		**39°F**					
Wind		**Mild**					
Humidity		**Low**					

Earth Tech Personnel On-Site: **John Huisman, Greg Stadden, Jimmy Simmonds, Randy Bryant**

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

Contract Materials and Equipment on site: **Ford F-250, hand tools**

Work Performed (include sampling; list by NAS number if applicable):
Repair Leaking Influent line. Install new flow meters on treatment system, Replace flat screen monitor On PLC. Pack all nonessential equipment to be moved off site in anticipation of site walkthrough on 3/11/04. Order new lights for switches on PLC panel. Contact ECC to order more aluminum backed Water proof tape for SVE and Air stripper joints. Put labels identifying equipment and piping in the treatment room. Contact ECC to order replacement light fixture for treatment room.

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**

DAILY QUALITY CONTROL REPORT

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

Client: ECC	Contract No: 5442-001-001
Contractor: Earth Tech, Inc. Address: 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228 Phone No.: (804) 515-8300	
Date: 3/8/04	Earth Tech Project No.: 70536

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

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

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

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

Explained in work performed section.

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

Special Notes:

Treatment room cleanup activities are being performed in preparation for press conference scheduled at The site on 3/11/04

Tomorrow's Expectations:

Monthly Influent / Effluent Sampling (3/10/04)

Bi-weekly system air monitoring (3/10/04)

Weekly O&M Inspection and facility Repairs (3/9/04)

By: John Huisman Title: Environmental Scientist

Signature: John Huisman (Quality Control Representative/Manager)

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

Signature: John Huisman (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/9/04 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather			**Sunny**				
Temp.			**43°F**				
Wind			**Mild**				
Humidity			**Low**				

Earth Tech Personnel On-Site: **Greg Stadden, Jimmy Simmonds, Randy Bryant**

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

Contract Materials and Equipment on site: **Ford F-250, hand tools**

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

Tape SVE and Airstripper pipe joints with aluminum backed water proof tape. Replace light fixture and Housing of light in treatment room. Complete wiring of new PLC flat screen monitor. Replace PLC Switch light bulbs. Clean off carbon vessels and mop treatment room floor. Move 55-gallon drums from Recent drilling activities from the parking lot area.

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**

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/9/04 | Earth Tech Project No.: 70536

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

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

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

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

Explained in work performed section.

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

Special Notes:

Treatment room cleanup activities are being performed in preparation for press conference scheduled at The site on 3/11/04

Tomorrow's Expectations:

Monthly Influent / Effluent Sampling (3/10/04)
Bi-weekly system air monitoring (3/10/04)
Weekly O&M Inspection (3/10/04)

By: John Huisman Title: Environmental Scientist

Signature: John Huisman (Quality Control Representative/Manager)

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

Signature: John Huisman (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/10/04 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather				**Sunny**			
Temp.				**40°F**			
Wind				**None**			
Humidity				**low**			

Earth Tech Personnel On-Site: **John Huisman**

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

Contract Materials and Equipment on site: **Ford Escape, Horiba U-22 Water Quality Meter, Sample bottles, and cooler, Multi-RAE Multi Gas Monitor, TSI VelociCalc, Meter , Gil Air 5 - Gillian Tri-Mode Air Sampler, Isobutylene and 4 Gas Calibration Gas.**

Work Performed (include sampling; list by NAS number if applicable):
Performed Monthly Influent / Effluent Sampling. Performed bi-weekly air monitoring. Performed weekly O&M inspection.

Quality Control Activities (including field calibrations): **Calibrated Horiba U-22 water quality meter and Multi Rae 4 Gas PID.**

Isobutylene Cal Gas **Calibration Gas Mix**
Lot # 76124 **Lot # 76270**
100 ppm **H_2S: 25 ppm** **0_2: 20.9%**
CO: 50 ppm **LEL: 50%**

Horiba U-22 Auto Cal Solution: PH: 4.0 Conductivity: 4.49mS/cm Turbidity: 0.0 NTU

Collect MS/MSD (QA/QC sample) from SC-04 (Effluent). Collect Duplicate sample of SC-01 (influent) labeled SC-64. Included Trip Blank in Sample Cooler. Include Temp Blank.

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**

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/10/04 | Earth Tech Project No.: 70536

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 the work performed section.**

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

Explained in the work performed section.

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

Special Notes:

Influent / Effluent water samples collected were shipped to: USEPA Region II Edison, NJ Lab.

Fedex airbill number for shipped samples: 842135658659

Case number: N/A

Traffic Report Number: 2-462971652-031004-0001

Copies of chains-of-custody faxed to Dave Miller, Jennifer Ferranda, Robert Toth, Adly Michael, and Heather Bauer.

Tomorrow's Expectations:

Weekly O&M Inspection (Week Ending 3/18/04)

Electronic copy of Sample Trip Report will be emailed (Week Ending 3/18/04)

Change indoor air Filters (Week Ending 3/18/04)

Water Level Measurements (Week Ending2/27/04)

By: John Huisman | Title: Environmental Scientist

Signature: John Huisman | (Quality Control Representative/Manager)

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

Signature: John Huisman | (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/18/04 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather					**Overcast**		
Temp.					**41°F**		
Wind					**None**		
Humidity					**low**		

Earth Tech Personnel On-Site: **John Huisman**

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

Contract Materials and Equipment on site: **Ford Escape, General Hand Tools**

Work Performed (include sampling; list by NAS number if applicable):
Performed weekly O&M inspection.

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

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

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

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

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

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

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

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

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

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

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

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY	
Client: ECC	Contract No: 5442-001-001
Contractor: Earth Tech, Inc. Address: 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228 Phone No.: (804) 515-8300	
Date: 3/18/04	Earth Tech Project No.: 70536

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

Explained in the work performed section.

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

Special Notes:

Tomorrow's Expectations:

Weekly O&M Inspection (Week Ending 3/26/04)

Water Level Measurements (3/29/04)

By: John Huisman	Title: Environmental Scientist
Signature: John Huisman	(Quality Control Representative/Manager)

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

Signature: John Huisman (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/25/04 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather				**Sunny**			
Temp.				**40°F**			
Wind				**None**			
Humidity				**low**			

Earth Tech Personnel On-Site: **John Huisman, Jimmy Simmonds, Greg Stadden**

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

Contract Materials and Equipment on site: **Ford Escape, Ford F-250, Multi-RAE Multi Gas Monitor, TSI VelociCalc, Meter , Gil Air 5 GillianTri-Mode Air Sampler, Isobutylene and 4 Gas Calibration Gas.**

Work Performed (include sampling; list by NAS number if applicable):
Performed bi-weekly air monitoring.
Performed weekly O&M inspection. Installed new air-flow meters

Quality Control Activities (including field calibrations): **Calibrated Multi Rae 4 Gas PID and new Air flow meters.**

Isobutylene Cal Gas **Calibration Gas Mix**
Lot # 76124 **Lot # 76270**
100 ppm **H_2S: 25 ppm** **0_2: 20.9%**
CO: 50 ppm **LEL: 50%**
Horiba U-22 Auto Cal Solution: PH: 4.0 **Conductivity: 4.49mS/cm** **Turbidity: 0.0 NTU**

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

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

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

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

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

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

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

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/25/04 | Earth Tech Project No.: 70536

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

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

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

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

Explained in the work performed section.

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

Special Notes:

The SVE influent airflow meter still needs to be calibrated. All other air flow meters operating to specs.

Tomorrow's Expectations:

Monthly Water Level Measurements (3/29/04)

By: John Huisman Title: Environmental Scientist

Signature: John Huisman (Quality Control Representative/Manager)

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

Signature: John Huisman (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

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

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

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

Date: 3/29/04 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather				**Sunny**			
Temp.				**40°F**			
Wind				**None**			
Humidity				**low**			

Earth Tech Personnel On-Site: **John Huisman**

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

Contract Materials and Equipment on site: **Ford Escape, Solinst Water Level Meter, General Hand Tools.**

Work Performed (include sampling; list by NAS number if applicable):
Performed Monthly Water Level Measurements.

Quality Control Activities (including field calibrations):
Decontaminate Solinst water level meter before each use with DI water and Liquinox solution and DI Water rinse.

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

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

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

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

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

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

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

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

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY	
Client: ECC	Contract No: 5442-001-001
Contractor: Earth Tech, Inc. Address: 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228 Phone No.: (804) 515-8300	
Date: 3/29/04	Earth Tech Project No.: 70536
Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**	
Comments and deficiencies noted and corrective actions taken: **Explained in the work performed section.**	
Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.	
Explained in the work performed section.	
Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.	
Special Notes:	
Several of the well caps and lids are damaged and require repair and /or replacement.	
Tomorrow's Expectations:	
Weekly O&M Inspection (Week Ending 4/2/04)	
Second Quarterly Groundwater Sampling Event (Week Ending 4/9/04)	
By: John Huisman	Title: Environmental Scientist
Signature: John Huisman	(Quality Control Representative/Manager)
The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.	
Signature: John Huisman	(Contractor's Authorized Representative)

Appendix B

Groundwater Treatment System Operation & Maintenance Checklists

3/2/04

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE

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] _____61_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____50_____ %
3. Recovery Well IW-01 flow _____NA_____ GPM
4. Recovery Well IW-01 valve open _____NA_____ %
5. Recovery Well EPA-EXT-03 flow _____NA_____ GPM
6. Recovery Well EPA-EXT-03 valve open _____NA_____ %
7. Recovery Well pH _____6.7_____ pH
8. Recovery Well conductivity _____59_____ cond
9. Air Stripper pH _____7.8_____ pH
10. Air Stripper temperature _____154*_____ deg.
11. Air Stripper air flow _____8402*_____ CFM
12. Pre-vapor carbon pressure _____0_____ "wc
13. Post carbon air flow _____2544_____ CFM
14. Discharge conductivity _____114_____ cond
15. Discharge pH _____8.4_____ pH

---

[1] *Wells EPA-EXT-02 and MW-24 wells are manifolded 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.*

16. Discharge flow _____74_____ GPM

17. Discharge total gallons _____59344630_____ Gal

18. SVE inlet vacuum _____4_____ "Hg

19. SVE air flow _____2004_____ CFM

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

1. Recovery Well EPA-EXT-02 total flow _____33604_____ Gal

2. Recovery Well IW-01 total flow _____32100_____ Gal

3. Recovery Well EPA-EXT-03 total flow _____0_____ Gal

5. Recovery Well pH _____6.71_____ pH

6. Recovery Well conductivity _____0.60_____ cond

7. Air Stripper pH _____7.82_____ pH

8. Air Stripper temperature _____15.3_____ deg.

9. Air Stripper Pump water flow _____70 _____ GPM

10. Air Stripper Pump pressure _____36/34_____ PSI

11. Discharge conductivity _____1.15_____ cond

12. Discharge pH _____8.11 _____ pH

13. Discharge total gallons _____95190_____ Gal

14. SVE inlet vacuum (digital readout) _____2.2_____ "Hg

15. SVE inlet vacuum _____-4_____ "Hg

16. SVE post knockout vacuum _____3_____ "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.

Notes:

3/10/04

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE

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] _____59_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____50_____ %
3. Recovery Well IW-01 flow _____NA_____ GPM
4. Recovery Well IW-01 valve open _____NA_____ %
5. Recovery Well EPA-EXT-03 flow _____NA_____ GPM
6. Recovery Well EPA-EXT-03 valve open _____NA _____ %
7. Recovery Well pH _____6.8_____ pH
8. Recovery Well conductivity _____59_____ cond
9. Air Stripper pH _____7.5_____ pH
10. Air Stripper temperature _____152*_____ deg.
11. Air Stripper air flow _____8400*_____ CFM
12. Pre-vapor carbon pressure _____0_____ "wc
13. Post carbon air flow _____2544_____ CFM
14. Discharge conductivity _____55_____ cond
15. Discharge pH _____8.3_____ pH

---

[1] *Wells EPA-EXT-02 and MW-24 wells are manifolded 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.*

16. Discharge flow _____71_____ GPM

17. Discharge total gallons _____60021695_____ Gal

18. SVE inlet vacuum _____4_____ "Hg

19. SVE air flow _____2000_____ CFM

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

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

2. Recovery Well IW-01 total flow _____3210039_____ Gal

3. Recovery Well EPA-EXT-03 total flow _____0_____ Gal

5. Recovery Well pH _____6.69_____ pH

6. Recovery Well conductivity _____0.59_____ cond

7. Air Stripper pH _____7.80_____ pH

8. Air Stripper temperature _____15.5_____ deg.

9. Air Stripper Pump water flow _____69 _____ GPM

10. Air Stripper Pump pressure _____45_____ PSI

11. Discharge conductivity _____.59_____ cond

12. Discharge pH _____8.01_____ pH

13. Discharge total gallons _____NA_____ Gal

14. SVE inlet vacuum (digital readout) _____2.2_____ "Hg

15. SVE inlet vacuum _____2.5_____ "Hg

16. SVE post knockout vacuum _____1.5_____ "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.

Notes:

3/18/04

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE

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] _____58_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____50_____ %
3. Recovery Well IW-01 flow _____NA_____ GPM
4. Recovery Well IW-01 valve open _____NA_____ %
5. Recovery Well EPA-EXT-03 flow _____NA_____ GPM
6. Recovery Well EPA-EXT-03 valve open _____NA_____ %
7. Recovery Well pH _____6.6_____ pH
8. Recovery Well conductivity _____58_____ cond
9. Air Stripper pH _____7.7_____ pH
10. Air Stripper temperature _____150_____ deg.
11. Air Stripper air flow _____8402_____ CFM
12. Pre-vapor carbon pressure _____0_____ "wc
13. Post carbon air flow _____2771_____ CFM
14. Discharge conductivity _____56_____ cond
15. Discharge pH _____8.0_____ pH

---

[1] *Wells EPA-EXT-02 and MW-24 wells are manifolded 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.*

16. Discharge flow _____72_____ GPM

17. Discharge total gallons _____60709165_____ Gal

18. SVE inlet vacuum _____4_____ "Hg

19. SVE air flow _____2004_____ CFM

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

1. Recovery Well EPA-EXT-02 total flow _____4677900_____ Gal

2. Recovery Well IW-01 total flow _____1581010_____ Gal

3. Recovery Well EPA-EXT-03 total flow _____0_____ Gal

5. Recovery Well pH _____6.66_____ pH

6. Recovery Well conductivity _____0.61_____ cond

7. Air Stripper pH _____7.79_____ pH

8. Air Stripper temperature _____14.98_____ deg.

9. Air Stripper Pump water flow _____70 _____ GPM

10. Air Stripper Pump pressure _____35_____ PSI

11. Discharge conductivity _____.55_____ cond

12. Discharge pH _____8.03_____ pH

13. Discharge total gallons _____897600_____ Gal

14. SVE inlet vacuum (digital readout) _____2.3_____ "Hg

15. SVE inlet vacuum _____-4 _____ "Hg

16. SVE post knockout vacuum _____.-2_____ "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.

Notes:

3/25/04

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE

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] _____58_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____50_____ %
3. Recovery Well IW-01 flow _____NA_____ GPM
4. Recovery Well IW-01 valve open _____NA_____ %
5. Recovery Well EPA-EXT-03 flow _____NA_____ GPM
6. Recovery Well EPA-EXT-03 valve open _____NA_____ %
7. Recovery Well pH _____6.6_____ pH
8. Recovery Well conductivity _____58_____ cond
9. Air Stripper pH _____7.8_____ pH
10. Air Stripper temperature _____NA_____ deg.
11. Air Stripper air flow _____2310_____ CFM
12. Pre-vapor carbon pressure _____0_____ "wc
13. Post carbon air flow _____2861_____ CFM
14. Discharge conductivity _____57_____ cond
15. Discharge pH _____8.0_____ pH

---

[1] *Wells EPA-EXT-02 and MW-24 wells are manifolded 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.*

16. Discharge flow _____71_____ GPM

17. Discharge total gallons _____61320702____ Gal

18. SVE inlet vacuum _____4_____ "Hg

19. SVE air flow _____NA_____ CFM

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

1. Recovery Well EPA-EXT-02 total flow _____5265634_____ Gal

2. Recovery Well IW-01 total flow _____3210039_____ Gal

3. Recovery Well EPA-EXT-03 total flow _____0_____ Gal

5. Recovery Well pH _____6.65_____ pH

6. Recovery Well conductivity _____0.61_____ cond

7. Air Stripper pH _____7.82_____ pH

8. Air Stripper temperature _____NA_____ deg.

9. Air Stripper Pump water flow _____75 _____ GPM

10. Air Stripper Pump pressure _____35_____ PSI

11. Discharge conductivity _____.56_____ cond

12. Discharge pH _____8.01_____ pH

13. Discharge total gallons _____1515137_____ Gal

14. SVE inlet vacuum (digital readout) _____2.2_____ "Hg

15. SVE inlet vacuum _____1.9_____ "Hg

16. SVE post knockout vacuum _____.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.

Notes:
Air stripper Air flow meter is installed and working. SVE air flow meter is installed but requires calibration.

Appendix C

Groundwater Treatment System Downloaded Operational Data

Stanton Cleaners Groundwater Contamination Site - March 2004 - Site Operation Data

	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
3/1/2004 8:00	0	0	59	0	2774	151	58	58	6.7	7.6	8	59235404.8
3/1/2004 12:00	0	0	59	70	2544	152	58	57	6.7	7.7	8	59249825.8
3/1/2004 16:00	0	0	57	67	2475	152	58	57	6.7	7.8	8	59264330.2
3/1/2004 20:00	0	0	60	68	2771	151	59	56	6.7	7.8	8	59278578.4
3/2/2004 0:00	0	0	60	71	2748	151	58	57	6.7	7.8	8.1	59293092.1
3/2/2004 4:00	0	0	57	71	2544	151	58	57	6.7	7.7	8	59307320.6
3/2/2004 8:00	0	0	60	67	2599	151	59	57	6.6	7.7	8	59321817.8
3/2/2004 12:00	0	0	59	68	2544	154	58	120	6.7	7.7	8.1	59336122.8
3/2/2004 16:00	0	0	61	71	2433	154	60	117	6.7	7.8	8	59350641.6
3/2/2004 20:00	0	0	57	70	2551	152	58	112	6.7	7.7	8	59365184.5
3/3/2004 0:00	0	0	59	71	2445	152	58	111	6.7	7.7	8	59379451.2
3/3/2004 4:00	0	0	58	72	2544	152	58	112	6.7	7.7	8	59393966.4
3/3/2004 8:00	0	0	57	68	2548	151	59	110	6.7	7.7	8	59408484.8
3/3/2004 12:00	0	0	58	68	2548	152	58	57	6.6	7.7	8	59423010.8
3/3/2004 16:00	0	0	59	67	2739	152	58	57	6.6	7.8	8	59437254.1
3/3/2004 20:00	0	0	59	71	2445	152	59	57	6.6	7.8	8	59451683.4
3/4/2004 0:00	0	0	61	71	2546	151	58	58	6.6	7.7	8	59466255.8
3/4/2004 4:00	0	0	60	72	2548	152	58	57	6.6	7.7	8	59480588.2
3/4/2004 8:00	0	0	59	71	2401	152	58	57	6.6	7.7	8	59495179.9
3/4/2004 12:00	0	0	60	72	2541	151	58	58	6.6	7.7	8	59509498.5
3/4/2004 16:00	0	0	58	72	2546	152	58	58	6.6	7.7	8	59524080.6
3/4/2004 20:00	0	0	59	70	2767	152	58	58	6.6	7.7	8	59538389.5
3/5/2004 0:00	0	0	59	0	2735	152	58	58	6.6	7.7	8	59552816.8
3/5/2004 4:00	0	0	60	73	2599	152	58	57	6.6	7.7	8	59567295.4
3/5/2004 8:00	0	0	58	72	2771	151	58	58	6.6	7.7	8	59581624.4
3/5/2004 12:00	0	0	58	70	2737	151	58	58	6.6	7.7	8	59596200.1
3/5/2004 16:00	0	0	56	70	2719	152	58	58	6.6	7.7	8	59610515.1
3/5/2004 20:00	0	0	58	72	2546	152	58	57	6.6	7.7	7.9	59625081.8
3/6/2004 0:00	0	0	61	72	2394	151	58	57	6.6	7.7	8	59639384.7
3/6/2004 4:00	0	0	58	72	2544	152	58	57	6.6	7.7	7.9	59653956.3
3/6/2004 8:00	0	0	58	72	2339	153	58	59	6.6	7.7	8	59668295.6
3/6/2004 12:00	0	0	60	71	2569	153	58	58	6.6	7.8	8	59682909.1
3/6/2004 16:00	0	0	57	0	2686	153	58	56	6.7	7.8	8	59697404.5
3/6/2004 20:00	0	0	57	72	2686	152	58	57	6.6	7.7	8	59711825.1
3/7/2004 0:00	0	0	58	73	2689	151	58	57	6.6	7.7	8	59726398.4
3/7/2004 4:00	0	0	58	0	2771	150	58	57	6.6	7.7	8	59740805.6
3/7/2004 8:00	0	0	59	72	2541	150	58	56	6.6	7.7	8	59755297.1
3/7/2004 12:00	0	0	60	70	2599	151	58	57	6.6	7.7	8	59769873.6
3/7/2004 16:00	0	0	57	68	2739	151	58	58	6.6	7.7	8	59784150.3
3/7/2004 20:00	0	0	60	72	2544	151	58	58	6.6	7.7	8	59798726.4
3/8/2004 0:00	0	0	58	74	2693	151	58	57	6.6	7.7	8	59813300.3
3/8/2004 4:00	0	0	61	0	2771	150	58	57	6.6	7.7	8	59827637.7
3/8/2004 8:00	0	0	60	70	2610	150	59	57	6.6	7.7	8	59842166.5
3/8/2004 12:00	0	0	61	6	2541	150	57	56	6.6	7.7	8	59856789.1
3/8/2004 16:00	0	0	57	71	2859	150	58	56	6.6	7.7	8	59865275.6
3/8/2004 20:00	0	0	58	0	2689	150	56	56	6.6	7.8	8	59879751
3/9/2004 0:00	0	0	58	8	2581	150	58	57	6.6	7.8	8	59894245.6
3/9/2004 4:00	0	0	59	73	2778	150	58	57	6.6	7.8	8	59908642.8
3/9/2004 8:00	0	0	56	71	2544	150	58	56	6.6	7.7	8	59923016.9
3/9/2004 12:00	0	0	60	72	2748	151	57	57	6.7	7.7	8.1	59934666
3/9/2004 16:00	0	0	61	71	2691	151	58	57	6.7	7.8	8.2	59949189.5
3/9/2004 20:00	0	0	58	72	2599	151	58	57	6.9	7.8	8.4	59963597.2
3/10/2004 0:00	0	0	60	71	2896	151	58	57	6.9	7.8	8.4	59978245.2
3/10/2004 4:00	0	0	59	71	2608	151	58	57	6.8	7.8	8.3	59992624.2
3/10/2004 8:00	0	0	61	61	2599	151	58	115	6.7	7.8	8.1	60007274
3/10/2004 12:00	0	0	58	75	2771	151	58	114	6.6	7.8	8	60021693
3/10/2004 16:00	0	0	59	6	2689	151	58	56	6.6	7.8	8	60036341.9
3/10/2004 20:00	0	0	59	72	2599	151	58	56	6.6	7.8	8	60050787.9
3/11/2004 0:00	0	0	59	0	2599	150	57	57	6.6	7.8	8	60065338.9
3/11/2004 4:00	0	0	56	72	2737	150	58	56	6.6	7.8	8	60079871.8
3/11/2004 8:00	0	0	59	73	2689	150	58	56	6.6	7.7	8	60094279.7
3/11/2004 12:00	0	0	58	71	2544	151	58	56	6.6	7.8	8	60109004.2
3/11/2004 16:00	0	0	61	71	2744	152	58	57	6.6	7.8	8	60123433
3/11/2004 20:00	0	0	60	71	2691	151	59	57	6.6	7.8	8	60138128.1
3/12/2004 0:00	0	0	59	71	2546	151	58	57	6.6	7.8	8	60152542.3

3/12/2004 4:00	0	0	59	0	2689	151	58	56	6.6	7.8	8	60166992.5
3/12/2004 8:00	0	0	57	71	2599	151	57	56	6.6	7.8	8	60181637
3/12/2004 12:00	0	0	59	71	2597	150	58	56	6.6	7.8	8	60196083.8
3/12/2004 16:00	0	0	59	7	2689	150	58	56	6.6	7.8	8	60210750.1
3/12/2004 20:00	0	0	60	72	2861	150	58	56	6.6	7.8	8	60225221.8
3/13/2004 0:00	0	0	58	70	2769	150	58	56	6.6	7.8	8	60239643.6
3/13/2004 4:00	0	0	61	75	2859	149	58	56	6.6	7.7	8	60254348.7
3/13/2004 8:00	0	0	59	70	2903	149	58	56	6.6	7.7	8	60268771.8
3/13/2004 12:00	0	0	61	74	2689	150	58	56	6.6	7.8	8	60283177.9
3/13/2004 16:00	0	0	61	0	2861	150	58	56	6.6	7.8	8	60297792.1
3/13/2004 20:00	0	0	58	71	2735	150	58	57	6.6	7.7	8	60312295.3
3/14/2004 0:00	0	0	59	75	2689	149	58	56	6.6	7.7	8	60326736.6
3/14/2004 4:00	0	0	59	72	2907	149	57	55	6.6	7.7	8	60341182.2
3/14/2004 8:00	0	0	57	71	2719	149	57	56	6.6	7.7	8	60355890.6
3/14/2004 12:00	0	0	59	72	2689	150	58	56	6.6	7.8	8	60370347.5
3/14/2004 16:00	0	0	60	0	2907	150	58	57	6.6	7.8	8	60384962.1
3/14/2004 20:00	0	0	59	71	2691	151	57	57	6.6	7.8	8	60399516
3/15/2004 0:00	0	0	57	71	2861	151	58	57	6.6	7.8	8	60413990.4
3/15/2004 4:00	0	0	58	0	2781	151	57	57	6.6	7.7	8	60428613.8
3/15/2004 8:00	0	0	59	72	2771	151	58	57	6.6	7.7	8	60443111.2
3/15/2004 12:00	0	0	60	72	2599	151	58	57	6.6	7.8	8	60457554
3/15/2004 16:00	0	0	60	8	2548	152	59	58	6.7	7.8	8	60472236.9
3/15/2004 20:00	0	0	61	71	2689	151	58	58	6.7	7.8	8	60486691.3
3/16/2004 0:00	0	0	59	76	2689	151	58	57	6.6	7.8	8	60501134.3
3/16/2004 4:00	0	0	58	73	2928	150	58	56	6.6	7.8	8	60515872.4
3/16/2004 8:00	0	0	58	73	2544	150	58	56	6.6	7.7	8	60530341.8
3/16/2004 12:00	0	0	59	3	2771	150	58	57	6.6	7.8	8	60544882.8
3/16/2004 16:00	0	0	60	71	2546	150	59	57	6.6	7.7	8	60559473.3
3/16/2004 20:00	0	0	61	0	2730	150	59	56	6.6	7.8	8	60573990.6
3/17/2004 0:00	0	0	62	72	2599	150	59	56	6.6	7.7	8	60588580.4
3/17/2004 4:00	0	0	59	6	2771	150	58	56	6.6	7.7	8	60603275.1
3/17/2004 8:00	0	0	59	73	2861	150	58	56	6.6	7.7	8	60617785.2
3/17/2004 12:00	0	0	59	73	2721	150	58	56	6.6	7.7	8	60632507.5
3/17/2004 16:00	0	0	58	76	2861	150	58	56	6.6	7.7	8	60646979.8
3/17/2004 20:00	0	0	60	72	2907	150	58	56	6.6	7.7	8	60661695.7
3/18/2004 0:00	0	0	59	73	2907	150	57	56	6.6	7.7	8	60676177.7
3/18/2004 4:00	0	0	58	0	2689	150	58	56	6.6	7.7	8	60690695.2
3/18/2004 8:00	0	0	58	71	2689	150	58	56	6.6	7.7	8	60705391.2
3/18/2004 12:00	0	0	59	6	2599	150	58	56	6.6	7.7	8	60719882
3/18/2004 16:00	0	0	57	70	2774	150	58	56	6.6	7.8	8	60734670.3
3/18/2004 20:00	0	0	59	73	2737	150	58	56	6.6	7.7	8	60749140.2
3/19/2004 0:00	0	0	57	76	2689	150	58	56	6.6	7.8	8	60763896.9
3/19/2004 4:00	0	0	59	75	2907	150	58	56	6.6	7.7	8	60778360.3
3/19/2004 8:00	0	0	57	0	2737	150	58	57	6.6	7.7	8	60792964.4
3/19/2004 12:00	0	0	57	73	2438	150	58	57	6.6	7.7	8	60807566.6
3/19/2004 16:00	0	0	57	0	2638	151	58	57	6.6	7.7	8	60822108.1
3/19/2004 20:00	0	0	58	73	2905	150	58	57	6.6	7.7	8	60836749.6
3/20/2004 0:00	0	0	57	71	2905	149	58	56	6.6	7.7	8	60851193
3/20/2004 4:00	0	0	58	0	2928	149	58	56	6.6	7.7	7.9	60865851.8
3/20/2004 8:00	0	0	59	71	2905	150	58	56	6.6	7.7	7.9	60880402.6
3/20/2004 12:00	0	0	58	74	2760	150	59	57	6.6	7.8	8	60894881.2
3/20/2004 16:00	0	0	60	74	2863	151	58	57	6.6	7.8	8	60909616.5
3/20/2004 20:00	0	0	57	73	2599	151	58	57	6.6	7.8	8	60924052.2
3/21/2004 0:00	0	0	58	71	2739	151	58	57	6.6	7.8	8	60938799.7
3/21/2004 4:00	0	0	58	72	2599	151	58	57	6.6	7.7	8	60953318.3
3/21/2004 8:00	0	0	57	73	2544	152	58	57	6.6	7.7	8	60968079.2
3/21/2004 12:00	0	0	58	71	2546	151	58	57	6.6	7.8	8	60982537.5
3/21/2004 16:00	0	0	60	72	2769	151	58	57	6.6	7.8	8	60997275.2
3/21/2004 20:00	0	0	58	75	2737	150	58	57	6.6	7.8	8	61011734.7
3/22/2004 0:00	0	0	57	0	2769	149	58	56	6.6	7.7	8	61026249.5
3/22/2004 4:00	0	0	56	71	2898	149	58	56	6.6	7.7	8	61040966.8
3/22/2004 8:00	0	0	59	74	2859	149	58	56	6.6	7.7	8	61055454.5
3/22/2004 12:00	0	0	58	75	2905	149	58	56	6.6	7.7	8	61070209.6
3/22/2004 16:00	0	0	58	73	2737	149	58	57	6.6	7.7	8	61084664
3/22/2004 20:00	0	0	58	71	2939	149	59	55	6.6	7.7	8	61099136.8
3/23/2004 0:00	0	0	57	75	2762	149	58	55	6.6	7.7	8	61113911.1
3/23/2004 4:00	0	0	59	72	2857	149	58	55	6.6	7.7	8	61128403.1
3/23/2004 8:00	0	0	60	76	2771	149	58	56	6.6	7.7	7.9	61142869.3
3/23/2004 12:00	0	0	58	0	2771	150	58	56	6.6	7.8	8	61157477.5

3/23/2004 16:00	0	0	59	74	2739	151	58	57	6.7	7.8	8	61171968.8
3/23/2004 20:00	0	0	57	72	2863	150	59	56	6.7	7.8	8	61186260.5
3/24/2004 0:00	0	0	58	76	2689	150	58	56	6.7	7.8	8	61200566.7
3/24/2004 4:00	0	0	57	71	2907	150	58	56	6.7	7.7	8	61215331.5
3/24/2004 8:00	0	0	56	72	2599	151	59	57	6.7	7.7	8	61229813.1
3/24/2004 12:00	0	0	60	73	2907	152	58	57	6.7	7.8	8	61244292.1
3/24/2004 16:00	0	0	58	73	2689	151	59	57	6.7	7.8	8.1	61259056
3/24/2004 20:00	0	0	60	74	2771	151	58	57	6.7	7.8	8.1	61273505.5
3/25/2004 0:00	0	0	61	72	2689	151	58	56	6.7	7.8	8	61288000.1
3/25/2004 4:00	0	0	60	2	2742	151	58	57	6.7	7.8	8	61302695.8
3/25/2004 8:00	0	0	59	73	2866	152	58	57	6.7	7.8	8	61317262.1
3/25/2004 12:00	0	0	0	0	18	151	59	59	6.6	7.7	8	61318886
3/25/2004 16:00	0	0	48	75	2852	150	57	61	6.6	7.7	7.9	61319220.3
3/25/2004 20:00	0	0	56	71	2771	152	58	57	6.7	7.8	8	61333069.1
3/26/2004 0:00	0	0	57	71	2689	152	58	57	6.7	7.8	8	61347493.4
3/26/2004 4:00	0	0	58	75	2866	152	58	57	6.7	7.8	8	61361653.4
3/26/2004 8:00	0	0	59	72	2544	152	58	57	6.7	7.8	8	61376092.6
3/26/2004 12:00	0	0	59	0	2744	153	59	58	6.7	7.8	8.1	61390316.5
3/26/2004 16:00	0	0	57	71	2868	153	59	58	6.7	7.8	8.1	61404648.7
3/26/2004 20:00	0	0	57	74	2742	153	59	58	6.7	7.8	8.1	61419093.3
3/27/2004 0:00	0	0	59	71	2599	153	58	58	6.7	7.8	8.1	61433249.1
3/27/2004 4:00	0	0	58	73	2601	153	59	58	6.7	7.8	8.1	61447657.9
3/27/2004 8:00	0	0	58	1	2601	153	58	58	6.7	7.8	8	61461992.1
3/27/2004 12:00	0	0	56	72	2447	155	59	59	6.7	7.8	8	61476202.8
3/27/2004 16:00	0	0	56	72	2601	154	59	59	6.7	7.8	8.1	61490602.4
3/27/2004 20:00	0	0	59	4	2912	153	59	58	6.7	7.8	8.1	61504968.1
3/28/2004 0:00	0	0	57	72	2689	152	58	57	6.7	7.8	8	61519147.3
3/28/2004 4:00	0	0	57	76	2551	152	58	57	6.7	7.8	8	61533552.9
3/28/2004 8:00	0	0	57	0	2868	152	58	57	6.7	7.8	8	61547740
3/28/2004 12:00	0	0	58	72	2691	152	58	57	6.7	7.8	8	61562126.5
3/28/2004 16:00	0	0	56	75	2587	152	58	57	6.7	7.8	8.1	61576526
3/28/2004 20:00	0	0	56	75	2781	152	58	56	6.7	7.8	8	61590638.6
3/29/2004 0:00	0	0	57	74	2774	151	58	57	6.7	7.8	8	61605060.6
3/29/2004 4:00	0	0	57	0	2748	150	58	56	6.6	7.8	8	61619387.6
3/29/2004 8:00	0	0	60	73	2771	151	59	56	6.6	7.8	8	61633663.8
3/29/2004 12:00	0	0	58	75	2689	151	58	56	6.7	7.8	8	61648071.6
3/29/2004 16:00	0	0	59	76	2691	151	58	57	6.7	7.8	8	61662209.7
3/29/2004 20:00	0	0	58	71	2866	151	58	56	6.7	7.8	8	61676677.3
3/30/2004 0:00	0	0	59	76	2771	151	58	56	6.6	7.8	8	61691124.7
3/30/2004 4:00	0	0	56	72	2689	150	58	56	6.6	7.8	8	61705268
3/30/2004 8:00	0	0	57	74	2771	150	58	56	6.6	7.7	8	61719634.7
3/30/2004 12:00	0	0	56	0	2546	151	59	56	6.6	7.8	8	61733717.2
3/30/2004 16:00	0	0	58	73	2698	151	58	57	6.7	7.8	8	61747977.9
3/30/2004 20:00	0	0	60	72	2742	151	58	57	6.7	7.8	8	61762318.7
3/31/2004 0:00	0	0	57	71	2742	151	59	57	6.7	7.8	8	61776415.1
3/31/2004 4:00	0	0	59	76	2689	151	58	57	6.7	7.8	8	61790825.4
3/31/2004 8:00	0	0	59	8	2870	152	58	57	6.7	7.8	8	61805195.7
3/31/2004 12:00	0	0	58	75	2742	152	58	57	6.7	7.8	8	61819380.9
3/31/2004 16:00	0	0	57	75	2742	152	58	58	6.7	7.8	8	61833832.9
3/31/2004 20:00	0	0	56	75	2548	152	58	57	6.7	7.8	8	61847996.6

Appendix D

Sampling Trip Reports

SAMPLING TRIP REPORT

Site Name: STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
CERCLIS ID Number: NYD047650197
Sampling Dates: March 10, 2004
CLP Case Number: N/A
Site Location: 110 Cutter Mill Road, Great Neck, New York, 11021
Sample Descriptions: Groundwater Treatment System Influent / Effluent.

Laboratories Receiving Samples (Table 1):

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

Sample Dispatch Data (Table 2):

On March 10, 2004, three (3)groundwater samples, including extra volume for Matrix Spike / Matrix Spike Duplicate (MS/MSD) analysis and one trip blank were shipped to the U.S. Environmental Protection Agency Region II Lab (USEPA) for TCL-VOAs analysis.

FedEx Airbill No.	Number of Coolers	Number and Type of Samples	Time and Date of Shipping
842135658659	1	3 Aqueous Samples, 1 MS/MSD and 1 Trip Blank for a total of 5 samples for TCL-VOAs.	3/10/04 @ 1500 TO: USEPA

Sampling Personnel (Table 3):

Name	Organization	Site Duties
Tom Williams	Earth Tech, Inc.	Task Manager
John Huisman	Earth Tech, Inc.	Health & Safety/Sampler

Sample Numbers and Collection Points (Table 4):

Laboratory	Analyses	Sample Type	Sample #	Sample Collection Point(SCP)
USEPA	TCL-VOAs	Aqueous Groundwater	B17Z6	SC-01
			B17Z7	SC-04 (MS/MSD)
			B17Z8	SC-64 (Dupl SP-01)
			B17Z9	SC-TB (Trip Blank)

Additional Comments:

All groundwater samples were collected after a five gallon purge from the sample ports located within the treatment system. Volumes were collected from the influent (SC-01) and effluent (SC-04) of the treatment system for the following analysis: Target Compound List (TCL) Volatile Organic Compounds.

Extra volumes for MS/MSD analysis were collected from SC-04, the effluent sample location. SC-64 is a duplicate sample of influent sample SC-01.

Earth Tech personnel also collected real time water quality parameters from the raw water (influent) and treated water (effluent) using a Horiba U-22 water quality meter.

APPENDIX A

CHAIN OF CUSTODY FORMS

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

Case No: N/A
DAS No:
SDG No:

L

Date Shipped:	3/10/2004
Carrier Name:	FedEx
Airbill:	842135658659
Shipped to:	USEPA REGION II Building 209 MS230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6886

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 John Heuisman	3/10/04	Fedex	
2			
3			
4			

Sampler Signature:

For Lab Use Only

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

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
B17Z6	Ground Water	L/G	VOA (21)	1 (HCL), 2 (HCL), 3 (HCL) (3)	SC-01	S: 3/10/2004	13:00		
B17Z7	Ground Water	L/G	VOA (21)	10 (HCL), 11 (HCL), 12 (HCL), 4 (HCL), 5 (HCL), 6 (HCL), 7 (HCL), 8 (HCL), 9 (HCL) (9)	SC-04	S: 3/10/2004	12:30		
B17Z8	Ground Water	L/G	VOA (21)	13 (HCL), 14 (HCL), 15 (HCL) (3)	SC-64	S: 3/10/2004	13:00		
B17Z9	Field QC	L/G	VOA (21)	16 (HCL), 17 (HCL), 18 (HCL) (3)	SC-TB	S: 3/10/2004			

Extra Volume Collected at SC-04 for MS/MSD

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: B17Z7	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? ___ Shipment Iced? ___
VOA = CLP TCL Volatiles				

TR Number: 2-462971652-031004-0001

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

LABORATORY COPY

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

Case No: N/A
DAS No:

R

Region:	2	**Date Shipped:**	3/10/2004	**Chain of Custody Record**	**Sampler Signature:**
Project Code:		**Carrier Name:**	FedEx	**Relinquished By (Date / Time)**	**Received By (Date / Time)**
Account Code:		**Airbill:**	842135658659	1 John Heuisman 3/10/04	Fedex
CERCLIS ID:	NYD047650197	**Shipped to:**	USEPA REGION II Building 209 MS230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6886	2	
Spill ID:	02LH			3	
Site Name/State:	Stanton Cleaners Site/NY			4	
Project Leader:	TOM WILLIAMS				
Action:	Operations and Maintenance				
Sampling Co:	Earth Tech				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
B17Z6	Ground Water	L/G	VOA (21)	1 (HCL), 2 (HCL), 3 (HCL) (3)	SC-01	S: 3/10/2004 13:00		--
B17Z7	Ground Water	L/G	VOA (21)	10 (HCL), 11 (HCL), 12 (HCL), 4 (HCL), 5 (HCL), 6 (HCL), 7 (HCL), 8 (HCL), 9 (HCL) (9)	SC-04	S: 3/10/2004 12:30		MS/MSD
B17Z8	Ground Water	L/G	VOA (21)	13 (HCL), 14 (HCL), 15 (HCL) (3)	SC-64	S: 3/10/2004 13:00		Field Duplicate
B17Z9	Field QC	L/G	VOA (21)	16 (HCL), 17 (HCL), 18 (HCL) (3)	SC-TB	S: 3/10/2004		Trip Blank

Extra Volume Collected at SC-04 for MS/MSD

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
	B17Z7		
Analysis Key: VOA = CLP TCL Volatiles	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?** _____

TR Number: 2-462971652-031004-0001

REGION COPY

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

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

APPENDIX B

FEDEX AIRBILLS

FedEx Express USA Airbill

FedEx Tracking Number 842135658659

1 From *Please print and press hard.*

Date 5/10/04 Sender's FedEx Account Number 2374-4259-8

Sender's Name John Huisman Phone (516) 466-4960

Company Earth Tech, Inc.

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

City Great Neck State NY ZIP 11021

2 Your Internal Billing Reference First 24 characters will appear on invoice. 5442001 OPTIONAL

3 To

Recipient's Name Sample Receiving Phone ( )

Company USEPA Region 2

Address Building 209 MS 230 Dept/Floor/Suite/Room

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address 2890 Woodbridge Avenue

City Edison State NJ ZIP 08837

Try online shipping at fedex.com

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

Questions? Visit our Web site at fedex.com
or call 1.800.Go.FedEx® 800.463.3339.

Sender's Copy

4a Express Package Service *Packages up to 150 lbs.* Delivery commitment may be later in some areas.

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

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

4b Express Freight Service *Packages over 150 lbs.* Delivery commitment may be later in some areas.

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

* Call for Confirmation: * Declared value limit $500

5 Packaging

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

6 Special Handling Include FedEx address in Section 3.

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

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

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

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

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

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

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

Total Packages	Total Weight	Total Declared Value†	
1		$ .00	FedEx Use Only

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

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

446

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RETAIN THIS COPY FOR YOUR RECORDS.

APPENDIX C

WATER QUALITY DATA

STANTON CLEANERS SITE LTRA

Groundwater Pump and Treatment System
Water Quality Parameters Log

Date: 3/10/04
Project # 70536

	pH	COND.	TURB.	DO	TEMP.	SALINITY
Combined Influent	7.00	0.659	0.0	6.3	58.12	0
Discharge	7.25	0.643	0.0	8.7	58.53	0

Total Gallons pumped: 60,039,740 gallons
Flow rate: 71 gpm

Equipment Calibrated by: John Huisman
Water samples collected by: John Huisman
Water monitoring performed by: John Huisman

Comments:
SC-01 : Influent Sample Collected
SC-04 : Effluent Sample Collected & (MS/MSD)
SC-64 : Duplicate Sample of SC-01

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

Appendix F

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

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

Date: 3/ 10 / 2004
Project # 70536

	MultiRAE Plus PGM-50					VelociCalc Plus				
	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
Influent SVE	5.0	0	20.90%	0%	0	99.9	NA	52.00%	-4.67	200
Post Air Stripper	0.0	0	21.00%	0%	0	52.0	NA	40.30%	-6.55	2000
Discharchge	0.2	0	21.00%	0%	0	40.5	NA	41.30%	-6.99	2300
Background	0.0	0	20.90%	0%	0	42.0	NA	60.20%	-8.03	NA

Total gallons pumped: 60,039,740 gallons
Flow Rate: 71 gpm

Equipment calibrated by: J. Huisman
Air sample collected by: J. Huisman
Air sample readings performed by: J. Huisman

Comments:
Monthly system sampling performed.

VOC: Volatile Organic Compounds
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
temperature: measured in degrees Farenheit
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 Farenheit

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

Date: 3/ 25 / 2004
Project # 70536

	MultiRAE Plus PGM-50					VelociCalc Plus				
	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
Influent SVE	5.1	0	21.00%	0%	0	105.2	NA	60.00%	-2.00	199
Post Air Stripper	0.0	0	21.00%	0%	0	56.4	NA	59.50%	-2.76	2015
Discharchge	0.2	0	21.00%	0%	0	43.2	NA	58.60%	-3.00	2400
Background	0.0	0	20.90%	0%	0	52.5	NA	75.00%	-4.00	NA

Total gallons pumped: 61,318,886 gallons
Flow Rate: 70 gpm

Equipment calibrated by: J. Huisman
Air sample collected by: J. Huisman
Air sample readings performed by: J. Huisman

Comments:
Weekly O&M Performed.

VOC: Volatile Organic Compounds
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
temperature: measured in degrees Farenheit
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 Farenheit

Appendix G

Quarterly Groundwater Sampling Analytical Data

Not applicable for this month.

Appendix H

Historical Groundwater Level Monitoring Results (Ongoing)

EARTH TECH

A Tyco Infrastructure Services Company

WATER LEVEL DATA SUMMARY

PROJECT:	Stanton Cleaners	JOB NUMBER:	70536
LOCATION:	Great Neck, NY	DATE:	3/29/2004
CLIENT:	USACE / USEPA	MEASURED BY:	John Huisman
SURVEY DATUM:	ft msl		
MEASURING DEVICE:	Solinst Water Level Indicator S/N# 34407		

WELL NUMBER	MEASURING POINT		DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)			
EPA-MW-11D	ft BTOC	74.63	60.00	14.63	missing 1 bolt
EPA-MW-21	ft BTOC	84.13	66.99	17.14	missing 1 bolt
EPA-MW-22	ft BTOC	82.20	61.90	20.30	
EPA-MW-23	ft BTOC	82.83	65.10	17.73	
EPA-MW-27	ft BTOC	69.32	52.08	17.24	no bolts
ST-MW-02	ft BTOC	82.03	63.99	18.04	
ST-MW-06	ft BTOC	69.83	45.60	24.23	
ST-MW-09	ft BTOC	78.13	62.80	15.33	
ST-MW-11	ft BTOC	75.25	60.00	15.25	no bolts
ST-MW-12	ft BTOC	87.20	72.22	14.98	missing 1 bolt
ST-MW-14	ft BTOC	69.73	56.99	12.74	no bolts
ST-MW-16	ft BTOC	75.78	54.68	21.10	no bolts
ST-MW-17	ft BTOC	86.53	70.25	16.28	no bolts
ST-MW-19	ft BTOC	82.50	66.00	16.50	no bolts
ST-MW-20	ft BTOC	84.53	71.45	13.08	no bolts

Notes:

WAGNN Well #9 was pumping at 1,000 GPM during water level measurements on 3/29/04

Treatment System:
Total Gallons Pumped: 61,648,071
Pumping Rate: 58 GPM

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

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

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

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

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

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

Well ID	Top of PVC Elevation (ft msl)	3/29/2004	
		DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	60.00	14.63
EPA-MW-21	84.13	66.99	17.14
EPA-MW-22	82.20	61.90	20.30
EPA-MW-23	82.83	65.10	17.73
EPA-MW-27	69.32	52.08	17.24
ST-MW-02	82.03	63.99	18.04
ST-MW-06	69.83	45.60	24.23
ST-MW-09	78.13	62.80	15.33
ST-MW-11	75.25	60.00	15.25
ST-MW-12	87.20	72.22	14.98
ST-MW-14	69.73	56.99	12.74
ST-MW-16	75.78	54.68	21.10
ST-MW-17	86.53	70.25	16.28
ST-MW-19	82.50	66.00	16.50
ST-MW-20	84.53	71.45	13.08

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Appendix I

Indoor Air Quality Analytical Data

Not applicable for this month.

Appendix J

Action List Dated March 2004

EARTH TECH

A Tyco Infrastructure Services Company

March 2004 ACTION LIST SUMMARY

PROJECT:	Stanton Cleaners	JOB NUMBER:	70536
LOCATION:	Great Neck, NY	DATE:	March-04
CLIENT:	USACE / USEPA		

COMPLETED ITEMS	DATE PERFORMED
Item #1 - The sump and in the upstairs sink has been repaired. The sink is now functioning.	3/2/2004
Item #2 - Water proof Aluminum backed tape has been used to seal all joints on SVE and Air Stripper piping	3/2 & 3/9/04
Item #3 - The SVE Blower Belts replaced.	3/4/2004
Item #4 - The PLC Touch Screen was replaced with a new flat screen monitor.	3/8/2004
Item #6 - Repair leaking water influent line.	3/8/2004
Item #7 - Mercury Vapor Lamp in Treatment Room Replaced with new bulb and fixture.	3/9/2004
Item #8 - New Air flow meters have been installed in the Air Stripper and SVE systems.	3/25/2004

OUTSTANDING ITEMS /	RECOMMENDED SOLUTION
Item A - The air flow meter on the SVE influent line needs to be calibrated.	
Item B - New bolts, well caps, and locks need to be ordered to repair existing monitoring wells.	