Maestri Site
ONONDAGA COUNTY, NEW YORK

Site Management Plan

NYSDEC Site Number: 7-34-025

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Revisions to Final Approved Site Management Plan

Revision No.	Submitted Date	Summary of Revision(s)	NYSDEC Approval Date
1	May 17, 2011	Replaced "Property Owner" references with "SMC"	May 18, 2011

AUGUST 2010

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1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the remedial program at the Maestri Site (hereinafter referred to as the "Site") under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with Order on Consent Index # A7-0226-90-03, Site # 7-34-025, which was executed on December 16, 1992, attached in Appendix L.

1.1.1 General

Stauffer Management Company, LLC (SMC) entered into an Order on Consent with NYSDEC to remediate the approximately 4.4-acre property located in Onondaga County, Town of Geddes, New York. This Order on Consent required SMC to investigate and remediate contaminated media at the Site. A map showing the Site location is provided in Figure 1. At this time, the only portion of the Site that is still being actively monitored is 2.5 acres and completely fenced, as shown in Appendix B. The boundaries of the Site are more fully described in the metes and bounds Site description attached as Appendix A to this plan. A proposal to modify the Site boundaries will be made by SMC to be consistent with the Declaration of Covenants and Restrictions, and for the benefit of NYSDEC, shall be recorded with the Onondaga County Clerk and require compliance with this SMP and all Engineering Controls (ECs) and Institutional Controls (ICs) placed on the Site.

After completion of the remedial work described in the March 1995 Record of Decision (ROD), attached as Appendix D, some contamination was left in the subsurface at this Site, which is hereafter referred to as 'remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the Site in perpetuity or until extinguishment of the Declaration of Covenants and Restrictions in accordance with ECL Article 71, Title 36. Remedial action work on the Site began in June 1996, and was completed in May 2008. All reports associated with the Site can be viewed by contacting NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by Envirospec Engineering, PLLC (Envirospec), on behalf of SMC, in accordance with the requirements in NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation, dated December 2002, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that will be required by the Declaration of Covenants and Restrictions for the Site.

1.1.2 Purpose

The Site contains remaining contamination after completion of the remedial action. Engineering Controls have been incorporated into the Site remedy to provide proper management of remaining contamination in the future to ensure protection of public health and the environment. The NYSDEC has prepared a Declaration of Covenants and Restrictions that will be recorded with the Onondaga County Clerk, that provides an enforceable legal instrument to ensure compliance with this SMP and all ECs and ICs placed on the Site. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Declaration of Covenants and Restrictions for contamination that remains at the Site. This plan has been approved by NYSDEC, and compliance with this plan is required by SMC and SMC's successors and assigns. This SMP may only be revised with the approval of NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site by SMC after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) operation and maintenance of all treatment, collection, containment, or recovery systems; and (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports.

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs, which includes a reporting plan for the submittal of data, information, recommendations, and certifications to NYSDEC; (2) a Monitoring Plan for implementation of Site Monitoring; and (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual for complex systems).

It is important to note that:

- This SMP details the Site-specific implementation procedures that will be required by the Declaration of Covenants and Restrictions. Failure to properly implement the SMP is a violation of Environmental Conservation Law and the Declaration of Covenants and Restrictions which is grounds for the revocation of the Release and Covenant not to sue;
- Failure to comply with this SMP is also a violation of 6 NYCRR Part 375 and the Order on Consent (Index # A7-02226-90-03 Site # 734025) for the Site, and thereby subject to applicable penalties.

The SMP and all Site documents related to Remedial Investigation and Remedial Action are maintained at the NYSDEC office in Albany, New York. Revisions to this plan will be proposed in writing to NYSDEC's project manager. In accordance with the Declaration of Covenants and Restrictions for the Site, NYSDEC will provide a notice of any approved changes to the SMP and append these notices to the SMP that is retained in its files.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The Site is located in the Town of Geddes of Onondaga County, New York and is identified as Block 13 and Lot 36.1 on the Town of Geddes Tax Map (Appendix A). The Site is located at 900 State Fair Boulevard, Geddes, NY. The Site is an approximately 2.5-acre area bounded by residential property to the north, an empty lot (904 State Fair Boulevard) and State Fair Boulevard to the south, residential property and wooded vacant lots to the east, and residential property and wooded vacant lots to the west (see Appendix B). The boundaries of the Site are more fully described in Appendix A – Metes and Bounds.

Currently, the Site is owned by is Mr. Mark Maestri. SMC is acting as Site operator and the Potentially Responsible Party (PRP) for remedial and site management activities.

1.2.2 Site History

In the 1970's, drums containing industrial waste material allegedly generated by Stauffer Chemical Company were buried at the Maestri Site. Solvent Savers, a waste disposal contractor, allegedly used the Site as a drum disposal area in the 1970s. In

January 1987, the Site owner at the time, Mr. Bert Maestri, reportedly excavated soil and drums from an area of the Site shown on Drawing #001 in Appendix C. After discovery of the disposal area in 1987, Malcolm Pirnie, Inc. conducted a limited Site investigation on behalf of the Onondaga County Department of Health (OCDOH) to evaluate the environmental effects of the Site. Several OCDOH groundwater monitoring wells were constructed adjacent to the Maestri property. In 1987 NYSDEC listed the Site on the New York State Registry of Inactive Hazardous Waste Disposal Sites as Site #734025. In 1988 NYSDEC and SMC executed an Order on Consent (#A7-0139-88-01) for development and implementation of Site Interim Remedial Measures (IRM).

In June 1989, a Site investigation began which included monitoring well installation, soil boring completion, air monitoring and sampling of subsurface soil and groundwater. A magnetic survey was also conducted to identify buried drums. In December 1990 the first drum excavation and disposal (approximately 100 drums) was completed (Drawing #001 in Appendix C).

In May 1992, to address contaminated groundwater, an initial groundwater monitoring, recovery and treatment system was installed on-site. In September 1992 SMC submitted a final report to NYSDEC summarizing the findings of the field investigations and development of the Site IRMs (Maestri Site Investigation and Development of Interim Remedial Measures. Final Report. O'Brien and Gere, September 1992).

In December 1992, NYSDEC and SMC executed a second Order on Consent (#A7-0226-90-03) for performance of a Focused Remedial Investigation/Feasibility Study (RI/FS). In 1992-1993 SMC conducted a focused Remedial Investigation/Feasibility Study (RI/FS) to further determine the nature and extent of soil and groundwater contamination, and to select a remedy for the Site. The following reports were developed for the RI/FS:

- Health and Safety Plan for RI/FS: Maestri Site. O'Brien and Gere, November 1992.
- Quality Assurance and Quality Control Plan for Remedial Investigation Feasibility Study: Maestri Site. O'Brien and Gere, revised November 1992.
- Interim Remedial Measure Work Plan Anomaly Excavation and Removal. Maestri Site; O'Brien and Gere, October 1993.

- Health and Safety Plan Anomaly Excavation and Removal: Maestri Site; O'Brien and Gere. November 1993.
- Anomaly Excavation and Removal Final Report: Maestri Site; O'Brien and Gere, November 1994.
- Focused Remedial Investigation Report: Maestri Site; O'Brien and Gere, February 1994.
- Fish and Wildlife Impact Analysis: Maestri Site; O'Brien and Gere, July 1994.
- Groundwater Recovery System Performance Test: Maestri Site; O'Brien and Gere, August - 1994.
- Feasibility Study: Maestri Site; O'Brien and Gere, September - 1994.
- Proposed Remedial Action Plan: Maestri Site; NYSDEC, December - 1994.

Upon completion of the RI/FS, a Record of Decision (ROD) to complete soil and groundwater remediation at the Maestri Site was signed in March 1995 (Appendix D).

1.2.3 Geologic Conditions

In 1995, on behalf of SMC, O'Brien and Gere Engineers Inc. conducted a Subsurface Investigation of the Maestri Site. The investigation report indicated that the soils in the area consist of sand and gravel with traces of clay. Native soils extend to an average depth of twenty (20) feet below grade as shown in Table 1 below.

Table 1. Geologic Conditions at Maestri Site.

Depth below grade	Soil condition
0-4 feet	brown, dry, loose fine to medium sand with traces of fine to coarse gravel and plant roots.
4-8 feet	moderate yellowish brown fine very moist medium dense sand, fine to coarse gravel poorly sorted.
8-12 feet	reddish brown, gray moist medium dense, fine to coarse gravel and fine to course sand, with some cobbles and traces of clay.
12-16 feet	fine to coarse gravel and fine to very fine wet to saturated dense sand, little silt and traces of clay.
16-20 feet	light brown very moist, very dense, fine/medium gravel, little fine/coarse sand, little silt, trace clay.
20-22 feet	The bedrock layer was encountered at 20-22 feet below grade and

Depth below grade	Soil condition
	was dark, red, damp hard clay with some embedded very coarse and fine gravel, and olive green dry non-calcareous shale, fissile, weathered Vernon shale.

The depth to groundwater on-site ranges from two (2) to twenty-two (22) feet below grade with an average depth of nine (9) feet below grade. Groundwater flows in a northeasterly direction and discharges into Onondaga Lake located approximately 0.4 miles to the east. A groundwater contour map is included as Drawing #002 in Appendix C.

1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the Site. The results of the RI are described in detail in the following reports:

1) Focused Remedial Investigation Report: Maestri Site: O'Brien and Gere, February 1994.

2) Feasibility Study: Maestri Site. O'Brien and Gere, September 1994.

Generally, the RI determined that the former drum disposal activities at the Site resulted in subsurface soil and groundwater contamination by volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). No significant impact on the ambient and indoor residential air quality or on surface water was identified for the Site.

Below is a summary of Site conditions when the RI was performed in 1992-1993.

1.3.1 Soil

Organic contaminants, predominantly xylene, were detected in subsurface soils down to the water table. Xylene was detected in soil at concentrations up to 7070 parts per million (ppm). Other contaminants detected in on-site soil included toluene, ethylbenzene, tetrachloroethene, 2-methylphenol, 2,4-dimethylphenol and benzoic acid in substantially lower concentrations as listed in Table 2 below. The areas of potentially impacted soil as designated in the Feasibility Study are shown on Drawing #003 included in Appendix C.

Table 2. Summary of Contaminants in Soil – 1992/1993 RI.

Compound	Average Soil Concentration (mg/kg)	Upper Level Soil Concentration (mg/kg)
PCE	28.4	156
Toluene	7.7	45.3
Ethylbenzene	2.2	11.7
Xylene	1360	7070
2-Methylphenol	1	3.7
2,4- Dimethylphenol	2.3	14.7
Benzoic Acid	12.8	71.5

1.3.2 On-Site and Off-Site Groundwater

The findings of the RI indicated the presence of Site related contaminants in the shallow overburden groundwater. The principal organic contaminant detected in the shallow groundwater was xylene in concentrations exceeding 30 parts per million (ppm) in on-site monitoring wells, located immediately down gradient of the former drum disposal areas. Movement of the shallow groundwater is in a northeasterly direction toward Alhan Parkway. There is a steep slope downgradient between the northeast boundary of the Site and Alhan Parkway. There are residences located along the Alhan Parkway; all residences are on public water and there are no current or anticipated future uses of groundwater in the vicinity of the Site. No Site related contaminants were detected in bedrock groundwater. A figure "VOC Groundwater Plume" from the Feasibility Study Report showing the lateral extent of the original VOC groundwater plume is included as Drawing #004 in Appendix C.

1.3.3 On-Site and Off-Site Soil Vapor

In 1989, O'Brien and & Gere Engineers conducted a Site investigation on behalf of SMC, including an initial soil vapor intrusion investigation.

In 1991, an indoor air-monitoring program was completed for selected residences located on Alhan Parkway, downgradient of the Site as required by the New York State Department of Health (NYSDOH). The monitoring program was implemented by O'Brien & Gere Engineers on behalf of SMC. Sufficient data was collected to establish in the ROD that there were no remaining significant impacts to the ambient air or residential indoor air quality resulting from the former drum disposal activities at the Site.

1.3.4 Underground Structures

Approximately 400 drums were excavated and removed during the IRM. In December 1990, approximately 100 drums were excavated and properly disposed. In 1993-1994, during the RI, over 200 buried drums were encountered at the Site. Approximately 100 drums were found in 1997 during implementation of remedial activities. There are currently no known underground structures on the Site.

1.4 SUMMARY OF REMEDIAL ACTIONS

The Site was remediated in accordance with the NYSDEC-approved Interim Remedial Measure Work Plan dated September 1992, the Remedial Action Work Plan dated December 1994 and the ROD dated March 1995. The components of the remedy are detailed below.

Remedial activities focused on subsurface soil and groundwater treatment. A combination of Soil Vapor Extraction (SVE) and biological treatment were chosen as the most effective remedy for Site soil contamination that was protective of human health and the environment. In accordance with the ROD, soil was to be excavated, treated in biopiles and redeposited back on-site. Groundwater was to be recovered and treated through an on-site Waste Water Treatment Plant (WWTP). Remedial Action Objectives (RAOs) for the Site were determined in the ROD as listed in Table 3 below.

Table 3. Site Remedial Action Objectives.

Parameter	Soil Clean-up Objective (mg/kg, dry weight)	(SCO) Groundwater Clean-up level (ug/l)
Volatile Organic Compounds (VOCs)		
Benzene	0.06	5
Ethylbenzene	5.5	5
t-1,2-dichloroethylene	0.3	5
Tetrachloroethylene	1.4	5
Toluene	1.5	5
Xylene	1.2	100
Total VOCs	10	100
Semi-Volatile Compounds (SVOCs)		
Benzoic acid	2.7	5

Parameter	Soil Clean-up Objective (mg/kg, dry weight)	(SCO) Groundwater Clean-up level (ug/l)
2,4-dimethylphenol	None established	None established
2-methylphenol	0.1	50
4-methylphenol	0.9	50
Total SVOCs	500	None established

The following is a summary of the Remedial Actions performed at the Site.

- Excavation of soil/fill quantity exceeding the Soil Cleanup Objectives (SCOs) listed in Table 3. Verification samples were taken from sidewalls and bottom of the excavations to determine the limits of remedial excavation.
- Treatment of excavated soils (approximately 10,000 cubic yards) by SVE/bioremediation techniques in abovegrade biopiles. Treated soils were placed back into excavated areas.
- Construction and maintenance of a soil cover system consisting of three (3) inches of loam and six (6) inches of topsoil.
- Treatment of groundwater exceeding groundwater cleanup levels through operation of a groundwater recovery and treatment system. Groundwater cleanup levels are listed in Table 3.
- Monitoring of the soil cover and groundwater to ensure compliance with clean up objectives.

1.4.1.1 Soil

Fluor Daniel – Groundwater Technologies, Inc. (FD-GTI) oversaw soil remediation activities on behalf of SMC which began in June 1996 with the excavation of soils and the construction of above grade on-site biopiles for treatment of VOCs and SVOCs with an exsitu SVE / bioremediation system. Excavation sidewall and bottom verification sampling was conducted to determine the limits of remedial excavation. The majority of excavation was conducted under an environmental enclosure (sprung structure). The excavated soil was conditioned by SMC (by adding vermiculite, fertilizer, lime and wood chips) prior to biopile construction. The biopile construction continued from July 1996 through the end of March 1997 resulting in a total of five (5) biopiles. A map showing areas where excavation was performed is shown as Drawing #009 in Appendix C. Following construction of the biopiles, a SVE system was operated in each

pile to promote biological degradation of contaminants in the piles. As biopiles showed contaminant concentrations meeting the SCOs established in ROD, NYSDEC approval was obtained to return treated soil to the excavated area. Over 10,000 cubic yards of soil were excavated and treated on-site. By September 1999 the last of the biopile soils (biopile 5) had met the SCOs and were returned to the Site excavation. Approximately three (3) inches of loam and six (6) inches of clean topsoil were placed over the soil re-deposition areas. The Site was re-graded and seeded in October 1999.

The groundwater treatment system was operated from 1992 to 2008 as discussed in Section 1.4.1.2. In April 2007, groundwater monitoring results still showed elevated levels of xylene in well MW-9. To investigate a possible remaining source of soil contamination, in July 2007, two (2) test pits were excavated in the area of MW-9. The locations of the test pits are provided in Drawing #005 in Appendix C. Soil excavated from the test pits was screened with a Photo Ionization Detector (PID) and showed low or non-detectable concentrations of VOCs. Overburden soil that had non-detectable PID screen readings was resused as backfill. Remaining soil excavated from the test pits was disposed of off-site and the test pits were backfilled with a mixture of overburden soil and clean fill, as denoted in the October 24, 2007 letter to NYSDEC attached as Appendix I. To further investigate soil conditions in the area and define the areal extent of possible soil contamination, in November 2007, SMC installed four (4) soil borings outside the area of the test pits. The locations of the soil borings are provided on Drawing #005 in Appendix C. Soil cuttings were placed back in the bore hole. A letter report from May 8, 2008, attached as Appendix K, details the soil boring work. Samples collected from the soil borings were analyzed for xylene. The concentration of xylene in the soil borings ranged from 0.54 to 4.4 ppm (Appendix H). Detailed sample results are provided in Section 1.4.4. Based on the low xylene results and no further evidence of soil contamination, in May 2008 SMC requested no further action for soil. NYSDEC approved the request on May 14, 2008. Groundwater monitoring continued as detailed in Section 1.4.1.2 below.

1.4.1.2 Ground Water

According to the ROD, groundwater was to be recovered and treated through an on-site treatment system. The ROD required continued operation of the groundwater collection and treatment system with an annual evaluation until concentration of Site contaminants could no longer be effectively removed or cleanup objectives were met. A groundwater recovery and treatment system was installed on-site in 1992 and was operational from 1992 until 2008. Originally six (6) groundwater recovery wells were

installed on-site in combination with a network of monitoring wells. The on-site Waste Water Treatment Plant (WWTP) treated water from the recovery wells along with water collected in the soil excavation and leachate accumulated from the biopiles during remedial activities. The water was treated with particulate filtration and carbon adsorption. Treated water was discharged under a State Pollution Discharge Elimination System (SPDES) equivalent permit, attached as Appendix J, to a storm sewer, which discharged to Onondaga Lake. A process flow diagram of the treatment system is provided as Drawing #006 in Appendix C.

The groundwater recovery system continued to operate after the Site was re-graded and seeded in October 1999. Groundwater sampling results demonstrated decreasing trends of Site contaminants in most of the on-site monitoring and recovery wells over the years of system operation. In order to address remaining groundwater contamination and to enhance groundwater remediation, in 2001 potassium permanganate (KMnO4) was injected into five (5) on-site wells (PZ-9, PZ-10, PZ-12, PZ-14 and RW-2). In October 2002 higher levels of groundwater contamination continued to exist in RW-2. In order to further address contamination in this well, Oxygen Release Compound (ORC) was injected in the area around the well. ORC injections were completed in 2002 and 2004. In April 2006, to address the possibility of a soil source of contamination existing in the vicinity of RW-2, the well was overdrilled and backfilled with nutrient-enriched gravel and soil to facilitate bioremediation of remaining organic compounds. A new monitoring well was installed in the same location to replace the recovery well (MW-2A). A split sample collected by NYSDEC in April 2007 showed elevated levels of xylene at 827 ppb. NYSDEC requested SMC investigate a possible source of this contamination, which lead to the test pit and soil boring investigations detailed in Section 4.1.1.1 along with additional groundwater sampling. MW-9 was removed during the test pit work in July 2007 and was reinstalled during the soil boring work in November 2007. A groundwater sample from MW-9 taken in January 2008 showed xylene at 11 ppb. No evidence of a soil source of contamination was found.

In May 2008, SMC requested approval to shutdown the groundwater treatment system as the groundwater treatment system had achieved the Site RAOs listed in the ROD. Levels of contaminants remaining in the groundwater were low and the system was no longer effective as shown by the consistency of the monitoring results. NYSDEC approved SMC's request on May 14, 2008, and the groundwater treatment system was shutdown on May 27, 2008. The system's main components (electricity, pumps, and controllers) were to remain in place until it could be determined that the residual plume

did not migrate as a result of shutting down the system. SMC was required to maintain the system for a minimum of one (1) year, until May 2009, and to monitor the residual groundwater plume quarterly to ensure it did not migrate. In May 2009, since the contaminant plume remained stable, SMC requested approval to dismantle the treatment system and to continue to monitor groundwater semiannually.

1.4.1 Removal of Contaminated Materials from the Site

Buried drums were excavated and properly disposed of off-site. Approximately four hundred (400) drums were excavated and removed from the Site in 1990-1997. In December 1990, the first drum excavation and disposal (approximately 100 drums) was completed. Additional drums were excavated and disposed of off-site in 1993-1994 (approximately 200 drums) and in 1997 (approximately 100 drums). Removal of contaminants from soil and groundwater is discussed above in Sections 1.4.1.1 and 1.4.1.2. A list of the soil cleanup objectives (SCOs) for this project is shown in Table 3. A map showing areas where excavation was performed is shown as Drawing #001 in Appendix C.

1.4.2 Quality of Backfill Placed in Excavated Areas

The treated soil from the biopiles was used for backfilling of excavated areas. The biopiles were periodically sampled to evaluate compliance with remedial objectives. As biopiles showed contaminant concentrations that met SCOs, NYSDEC approval was obtained and the treated soil was returned to the excavated areas. A six-inch stone drainage layer was constructed at the bottom of the excavation to promote drainage. After treated soils were backfilled, three (3) inches of loam and six (6) inches of clean topsoil were placed over the soil redeposition areas. The volume of stone used for the drainage layer was approximately 140 cubic yards and the volume of virgin soil used for the cover was approximately 970 cubic yards. The Site was re-graded and seeded in October 1999. The re-grading was based on pre-construction grades with an overall increase in elevation of approximately two (2) feet due to the importation of materials to the Site for use in the conditioning of the biopiles. A survey showing the final post-remediation grade of the Site is provided as Drawing #007 in Appendix C. This survey does not necessarily reflect current grades on-site.

Additional areas excavated in July/November 2007 were backfilled with the excavated soil based on agreement with NYSDEC. The excavated material was backfilled followed by a layer of crusher-run stone (approximately 35 cubic yards) and a layer of clean imported sand (approximately 85 cubic yards). Additional regrading and seeding of these areas was done in May-July 2008.

1.4.3 On-Site and Off-Site Treatment Systems

The groundwater recovery and treatment system was installed and operational on-site from 1992 until 2008. The WWTP was used to treat recovered groundwater as well as water collected in excavations and leachate accumulated from the biopiles during soil remediation activities. The recovery system was successful in containing the groundwater plume while it was in operation.

Water was collected from six (6) on-site recovery wells at a total rate of approximately four (4) to eight (8) gpm. The water collected from the excavation was pumped into a holding tank and treated in the on-site treatment system. Collected groundwater and stormwater was treated on-site before discharge to a storm sewer, which discharged to Onondaga Lake under an equivalent SPDES permit. The water was treated with particulate filtration and carbon adsorption. The map indicating the location of the recovery wells and the WWTP is provided on Drawing #002 in Appendix C. The WWTP was temporarily shut down in May 2008 upon approval by NYSDEC, and is expected to be permanently dismantled in 2010.

1.4.4 Remaining Contamination

There is no designated "Remaining Contamination Zone" on-site. The contaminated soil was treated to meet Site remedial objectives listed in the ROD. Upon completion of the soil treatment, verification samples were taken to demonstrate that the treated soil met SCO requirements. In November 2007 SMC took four (4) samples from soil borings outside the footprint of the excavated area. Analysis of the samples showed low concentrations of xylene as detailed in Table 4. A sample was additionally taken by NYSDEC from SB-2 in the interval above refusal. One boring (SB-1) showed level of xylene above SCOs. The location of SB-1 is shown on Drawing #005 in Appendix C.

Table 4 summarizes results of soil samples remaining at the Site after completion of the Remedial Action. No samples exceed the Track 2 Restricted Use Soil Cleanup Objectives as outlined in 6 NYCRR Part 375, dated December 14, 2006. The Site is zoned for Residential Use A, which is designated as single-family dwellings.

Table 4. Soil Boring Sample Results

Soil Boring	Xylene Concentration in Soil Borings (ppm)	1995 ROD Site-Specific Xylene SCO for soil (ppm)	Unrestricted Use xylene level (ppm)	Residential and Restricted Use Residential xylene level (ppm)	Restricted Use Commercial xylene level (ppm)	Restricted Use Industrial xylene level (ppm)
SB-1	4.4	1.2	0.26	100	500	1000
SB-2	<0.15	1.2	0.26	100	500	1000
SB-3	0.81	1.2	0.26	100	500	1000
SB-4	0.54	1.2	0.26	100	500	1000

Continued operation and monitoring of the groundwater recovery system has demonstrated decreasing trends of Site contaminants in the monitoring and recovery wells. The groundwater treatment system was shut down based on approval from NYSDEC as sampling results indicate that contaminants remaining in groundwater are low and the system was no longer effectively removing remaining contamination. SMC will continue to monitor groundwater on a semiannual basis to account for fluctuations in the groundwater table.

No public utility lines or other subsurface infrastructure are present at the Site. The only remaining subsurface utilities and infrastructure are those directly related to the operation of the WWTP, which is decommissioned and has been left in place. When the system is permanently dismantled, the subsurface utilities will be filled with grout. No critical infrastructure remains on-site.

1.4.5 Engineering and Institutional Controls

Since remaining residual soil and groundwater contamination are present at the Site, Engineering Controls and Institutional Controls have been implemented to protect public health and the environment for the applicable future use. The Controlled Property has the following Engineering Controls: 1) maintenance of the soil cover over the soil redeposition areas, consisting of three (3) inches of loam, six (6) inches of top soil, and grass, and 2) continuous monitoring of groundwater.

The installation of mechanical systems, such as sub-slab depressurization systems or air sparge/ soil vapor extraction systems, were not required to protect public health and the environment upon completion of the remedial activities at the Site.

A series of Institutional Controls are required to implement, maintain and monitor these Engineering Controls. The Declaration of Covenants and Restrictions to be

filed with Onondaga County for the Site requires compliance with the Institutional Controls, to ensure that:

- All Engineering Controls must be operated and maintained by SMC as specified in this SMP;
- All Engineering Controls on the Site must be inspected and certified by SMC at a frequency and in a manner defined in this SMP;
- Groundwater monitoring must be performed by SMC as defined in this SMP;
- Data and information pertinent to Site Management for the Controlled Property must be reported by SMC at the frequency and in a manner defined in this SMP;
- On-site environmental monitoring devices, including but not limited to, groundwater monitoring wells must be protected and replaced by SMC as necessary to ensure continued functioning in the manner specified in this SMP.

In addition, the Declaration of Covenants and Restrictions will place the following restrictions on the property:

- Vegetable gardens and farming on the property are prohibited;
- Use of groundwater underlying the property is prohibited without treatment rendering it safe for the intended use as approved by NYSDOH;
- The topsoil cover over the excavated areas acts as a cover system at the Controlled property. Disturbance and incidental damage to this cover system shall be repaired upon discovery in a manner that complies with the SMP.
- All future activities on the property that would disturb remaining contaminated material must be conducted in accordance with the Excavation Plan included in this SMP;
- The potential for vapor intrusion must be evaluated by SMC for any buildings developed on the Site, and any potential impacts that are identified must be mitigated;
- The property may be used for residential use, provided that the long-term Engineering and Institutional Controls described in the SMP remain in use and land zoning regulations are followed.

These Engineering Controls and Institutional Controls are designed to:

- Prevent ingestion/direct contact with contaminated soil;

- Prevent inhalation of or exposure to contaminants volatilizing from contaminated soil;
- Prevent ingestion of groundwater with contaminant levels that exceed drinking water standards;
- Prevent contact with or inhalation of volatiles from contaminated groundwater;
- Prevent contaminated groundwater from migrating off-site; and
- Prevent migration of contaminants that would result in off-site groundwater or surface water contamination.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved ROD for the Maestri Site (March 1995). The Soil Cleanup Objectives (SCOs) are listed in Table 3 and include 1.2 ppm for xylene in Site soils and five (5) ppb for xylene in groundwater. The remedial goals included attainment of SCOs listed in the ROD for on-site soils for unrestricted use. The unrestricted SCOs were approved by NYSDEC and are listed in Table 3. The SCOs listed in the ROD were originally derived from the TAGM 4046 SCOs. NYSDEC has since issued new restricted use SCOs, listed in 6 NYCRR Subpart 375-6.8(b). The new SCOs list 100 ppm of xylene for residential use and 1.6 ppm of xylene in soil for protection of groundwater. A summary of the remedial strategies and EC/ICs implemented at the Site are provided below.

Since remaining contaminated soil and groundwater exists beneath the Site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

The purpose of this Plan is to provide:

- A description of all EC/ICs on the Site;
- The basic operation and intended role of each implemented EC/IC;
- A description of the key components of the ICs created as will be stated in the Declaration of Covenants and Restrictions;
- A description of the features that should be evaluated during each periodic inspection and compliance certification period;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of an Excavation Plan for the safe handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site;
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the Site remedy, as determined by NYSDEC; and
- A description of the reporting requirements for these controls.

2.2 ENGINEERING CONTROLS

2.2.1 Engineering Control Systems

2.2.1.1 Soil Cover System

Exposure to remaining contamination in soil at the Site is prevented by a soil cover system. This cover system is comprised of three (3) inches of loam, six (6) inches of topsoil, and grass placed over the soil redeposition areas. The Excavation Plan that appears in Section 2.4 outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs.

2.2.1.2 Groundwater Monitoring

To address remaining residual groundwater contamination present at the Site, continuous groundwater monitoring by SMC has been implemented at the Site.

Procedures for monitoring groundwater are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition

inspections in the event that a severe condition, which may affect controls at the Site, occurs.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, the remedial processes will be considered to be completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The specific determination of when the following remedial processes are complete will be made in compliance with the latest edition of NYSDEC DER-10.

2.2.2.1 Cover System

The soil cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.2.2.2 Groundwater Monitoring

Groundwater monitoring activities to assess the residual groundwater plume will continue semiannually by SMC as outlined in the Monitoring Plan in Section 3 of the Site Management Plan until an alternate schedule is requested or until permission to discontinue is granted in writing by NYSDEC.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls will be required by the Declaration of Covenants and Restrictions to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to residential use with restricted groundwater use. Adherence to these Institutional Controls on the Site will be required by the Declaration of Covenants and Restrictions and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Declaration of Covenants and Restrictions by SMC and SMC's successors and assigns with all elements of this SMP;
- All Engineering Controls must be operated and maintained by SMC as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected and certified by SMC at a frequency and in a manner defined in the SMP.

- Groundwater monitoring must be performed by SMC as defined in this SMP;
- Data and information pertinent to Site Management for the Controlled Property must be reported by SMC at the frequency and in a manner defined in this SMP;
- On-site environmental monitoring devices, including but not limited to, groundwater monitoring wells must be protected and replaced by SMC as necessary to ensure the devices function in the manner specified in this SMP.

Institutional Controls may not be discontinued by SMC without an amendment to or extinguishment of the Declaration of Covenants and Restrictions.

The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls by SMC will be required by the Declaration of Covenants and Restrictions. The Site will be inspected by SMC in accordance with the Declaration of Covenants and Restrictions. Site restrictions that apply to the Controlled Property are:

- Vegetable gardens and farming, including cattle and dairy farming, on the property are prohibited;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended purpose;
- All future activities on the property that will disturb remaining contaminated material are prohibited unless they are conducted in accordance with this SMP;
- The potential for vapor intrusion must be evaluated for any buildings developed on the Site, and any potential impacts that are identified must be mitigated;
- The property may be used for residential use with restricted groundwater use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a less restrictive use, such as unrestricted use, without additional remediation and amendment of the Declaration of Covenants and Restrictions by the Commissioner of NYSDEC.
- SMC will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to

comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that NYSDEC finds acceptable.

2.3.1 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures located over areas that contain remaining contamination, a soil vapor intrusion (SVI) evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to volatile organic vapors in the proposed structure. Alternatively, an SVI mitigation system will be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted by SMC to NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York". Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (unvalidated) SVI sampling data will be forwarded to NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. Validated SVI data will be transmitted to SMC within 30 days of validation.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

2.4 EXCAVATION PLAN

SMC does not own the Maestri property. The Site remedy allows for residential use with restricted groundwater use. Any future intrusive work that will penetrate, encounter or disturb the remaining contamination, and any modifications or repairs to the existing cover system will be performed in compliance with this Excavation Plan (EP). Intrusive construction work must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) prepared for the Site. Based on future

changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP will be updated and re-submitted with the notification. Any intrusive construction work will be performed in compliance with the EP and HASP and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 2.6).

SMC, who is preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all invasive work, the structural integrity of excavations, and for structures that may be affected by excavations (such as building foundations and bridge footings).

The only remaining structures and utilities on-site are those directly related to the former WWTP, which has been permanently dismantled.; underground lines from the WWTP remain on-site and have been grouted in place. No critical infrastructure that would need to be replaced remains on-site.

Mechanical processing of historical fill and contaminated soil on-site is prohibited.

Excavated areas from the Remedial Action have been surveyed by a surveyor licensed to practice in the State of New York. The survey information will be shown on maps to be reported in the Periodic Review Report to be prepared by SMC.

2.4.1 Notification

At least 10 days prior to the start of any activity that is reasonably anticipated to encounter remaining contamination, SMC or their representative will notify the NYSDEC. Currently, this notification will be made to:

David Chiusano. NYS Department of Environmental Conservation. Remedial Bureau E, Section A. Division of Environmental Remediation. 625 Broadway 12th Floor. Albany, NY 12233-7017.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for Site re-grading, intrusive elements or utilities to be installed below the soil cover, or any work that may impact an engineering control;
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;

- A schedule for the work, detailing the start and completion of all intrusive work;
- A statement that the work will be performed in compliance with this EP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan, in electronic format;
- Identification of disposal facilities for potential waste streams;
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

2.4.2 Soil Screening Methods

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all future remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

2.4.3 Stockpile Methods

Soil stockpiles will be continuously encircled with a silt fence. Hay bales are used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

2.4.4 Materials Excavation and Load Out

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

SMC and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

A truck wash will be operated on-site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

2.4.5 Materials Transport Off-Site

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Truck transport routes will be identified that will: (a) limit transport through residential areas and past sensitive sites; (b) use city-mapped truck routes; (c) minimize off-site queuing of trucks entering the facility; (d) limit total distance to major highways; and (e) promote safety in access to highways.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Due to limited available space at the Site, some off-site queuing of trucks may be necessary. The number and duration of trucks lined up outside the Site entrance will be minimized through efficient scheduling and staging at a remote location.

2.4.6 Materials Disposal Off-Site

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to NYSDEC. Unregulated off-site management of materials from this Site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste pursuant to 6NYCRR Part 360-1.2. Material that does not meet the lower of the SCOs for residential use or groundwater protection will not be taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility) without a beneficial use determination issued by NYSDEC.

2.4.7 Materials Reuse Onsite

There is no plan to re-use on-site materials. If materials will be re-used on-site, a Plan will be developed for NYSDEC approval prior to work.

2.4.8 Fluids Management

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported

and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, but will be managed off-site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

2.4.9 Cover System Restoration

After the completion of soil removal and any other invasive remedial activities the cover system will be restored in a manner that complies with the Record of Decision and the SMP. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the SMP.

2.4.10 Backfill from Off-Site Sources

All materials proposed for import onto the Site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP, applicable regulations (6NYCRR 375-6.7(d)) and guidance (DER-10) prior to receipt at the Site.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

2.4.11 Stormwater Pollution Prevention

If construction occurs on-site in the future barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

A detailed Storm Pollution Prevention Plan will be developed prior to work if any construction occurs on-site in the future.

2.4.12 Contingency Plan

If underground tanks/drums or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for VOCs and SVOCs listed in Table 3.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in daily and periodic electronic media reports.

2.4.13 Community Air Monitoring Plan

A map showing the locations of the air monitoring stations installed during the remedial activities of 1995 – 1999 is provided as Drawing #008 in Appendix C. If any future intrusive work will disturb the cover system, a new CAMP will be developed by SMC and submitted to NYSDEC and NYSDOH Project Managers in accordance with

latest revision of the NYSDEC's Technical Guidance for Site Investigation and Remediation (DER-10). The location of the air monitoring stations will be adjusted based on the actual wind direction and work to be performed on the Site. Any exceedance of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers by SMC or their representatives.

2.4.14 Odor Control Plan

Environmental enclosures can be used on a routine basis to control odors from excavation work on-site. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of SMC, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. These measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils; If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

2.4.15 Dust Control Plan

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.

- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

2.4.16 Other Nuisances

A plan for rodent control will be developed if necessary and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

2.5 INSPECTIONS AND NOTIFICATIONS

2.5.1 Periodic Inspections

Periodic inspections of all remedial components installed at the Site will be conducted by SMC at the frequency specified in SMP Monitoring Plan schedule (semiannually). A comprehensive Site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Declaration of Covenants and Restrictions;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted by SMC representatives in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3), using the Site-Wide

Inspection Form included in Appendix E. The reporting requirements are outlined in the Site Management Reporting Plan (Section 2.6).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

2.5.2 Notifications

Notifications will be submitted by SMC to NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the Order on Consent, 6NYCRR Part 375, and/or Environmental Conservation Law.
- 10-day advance notice of any proposed ground-intrusive activities.
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Notice within 48-hours of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the Site, including a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Notifications will be made to Mr. David Chiusano, NYS Department of Environmental Conservation Remedial Bureau E, Section A, Division of Environmental Remediation, 625 Broadway 12th Floor, Albany, NY 12233-7017, Phone: 1 (888) 459-8667. In the event that NYSDEC develops a centralized notification system, that system will be used instead.

2.5.3 Evaluation and Reporting

The results of the inspection and Site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The Site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP.

2.6 REPORTING PLAN

2.6.1 Introduction

A Periodic Review Report will be submitted by SMC to NYSDEC every year, beginning one year after the SMP has been approved by NYSDEC. The Periodic Review Report will be prepared in accordance with the latest revision of the NYSDEC DER-10 "Technical Guidance for Site Investigation and Remediation". The frequency of submittal of the Periodic Review Report may be modified with the approval of NYSDEC.

This report will include the following:

- Identification of all EC/ICs required by this SMP;
- An assessment of the effectiveness of all Institutional and Engineering Controls for the Site;
- An evaluation of the Engineering and Institutional Control Plan and the Monitoring Plan for adequacy in meeting remedial goals;
- Results of the required annual Site inspections and severe condition inspections, if any;
- A compilation of all deliverables generated during the reporting period, as specified in Section 2 EC/IC Plan and Section 3 Monitoring Plan; and
- Certification of the EC/ICs.

2.6.2 Certification of Engineering and Institutional Controls

Inspection of the EC/ICs will occur by SMC representataives at the frequency described in Section 3 (Monitoring Plan). After the last inspection of the reporting period, a qualified environmental professional will prepare a Periodic Review Report which certifies that:

- On-site ECs/ICs are unchanged from the previous certification;
- They remain in-place and are effective;
- The systems are performing as designed;
- Nothing has occurred that would impair the ability of the controls to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls;
- Access is available to the Site by NYSDEC and NYSDOH to evaluate continued maintenance of such controls; and
- Site use is compliant with the Declaration of Covenants and Restrictions.

2.6.3 Periodic Review Report

A Periodic Review Report will be submitted by SMC every year, beginning one year after the SMP has been approved by NYSDEC. The report will be submitted within 45 days of the end of each certification period. Other reports, such as validated groundwater monitoring data, will be submitted by SMC as determined by NYSDEC. Groundwater sampling results will also be incorporated into the Periodic Review Report. The report will include:

- EC/IC certification;
- All applicable inspection forms and other records generated for the Site during the reporting period;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern in groundwater which include a listing of all compounds analyzed, along with the applicable standards, with all contraventions of groundwater SCGs highlighted.

These will include a presentation of past data sufficient for the NYSDEC to evaluate contaminant concentration trends;

- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A Site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the Site-specific ROD;
    - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
    - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
    - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted by SMC in electronic format, to the NYSDEC Central Office located in Albany, NY, the NYSDOH Syracuse Regional Office, and the NYSDOH Bureau of Environmental Exposure Investigation.

3.0 MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the implemented ECs to reduce or mitigate contamination at the Site. ECs at the Site include a soil cover over excavated areas and semiannual monitoring of groundwater. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Visual monitoring of soil cover integrity;
- Sampling and analysis of groundwater;
- Assessing compliance with NYSDEC groundwater standards;

- Assessing achievement of the remedial performance criteria;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Quarterly monitoring of the performance of the remedy and overall reduction in contamination on-site and off-site was conducted by SMC for the first year after shutdown of the Waste Water Treatment Plant (WWTP), from May 2008 until May 2009. After this one (1) year monitoring period, since the groundwater plume appeared to remain stable, the monitoring frequency was reduced to semiannually. Semiannual groundwater monitoring will continue by SMC until otherwise approved by NYSDEC and NYSDOH. Trends in contaminant levels in groundwater in the affected areas will be evaluated by SMC to determine if the remedy continues to be effective in achieving remedial goals. The soil cover will be inspected annually by SMC to ensure no building on the Site has occurred and that the Site cover remains in place. Annual inspections of the soil cover will continue by SMC until otherwise approved by NYSDEC and NYSDOH. Monitoring programs for environmental media are summarized in Table 5 and outlined in detail in Sections 3.2 through 3.5 below.

Table 5: Groundwater and Soil Cover Monitoring Schedule.

Monitoring Program	**Frequency***	**Matrix**	**Analysis**
Soil Cover	Semiannually	Soil	Visual observation for soil cover integrity.
Groundwater monitoring	Semiannually	Groundwater	Xylene

* The frequency of events will be conducted as specified until otherwise approved by both NYSDEC and NYSDOH

The annual soil cover monitoring will occur by SMC concurrently with a groundwater monitoring event.

3.2 SOIL COVER MONITORING

Exposure to remaining contamination in soil at the Site is prevented by a soil cover system. Inspections of the soil cover will be performed periodically by SMC to assess its integrity.

The soil cover system is comprised of three (3) inches of loam, six (6) inches of topsoil, and grass placed over the excavated areas. The Site has been regraded and seeded upon completion of the remedial activities. The Site has been secured with an 8-foot high fence and two locked gates to restrict Site access. The fence and gate post location are shown in Drawing #007 Appendix C. SMC keeps the Site gates locked and will annually assess fence integrity.

An as-built drawing for the Site is included as Drawing #007 Appendix C.

3.2.1 Inspection Schedule

Site inspections are conducted semiannually by SMC as detailed in Section 3.1.2. Although the Site will be inspected semiannually by SMC, certifications will be issued annually. The frequency of inspections by SMC will be evaluated every two (2) years.

3.2.2 Monitoring Event Protocol

A visual inspection of the soil cover integrity will be conducted semiannually by SMC, concurrently with groundwater sampling events. A Site inspection form provided in Appendix E will be completed during each inspection and kept on file at Envirospec's office. The Inspection frequency is subject to change with the approval of NYSDEC.

Items reviewed during Site inspections include Site security, general Site maintenance, erosion control, condition of neighboring properties and general observations of the Site. General observations include, but are not limited to, the following:

- Evidence of damage to chain link fence.
- Evidence of odors through the Site.

- Evidence of cover breach or bald spots in grassy areas through the Site.
- Evidence of surface runoffs through the Site.
- Evidence of sink holes through the Site.
- Evidence of water accumulation, water staging/ponding or pooling through the Site.

A complete list of components to be checked is provided in the Site Inspection Checklist, presented in Appendix E. If soil cover integrity is not maintained, repairs will be performed within 30 days of the inspection if weather permits.

Unscheduled inspections and/or sampling may take place when a suspected failure of the soil cover system has been reported or an emergency occurs that is deemed likely to affect the soil cover. Monitoring deliverables for the soil cover system are specified later in this Plan in Section 3.6.

3.3 GROUNDWATER MONITORING PROGRAM

Groundwater monitoring will be performed by SMC on a periodic basis to assess the performance of the remedy.

3.3.1 Monitoring System Design

The network of monitoring wells has been installed to monitor both up-gradient and down-gradient groundwater conditions at the Site. The network of on-site and off-site wells has been designed to monitor the residual groundwater plume. Currently twenty-five (25) monitoring wells are installed on-site and off-site. The depth of the wells and analytes to be tested semiannually are detailed in Table 6 below. Drawing #002 in Appendix C shows locations of monitoring wells. Monitoring well construction logs are included in Appendix F. Post-remedial ground water quality conditions are provided in groundwater monitoring reports submitted to NYSDEC following sampling events.

In May 2008, SMC requested to shutdown the groundwater treatment system as groundwater treatment system had achieved the Site RAOs. Levels of contaminants remaining in the groundwater were low and the system was no longer effective as shown by the consistency of the results. Based on NYSDEC approval, quarterly sampling for total xylene concentrations was performed for one (1) year for eight (8) perimeter wells MW-2A, MW-9, PZ-4, RW-3, RW-5, RW-6, RW-7, and RW-8. Monitoring will continue semiannually by SMC for these wells in addition to a new off-site well, PZ-20.

Table 6. Groundwater Monitoring Program.

Well #	Depth of Well, ft bgs	Grade Elevation, ft	Screened Interval, ft	Depth to Water, ft	Total Xylene Concentration Measurement, Y/N	Water Elevations Measurement, Y/N	Frequency
MW-9	19.2	406.2	387.00-397.00	13.4	Y	Y	Semiannually
PZ-4	19.5			7.5	Y	Y	Semiannually
PZ-20	20.00			3.7	Y	Y	Semiannually
MW-2A (formerly RW-2)	23.00	405.5	386.86-396.86	13.9	Y	Y	Semiannually
RW-3	25.33	404.3	381.97-391.97	18.0	Y	Y	Semiannually
RW-5	24.53	407.7	386.17-396.17	12.5	Y	Y	Semiannually
RW-6	21.86	393.6	374.74-384.74	5.7	Y	Y	Semiannually
RW-7	27.5			17.0	Y	Y	Semiannually
RW-8	24.5			13.4	Y	Y	Semiannually

3.3.2 Groundwater Monitoring Schedule

Monitoring of the groundwater wells is performed by SMC on semiannual basis. The need for additional monitoring or decommissioning of the wells will be evaluated every year. The sampling frequency may be modified with the approval of NYSDEC. The SMP will be modified by SMC to reflect changes in sampling plans approved by NYSDEC.

Deliverables for the groundwater monitoring program are specified in Section 2.5 and 2.6.

3.3.3 Sampling Event Protocol

All monitoring well sampling activities will be recorded on a Well Sampling Field Record form presented in Appendix E. Other observations (e.g., well integrity, etc.) will be noted on the Site Observation Report also provided in Appendix E.

Groundwater sampling is conducted by SMC semiannually, and semiannual reports are submitted to NYSDEC. The reports present the data and compare the results to historical data to assess conditions of the groundwater. During each sampling event, the wells to be sampled are gauged for water level. A minimum of three (3) well volumes are then purged from each of the sampling wells prior to sampling. Wells are purged with either a two-inch (2”) submersible, Grundfos pump and poly tubing or purged with a

two-inch (2") disposable polyethylene bailer or both. Purged water is collected and containerized in a mobile poly tank. The containerized water is brought to the SMC's Skaneateles Falls site and sent through the on-site Waste Water Treatment Plant (WWTP) for treatment or will be properly disposed of off-site. Field data including pH, temperature, conductivity, and total dissolved solids (TDS) are recorded for approximately each well volume. A summary of the field data, the total volume of groundwater purged and the well sampling field reports are included in the semiannual report.

Samples are collected using disposable bailers. A duplicate sample is collected from one of the wells for laboratory and sampling quality assurance/quality control purposes. A trip blank is placed in the sample cooler to ensure no cross contamination or outside contamination was present. Samples are sent to Certified Environmental Services Laboratory (CES) in Syracuse, NY (an ELAP certified lab) following typical chain of custody procedures for xylene analysis via EPA Method 602 and a standard 30 day turnaround time. Analytical results are included in the groundwater monitoring reports.

3.4 MONITORING WELL REPAIRS, REPLACEMENT AND DECOMMISSIONING

If biofouling or silt accumulation occurs in the on-site and/or off-site monitoring wells, the wells will be physically agitated/surged and redeveloped by SMC. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan) by SMC, if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "CP-43: Groundwater Monitoring Well Decommissioning Policy." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled by SMC in the nearest available location, unless otherwise approved by NYSDEC.

3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

All sampling and analysis is performed in accordance with the requirements of the Sampling, Analysis, and Monitoring Plan (SAMP) prepared for the Site, attached as Appendix G. A main component of the SAMP is the Quality Assurance Project Plan (QAPP) in Section 6 which includes:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
    - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
    - Sample holding times will be in accordance with NYSDEC ASP requirements.
    - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
    - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
    - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Internal QC and Checks;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

3.6 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file by SMC at Envirospec's office. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in Section 2.6.

All media and engineering system monitoring results will be reported to NYSDEC by SMC on a periodic basis in the Periodic Review Report. The report will include, at a minimum:

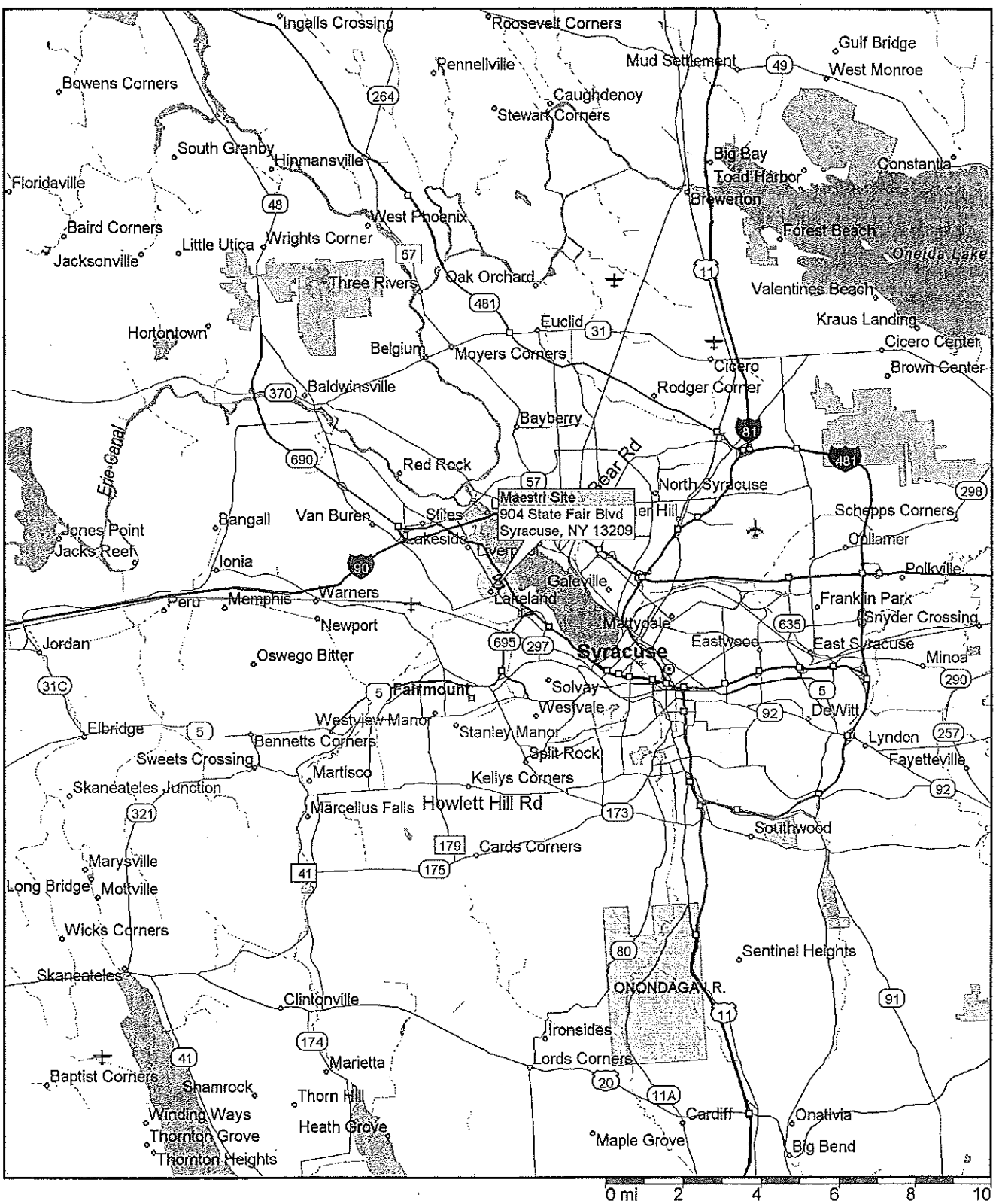
- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, inspection checklists, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations;
- Condition of soil cover and required repairs;
- Condition of Site security, of general Site maintenance, and of neighboring properties; and
- A determination as to whether groundwater conditions have changed since the last reporting event.

4.0 OPERATION AND MAINTENANCE PLAN

The Site remedy does not rely on any mechanical systems, such as sub-slab depressurization systems or air sparge/ soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not applicable in this case, and has not been included in this SMP.

FIGURES

Figure 1
Site Location Map

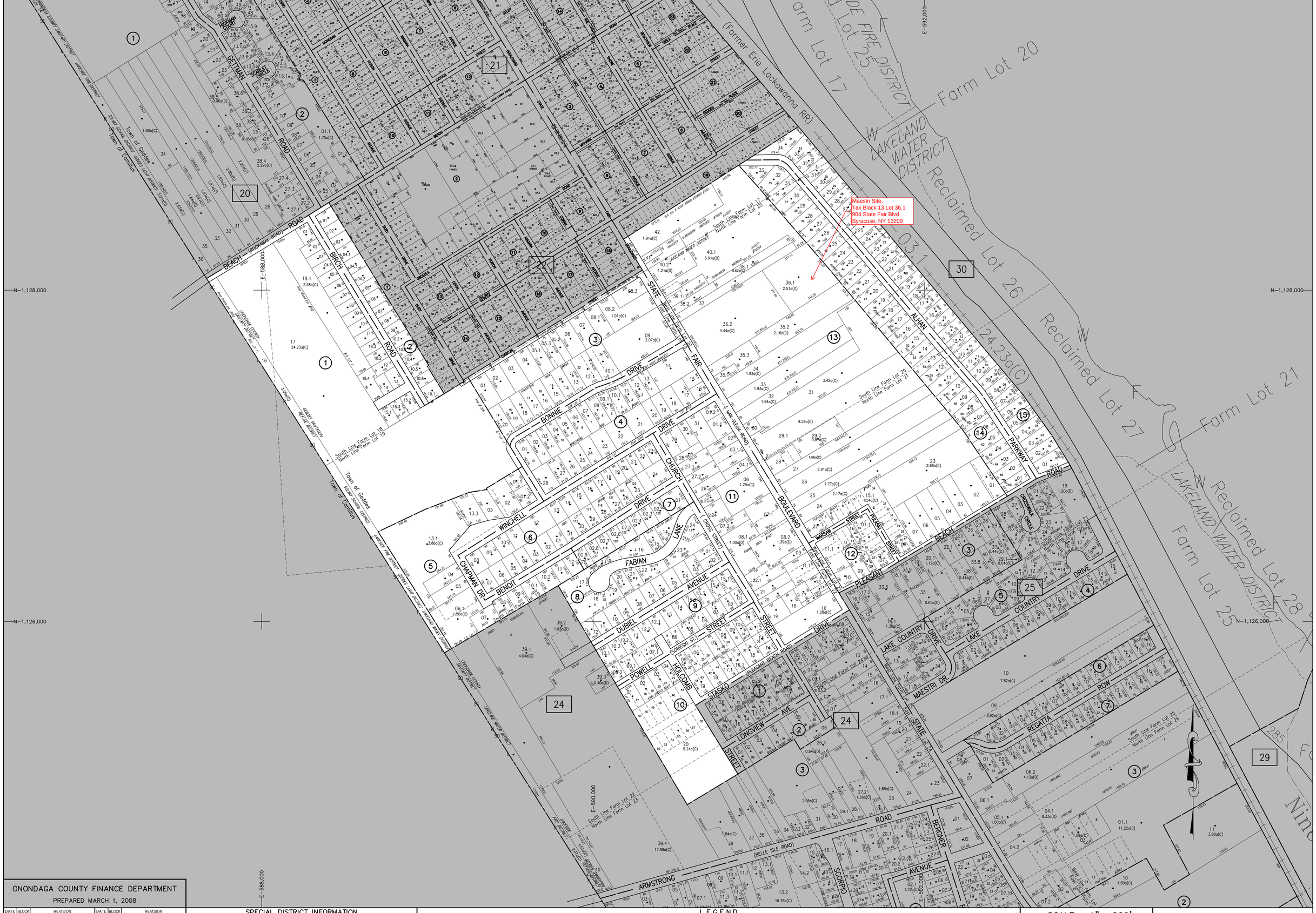


Microsoft Expedia
Streets98

APPENDICES

APPENDIX A

Tax Map
Metes and Bounds



ONONDAGA COUNTY FINANCE DEPARTMENT

PREPARED MARCH 1, 2008

DATE	BLOCK	REVISION	DATE	BLOCK	REVISION

SPECIAL DISTRICT INFORMATION

FIRE	LAKESIDE		
LIGHT	GEDDES		
REFUSE	GEDDES SANITATION		
SANITATION	GEDDES		
SCHOOL	SOLVAY		
WATER	LAKELAND		

LEGEND

AGRICULTURAL DISTRICT LINE — AG —	PARK DISTRICT LINE — P —	PROPERTY PARCEL LINE	CITY LINE
AMBULANCE DISTRICT LINE — A —	REFUSE DISTRICT LINE — R —	ORIGINAL LOT LINE	TOWN LINE
DRAINAGE DISTRICT LINE — D —	SANITARY DISTRICT LINE — SD —	ROAD OR RAILROAD RIGHT-OF-WAY LINE	VILLAGE LINE
FIRE DISTRICT LINE — F —	SCHOOL DISTRICT LINE — SC —	STREAM	BLOCK BOUNDARY
HYDRANT DISTRICT LINE — H —	SEWER DISTRICT LINE — S —	RAILROAD TRACK	STREAM AND PARCEL LINE
LIGHTING DISTRICT LINE — L —	WATER DISTRICT LINE — W —		

PARCEL NUMBER	24	BLOCK NUMBER	(2)
DEED AREA	(D)	DEED BLOCK NUMBER	(3)
CALCULATED AREA	(C)	PROPERTY CONNECTION SYMBOL	7/7
DEED DIMENSION	(d)	ADJACENT SECTION MAP	25
SCALED DIMENSION	(s)		
DEED LOT NUMBER	s		

SCALE : 1"= 200'

200' 0 200'

GRAPHIC SCALE

FOR TAXING PURPOSES ONLY
NOT TO BE USED FOR CONVEYANCE

SECTION MAP 23
TOWN OF GEDDES
ONONDAGA COUNTY, NY

TITLE NO.: 09NYONO11432

SCHEDULE A
DESCRIPTION

ALL that certain plot, piece or parcel of land, situate in the Town of Geddes, County of Onondaga and State of New York, known and distinguished as being part of Farm Lot Number Twenty (20) in said Town, bounded and described as follows:

BEGINNING at a point on the centerline of State Fair Boulevard (a/k/a Van Vleck Road) 455.34 feet southerly from the point of intersection of the northerly line of aforesaid Farm Lot Number 20 and the centerline of State Fair Boulevard and which beginning point is also 108.60 feet northerly from the point of intersection of the centerline of Bonnie Drive and the said centerline of State Fair Boulevard;

RUNNING THENCE southerly along said centerline of State Fair Boulevard 329.29 feet to a point;

THENCE easterly at an interior angle of 88 degrees 55 minutes 52 seconds along the northerly line of the premises conveyed by Lewis S. Hanreck to Patrick M. Pontello, Jr. and John E. Szczech by deed recorded in the Onondaga County Clerk's Office on June 8, 1987 in Book 3358 of Deeds at Page 60, 632.80 feet to a point;

THENCE northerly at an interior angle of 86 degrees 23 minutes 13 seconds 331.66 feet to a point;

THENCE westerly at an interior angle of 93 degrees 26 minutes 42 seconds along the southerly line of premises conveyed by Kathryn Ruzio to Philip Ryan and Patricia Ryan, his wife, by deed recorded in the Onondaga County Clerk's Office on July 2, 1973 in Book 2506 of Deeds at Page 111, 605.76 feet to the point and place of BEGINNING.

END OF SCHEDULE A

APPENDIX B

Aerial Map

Appendix B
AERIAL MAP

Maestri Site
904 State Fair Blvd,
Geddes, New York

APPENDIX C

Drawings

#001 Historically Excavated Areas
#002 Groundwater Contour Map
#003 Soils Prior to Remediation
#004 Original Groundwater VOC Contamination Plume
#005 Test Pit and Soil Boring Locations Near MW-9 from 2007
#006 WWTP Process Flow Diagram
#007 Final Post-Remediation Grade Survey
#008 Air Monitoring Station Locations
#009 Areas of Excavation

APPENDIX C

Drawing #001
Historically Excavated Areas

FIGURE 001

LEGEND

- TREE LINE
- ACCESS ROAD
- MAESTRI SITE PROPERTY BOUNDARY
- FENCE
- 8' HIGH SECURITY FENCE
- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- APPROXIMATE LIMITS OF 1987 EXCAVATION
- APPROXIMATE LIMITS OF 1990 EXCAVATION
- APPROXIMATE LIMITS OF 1993 EXCAVATION

BASIS OF DESIGN REPORT
MAESTRI SITE
GEDDES, NEW YORK

HISTORICALLY EXCAVATED AREAS

0 50 100

APPROX. SCALE IN FEET

FILE NO. 5618.005-03F

O'BRIEN & GERE ENGINEERS INC.

APPENDIX C

Drawing #002
Groundwater Contour Map

IMAGE	X-REF	OFFICE	DRAWN BY		REVISED		APPROVED BY		DRAWING NUMBER
---	---	ALB	DEO	7-19-99	BH	08/10	---	---	MAY10

MAY 2010

LEGEND

- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- MAESTRI SITE PROPERTY BOUNDARY
- 8' HIGH SECURITY FENCE
- ELECTRIC POLE

SCALE

0 30 60 90 FEET

NOTE:

APPROXIMATE LOCATION OF RWs 1, 4 & 9 (REMOVED DURING EXCAVATION)

APPROXIMATE LOCATION OF MW 14, 16, 18 (NYSDEC APPROVED REMOVAL 2004)

CLIENT

STAUFFER
MANAGEMENT COMPANY
BASE MAP PROVIDED BY IT CORPORATION
SURVEY BY CT MALE

FIGURE 002

GROUNDWATER CONTOURS
WITH XYLENE CONCENTRATION SUMMARY
MAESTRI SITE–MAY 2010
904 STATE FAIR BLVD.
GEDDES, NEW YORK

APPENDIX C

Drawing #003
Soils Prior to Remediation

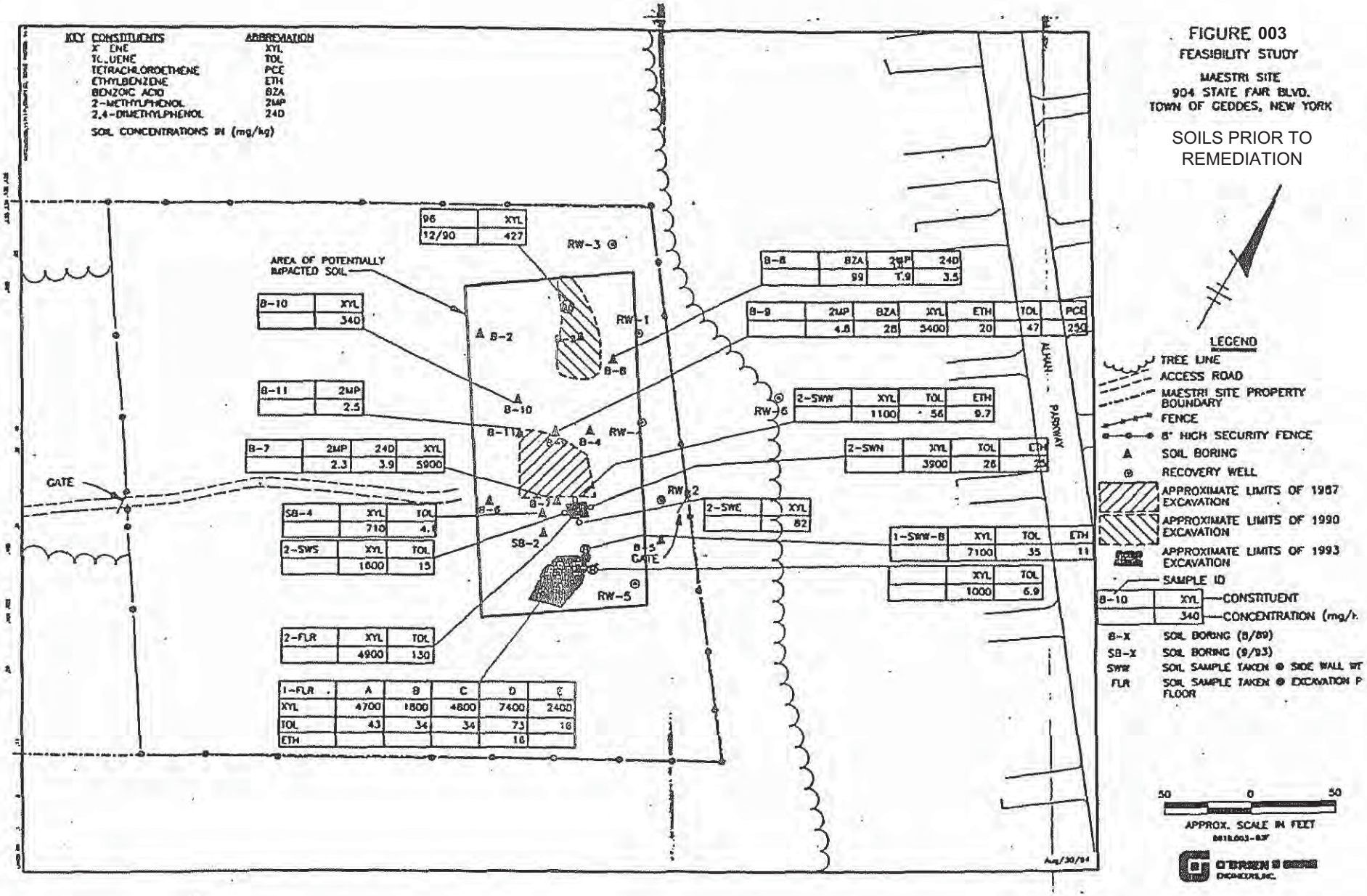


FIGURE 003
FEASIBILITY STUDY
MAESTRI SITE
904 STATE FAIR BLVD.
TOWN OF GEDDES, NEW YORK

SOILS PRIOR TO REMEDIATION

O'BRIEN & GERE ENGINEERS, INC.

APPENDIX C

Drawing #004
Original Groundwater VOC Contamination Plume

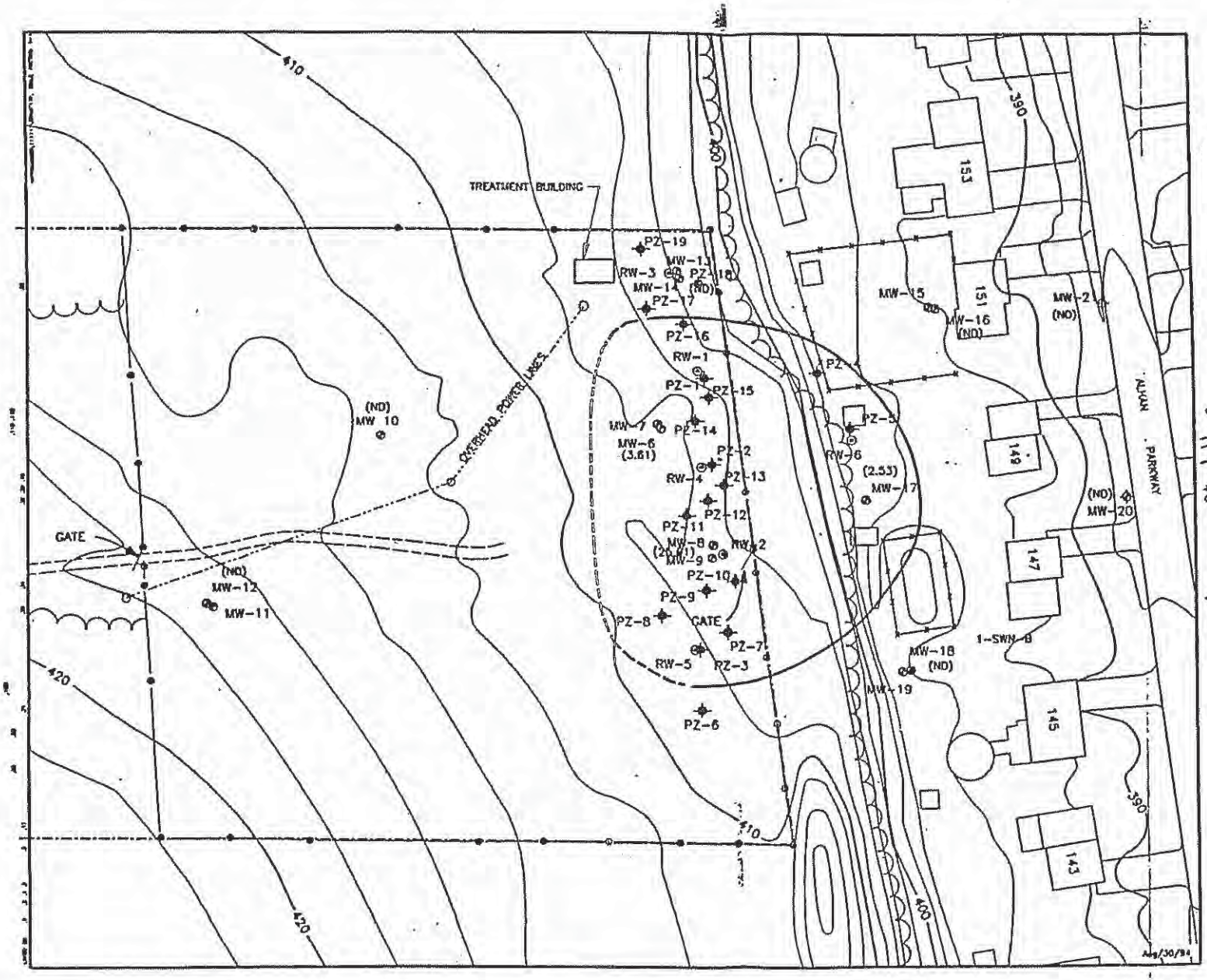


FIGURE 004
FEASIBILITY STUDY

MAESTRI SITE
904 STATE FAIR BLVD.
TOWN OF GEDDES, NEW YORK

ORIGINAL GROUNDWATER VOC CONTAMINATION PLUME

LEGEND

- TREE LINE
- ACCESS ROAD
- MAESTRI SITE PROPERTY BOUNDARY
- FENCE
- 8' HIGH SECURITY FENCE
- MONITORING WELLS
- RECOVERY WELL
- PIEZOMETER
- APPROXIMATE LIMITS OF VOLATILE ORGANIC COMPOUND GROUND WATER PLUME (DASHED WHERE INFERRED)
- (3.61) TOTAL VOC CONCENTRATION IN (ppm)

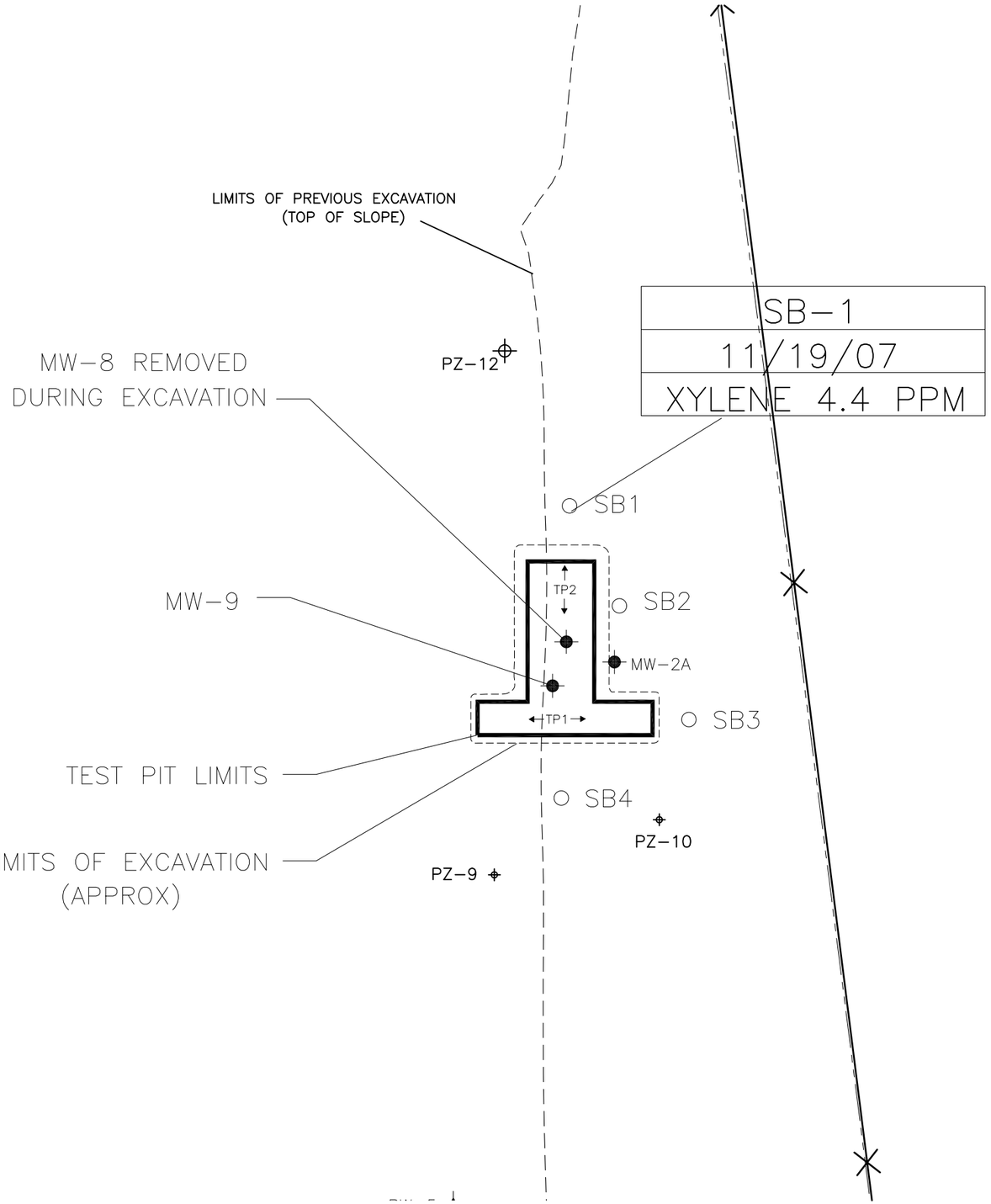
NOTE: EDGES OF VOC PLUME ARE BASED ON GROUND WATER SCREENING AND GROUND WATER MONITORING WELL SAMPLING RESULTS.

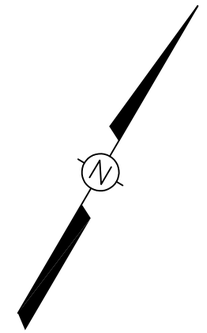
50 0 50
APPROX. SCALE IN FEET

O'BRIEN & GERE ENGINEERS, INC.

APPENDIX C

Drawing #005
Test Pit and Soil Boring Locations Near MW-9 from 2007





NOTE:
HARD PAN ENCOUNTERED DURING TEST PIT EXCAVATION AT APPROXIMATELY BETWEEN 8' –11' BGS. SOIL WAS EXCAVATED TO BEDROCK AT APPROXIMATELY 16' BGS BEYOND THE LATERAL LIMITS OF THE TEST PIT BELOW THE HARD PAN. SOILS REMOVED FROM THE TEST PITS AND FROM THE EXCAVATION BELOW THE HARD PAN WERE DISPOSED OF OFF-SITE.

LEGEND

- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- MAESTRI SITE PROPERTY BOUNDARY
- 8' HIGH SECURITY FENCE
- EP ELECTRIC POLE
- SOIL BORING LOCATIONS

SPEC
CONSULTING, LLC 18 COMPUTER DRIVE WEST
ALBANY, NY 12205
PHONE: 518.438.6809
FAX: 518.438.8527

STAUFFER
MANAGEMENT COMPANY

BASE MAP PROVIDED BY IT CORPORATION

FIGURE 005
TEST PIT AND SOIL BORING
LOCATIONS NEAR MW-9 FROM 2007
MAESTRI SITE
904 STATE FAIR BLVD.
GEDDES, NEW YORK

APPENDIX C

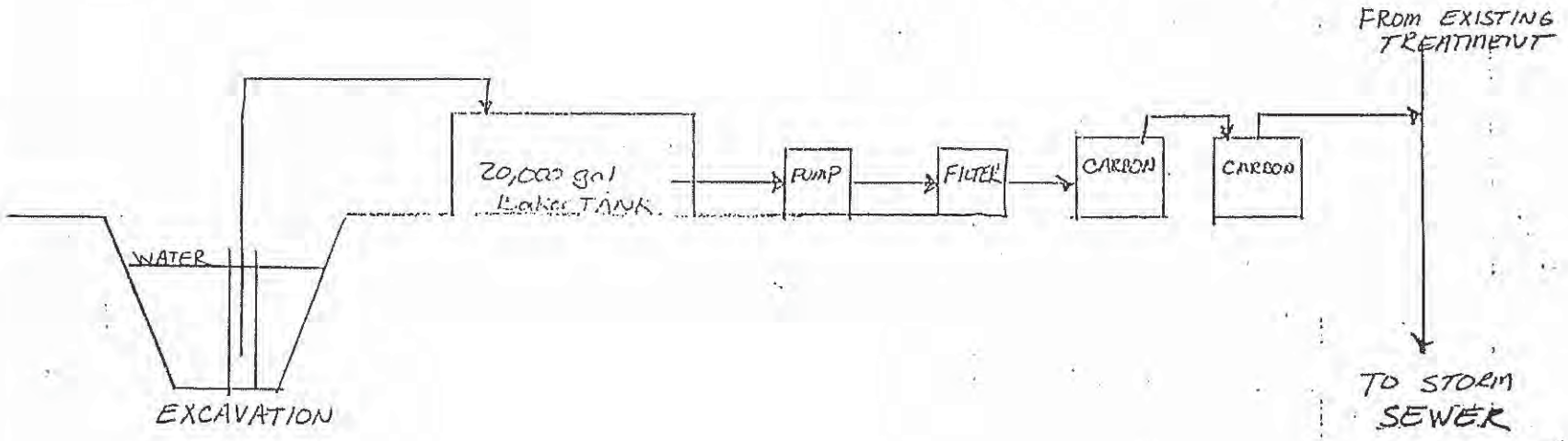
Drawing #006
WWTP Process Flow Diagram

FIGURE 006

PROCESS FLOW DIAGRAM

MAESTRI SITE

TEMPORARY TREATMENT SYSTEM



P1 of 1

MIKE SYKES

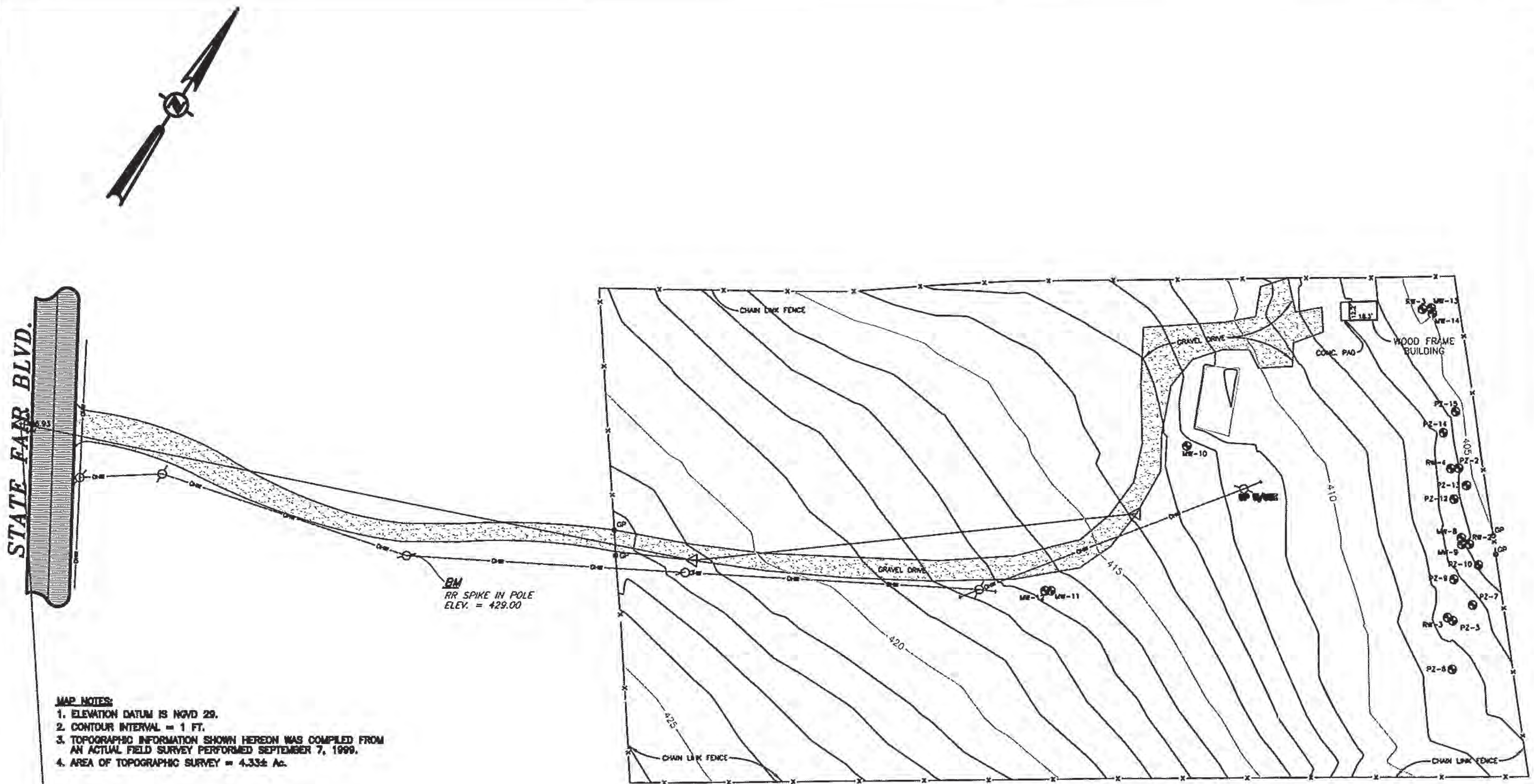
APPENDIX C

Drawing #007
Final Post-Remediation Grade Survey

NO XREFS

PROJECT NUMBER: 99.2102

CAD DWG. FILE NAME: 992102.DWG



MAP NOTES:

1. ELEVATION DATUM IS NGVD 29.
2. CONTOUR INTERVAL = 1 FT.
3. TOPOGRAPHIC INFORMATION SHOWN HEREON WAS COMPILED FROM AN ACTUAL FIELD SURVEY PERFORMED SEPTEMBER 7, 1999.
4. AREA OF TOPOGRAPHIC SURVEY = 4.33± Ac.

LEGEND

- OHW — UTILITY POLE W/ OVERHEAD WIRES
- — GUY WIRE
- GP — GATE POST
- MW-12 — MONITOR WELL
- RW-3 — RECOVERY WELL
- PZ-8 — PIEZOMETER

"ONLY COPIES OF THIS MAP SIGNED IN RED INK AND EMBOSSED WITH THE SEAL OF AN OFFICER OF C.T. MALE ASSOCIATES, P.C. OR A DESIGNATED REPRESENTATIVE SHALL BE CONSIDERED TO BE A VALID TRUE COPY".

460.69
CRF DS-10

DAVID J. UHRINEC
PLS #50052

DATE		REVISIONS RECORD/ DESCRIPTION	DRAFTER	CHECK	APPR.

PROJ. NO: 99.2102
DESIGNED :
DRAFTED : MRM
CHECKED :

FIGURE 007
FINAL POST-REMEDIATION GRADE SURVEY
MAESTRI SITE
904 STATE FAIR BLVD.
TOWN OF GEDDES, NY

TOWN OF GEDDES — ONONDAGA COUNTY, NEW YORK

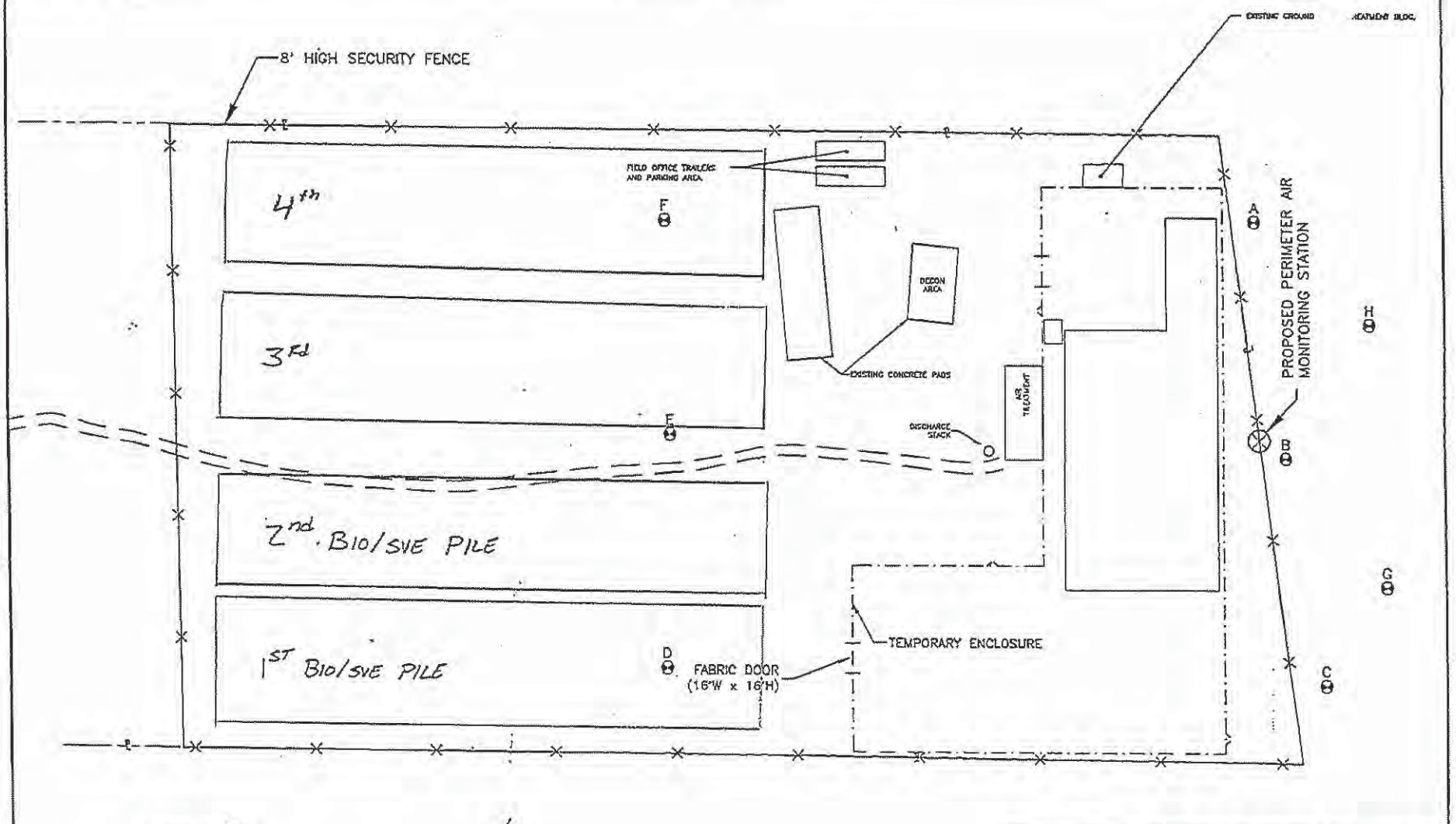
C.T. MALE ASSOCIATES, P.C.
200 GATEWAY PARK DRIVE, BLDG. C, P.O. BOX 3246
NORTH SYRACUSE, NY 13212-3246
315.458.6498 * FAX 315.458.4427
ARCHITECTURE & BUILDING SYSTEMS ENGINEERING * CIVIL ENGINEERING
ENVIRONMENTAL SERVICES * SURVEY & LAND INFORMATION SERVICES

SCALE: 1" = 50'
SHEET 1 OF 1
DATE: 9/8/1999
DWG. NO: 99-406

CAD DWG. FILE NAME: 992102.DWG

APPENDIX C

Drawing #008
Air Monitoring Station Locations



FLUOR DANIEL GTI
1245 KINGS ROAD
SCHENECTADY, NY 12303
(518) 370-5631

STAUFER MANAGEMENT CORPORATION
MAESTRI SITE
GEDDES, NEW YORK

FIGURE 008
AIR MONITORING
STATION LOCATIONS

PROJECT NO.:	ACAD FILE:	DRAWING DATE:
01110-0531	0531-STA	8/5/96
DESIGNED: BMT	DETAILED: DEO	FIGURE: 1

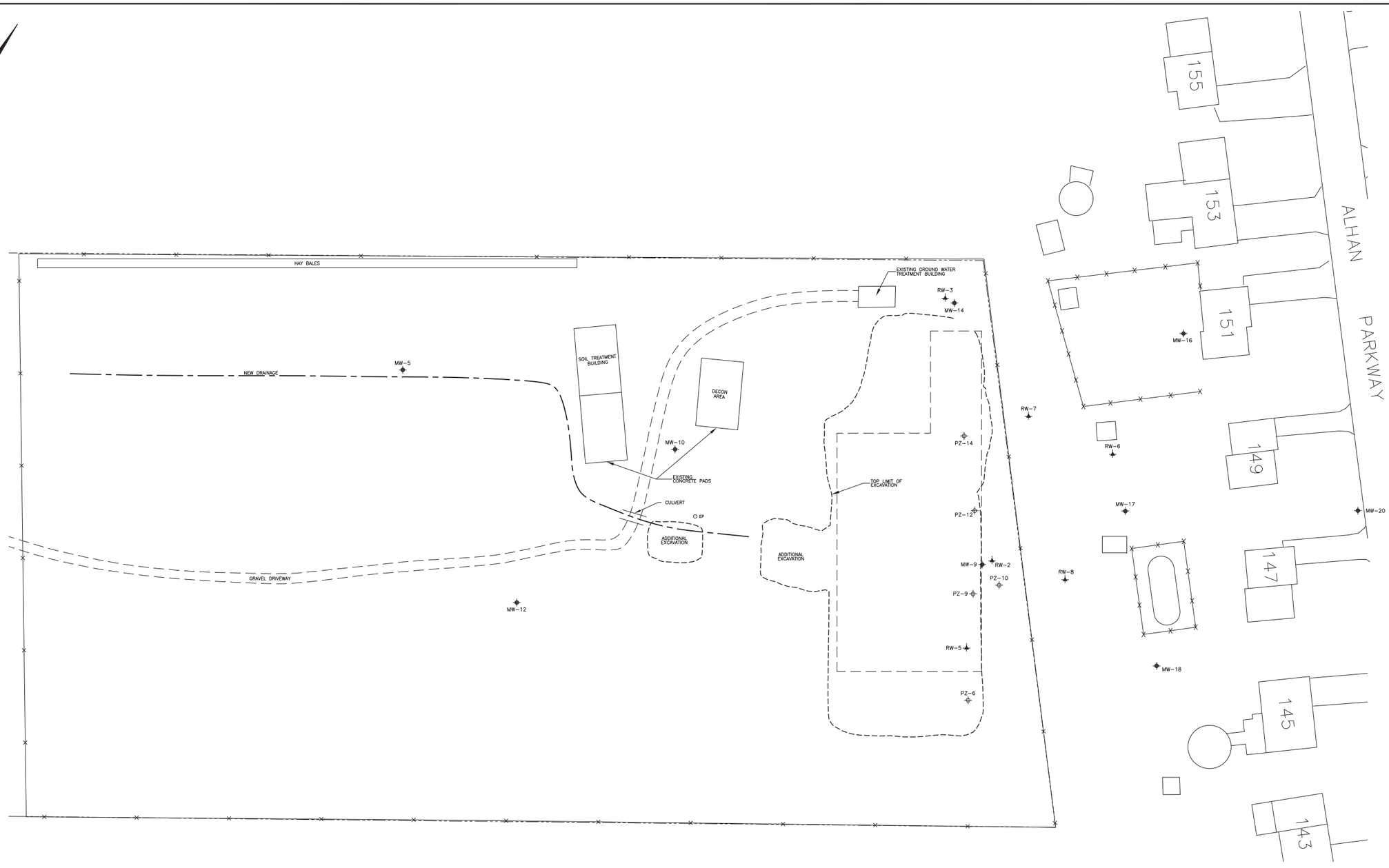
APPENDIX C

Drawing #009
Areas of Excavation

DRAWING NUMBER	SUMJUL99
APPROVED BY	---

CHECKED BY	---

DRAWN BY	7-19-99
	DEO
OFFICE	ALB
X-REF	---
IMAGE	---



LEGEND

- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- MAESTRI SITE PROPERTY BOUNDARY
- 8' HIGH SECURITY FENCE
- EP ELECTRIC POLE

SCALE

0 30 60 90 FEET

STAUFFER
MANAGEMENT COMPANY

BASE MAP PROVIDED BY IT CORPORATION

FIGURE 009
AREAS OF EXCAVATION

MAESTRI SITE
904 STATE FAIR BLVD.
GEDDES, NEW YORK

APPENDIX D

Record of Decision (ROD)

ZENECA

INTERNAL MEMORANDUM

DATE: March 31, 1995

FROM: J. A. MacARTHUR

TO: B. A. SPILLER

ZENECA Inc.
Wilmington, DE 19897 USA
ENVIRONMENTAL SERVICES & OPERATIONS
Telephone: (302) 886-4257
Facsimile: (302) 886-5933
FILE: ENV-MAESTRI-GWS

cc: J. F. Peter*
L. W. Mette
F. R. McNeice
* - No Attachment

MAESTRI - REMEDIAL DESIGN

Attached for your files is the completed and signed Record of Decision for the Maestri Site. As outlined in the cover letter from Gary Kline this effectively "starts the clock" on our remedial activities. As noted in my previous memo due to the aggressive schedule on this project we should take the full 30 days allotted to respond in order to provide us enough time to complete the Remedial Design Work Plan.

J A MacArthur

Environmental Engineering Associate

8A - 033195A.MEM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road, Albany, New York 12233

March 29, 1995

Mr. Frank R. McNeice
Zeneca Inc.
Environmental Services and Operations
Wilmington, Delaware 19897

Re: Maestri Site
Site #7-34-025
Onondaga County

Dear Mr. McNeice

Enclosed for your review are four (4) copies of the executed Record of Decision (ROD) for the Maestri Inactive Hazardous Waste Site. In accordance with the Order On Consent #A7-02226-90-03 Section XI, Stauffer Management within 30 days of its receipt of the ROD must notify this Department whether or not it elects to undertake the remedial actions identified in the ROD. Upon notification of its election to undertake the remedial actions, Section XII of the Order becomes operative and the ROD shall be incorporated into the Order and attached as Appendix "E".

Within 30 days after the ROD is incorporated into the Order, Stauffer is required to submit a Remedial Design Workplan (RD Workplan) outlining the implementation of the NYSDEC selected remedy. The RD Workplan shall include the elements specified in Section XII paragraph 2 of the Order.

We look forward to Stauffer's response and continuing progress on the Maestri Site. If you should have any questions concerning the above please contact me at (518) 457-5636.

Sincerely,

Gary E. Kline, P.E.
Maestri Project Manager
Div. of Hazardous Waste Rem.

cc: C. Branagh Reg 7
R. Heerkins DOH-Syr
J. McArthur Zeneca
J. Kelly, Esq Zeneca

Department of Environmental Conservation

Division of Hazardous Waste Remediation

Record of Decision

Maestri Site

Town of Geddes, Onondaga County

Site Number 7-34-025

March 1995

New York State Department of Environmental Conservation
GEORGE PATAKI, *Governor* MICHAEL ZAGATA, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

"Maestri" Inactive Hazardous Waste Site
Onondaga County, New York
Site No. 7-34-025

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Maestri Inactive Hazardous Waste Disposal Site which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Maestri Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site, if not addressed by implementing the response action selected in this ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) for the Maestri Site, and the criteria identified for evaluation of alternatives, the NYSDEC has selected excavation of soil contaminated with Xylene in excess of site cleanup levels followed by on-site treatment utilizing vacuum extraction supplemented by biological treatment. The components of the remedy are as follows:

1. A remedial design program to verify the conclusions of the conceptual design, and provide the details necessary for construction, operation, maintenance and monitoring of the remedial program.

2. Excavation and preparation for treatment of soils that contain contaminants in excess of soil cleanup objectives. This will involve an estimated 8,000 cubic yards of contaminated soil.

3. Treatment of the soil utilizing ex-situ piles that combines vapor extraction and biological degradation of organic contamination, and collection and treatment of air discharges from the soil treatment process.

4. Redeposition of treated soils on-site. Placement of 6 inches of clean top soil over the soil redeposition areas, site regrading, and restoration.

5. Continued operation of the on-site groundwater collection and treatment system with an evaluation annually until concentrations of site contaminants can no longer be effectively removed or cleanup objectives are met. Treatment is by carbon adsorption with discharge to a nearby storm sewer.

6. Monitoring of the soil treatment, water treatment, air discharges and groundwater to ensure compliance with clean up objectives.

New York State Department of Health Acceptance

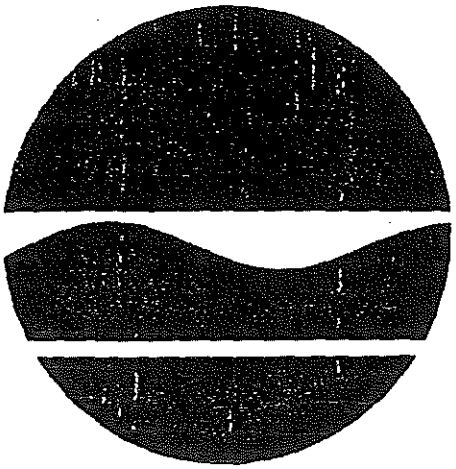
The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

3/23/95
Date

Michael J. O'Toole, Jr.
Director, Division of Hazardous Waste Remediation



NEW YORK STATE
DEPARTMENT OF

ENVIRONMENTAL
CONSERVATION

DIVISION OF HAZARDOUS
WASTE REMEDIATION

RECORD OF DECISION

MAESTRI SITE

SITE #7-34-025

TOWN OF GEDDES, ONONDAGA COUNTY

March 1995

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RECORD OF DECISION

"MAESTRI SITE"
Town of Geddes, Onondaga County, New York
Site No. 7-34-025
MARCH 1994

SECTION 1: SITE LOCATION AND DESCRIPTION

The Maestri Site, located at 904 State Fair Boulevard in the Town of Geddes, Onondaga County, New York, is approximately 3 miles northwest of Syracuse, New York. A site location map is included as Figure 1. The site, depicted in Figure 2, is approximately 7 acres in area. Onondaga Lake, located 1500 ft. northeast of the site, is the nearest surface water body to the site. Topography of the site is characterized by gently sloping grades which fall to the northeast at slopes up to 5 percent. The site is bordered by State Fair Boulevard to the southwest and the residences along Alhan Parkway to the northeast. Vacant lots that border the site on the northwest and southeast are heavily wooded.

Presently a 2.8 acre portion of the site near Alhan Parkway is cleared and secured with an 8-ft high chained link fence and two locked gates. A gravel road extends from State Fair Boulevard to the secured portion of the site. A ground water treatment building, concrete pads, monitoring wells, recovery wells, piezometers, and former drum disposal areas at the site are indicated on Figure 3.

SECTION 2: SITE HISTORY

2.1 Operational/Disposal History

* 1970's - Drums containing industrial waste materials allegedly generated by Stauffer Chemical Company were buried at the site.

* 1987 - The site owner, Mr. Bert Maestri reportedly excavated soil and drums from an area of the site indicated on Figure 3. Following characterization by the New York State Department of Health (NYSDOH), the material was disposed of at an off site secure landfill.

* 1987 - Samples collected by NYSDOH from a residential basement sump revealed the presence of contaminants from the site. Additional samples collected by NYSDOH from neighboring residential sumps indicated that only the original basement sump was impacted by the site.

* 1987 - Malcolm Pirnie, Inc. conducted a limited site investigation on behalf of the Onondaga County Health Department (OCHD) to evaluate the environmental effects of the former waste disposal area.

* 1987 - NYSDEC listed the site on the NYS Registry of Inactive Hazardous Waste Disposal Sites as site # 7-34-025.

2.2 Remedial History

* October 1988 - NYSDEC and Stauffer Management Company (SMC) executed an Order on Consent for development and implementation of site Interim Remedial Measures (IRM).

* June 1989 - Site investigations began, which included: soil vapor survey, geophysical survey, monitoring well installation, soil boring completion, air sampling, and sampling of surface soil, subsurface soil, and ground water. A magnetic anomaly discovered during the investigation was identified as buried drums.

* December 1990 - SMC completed the first drum excavation. Approximately 100 drums are removed from the site

* February 1991 - An indoor air monitoring program required by NYSDOH for selected residences located on Alhan Parkway, downgradient of the site, was implemented by O'Brien & Gere Engineers on behalf of SMC

* January 1992 - SMC submitted Basis of Design Report to NYSDEC for a ground water recovery and treatment system.

* May 1992 - Operation of the ground water recovery and treatment system began.

* September 1992 - SMC submitted a final report on the results of the field investigations and development of the site IRMs.

* December 1992 - NYSDEC and SMC executed an Order on Consent for performance of a Focused Remedial Investigation/Feasibility Study (RI/FS).

* December 1993 - Second drum removal occurs. Approximately 200 drums found during the focused RI, and containing industrial waste were excavated and disposed off site by SMC.

* February 1994 - SMC submitted the Focused Remedial Investigation Report to NYSDEC.

* September 1994 - SMC submitted the Maestri Site Feasibility Study to NYSDEC.

SECTION 3: CURRENT STATUS

Under terms of an Administrative Order on Consent with the NYSDEC, SMC initiated a Remedial Investigation/ Feasibility Study (RI/FS) in December 1992 to address the residual contamination at the site. Field work for the RI was completed in May 1993. The Focused RI Report was submitted by SMC in February 1994 and the report was approved in July 1994. A public meeting to present the results of the RI was held at the Geddes Town Offices on September 22, 1994. The site FS was submitted on September 24 1994. The Proposed Remedial Action Plan was subject to a public meeting on January 19, 1995.

3.1 Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any residual contamination resulting from previous drum disposal activities at the site.

The focused RI was conducted in a single phase. The field work was conducted between January 1993 and May 1993. A report entitled Maestri Site Focused Remedial Investigation has been prepared describing the field activities and findings of the RI in detail. A summary of the RI follows.

The RI activities consisted of the following tasks completed in accordance with the approved RI Workplan:

1) An on-site passive soil vapor survey to detect potential areas of subsurface soil contamination was conducted.

2) Two geophysical surveys were conducted, originally one in the area of the soil vapor survey and a second confirmatory survey over the remainder of the site after the detection of an anomaly in the soil vapor area.

3) 12 on-site test pits, located based on the soil vapor and geophysical survey results

4) Installation of 4 soil borings

5) On-site and off-site groundwater quality screening, consisting of sampling points GW-1 through GW-16, was performed to evaluate the horizontal extent of groundwater contamination downgradient of the site.

6) Installation and hydraulic conductivity testing of 2 additional off-site ground water monitoring wells.

7) Collection and chemical analysis of 18 groundwater samples for site specific parameters.

8) Completion of a human health risk assessment.

9) Summary of all RI results, previous investigations, and remedial work performed during the IRM's, including the performance of the groundwater recovery and treatment system, in a Focused RI Report.

10) A Fish and Wildlife Survey was conducted at the site and documented in the Fish and Wildlife Impact Analysis Report dated July 1994.

The analytical data obtained from the RI was compared to applicable Standards, Criteria, and Guidance (SCGs) in determining remedial alternatives. Groundwater, drinking water and surface water SCGs identified for the Maestri Site were based on NYSDEC Ambient Water Quality Standards and Guidance Values and on Part V of the NYS Sanitary Code. For the evaluation and interpretation of soil and sediment analytical results, NYSDEC soil cleanup guidelines for the protection of groundwater, and background conditions were used to develop remediation goals for soil.

Based upon the comparison of results of the remedial investigation to the SCGs and evaluation of potential public health and environmental exposures, certain areas and media of the site require remediation.

During the course of the site investigation conducted under the initial IRM (1988) Order with SMC, sufficient data was collected to establish that there are no remaining significant impacts to the site surface soils, surface water, ambient air, or residential indoor air quality resulting from the former drum disposal activities at the site. As a result the RI was focused to delineate the extent of the off site groundwater plume and to determine the vertical and horizontal extent of subsurface soils containing site contaminants in excess of cleanup goals.

Soil sample analytical results indicate the presence of site related contaminants in subsurface soils near the former drum disposal areas (Figure 4). Organic contaminants, predominantly xylene, were detected in the subsurface soils down to the water table (approx. 11 ft. below grade). Xylene concentrations ranged to a high of 7000 parts per million (PPM) in site subsurface soils. Other contaminants detected on site include toluene, ethlybenzene, tetrachloroethene, 2-methylphenol 2,4-dimethylphenol, and benzoic acid. Concentrations of these contaminants are substantially lower than that of xylene (Table #1).

Results of the groundwater investigations indicate the presence of site related contaminants in the shallow overburden groundwater. Movement of the shallow groundwater is in a northeasterly direction placing the homes on Alhan Parkway in the path of the off-site plume. However, all local residences are on public water, and no current or anticipated future uses of groundwater exist in the vicinity of the site. The principal organic contaminant detected in the shallow groundwater was xylene. Concentrations in excess of 30 ppm have been detected in monitoring wells on site immediately down gradient of the former drum disposal areas. No site related contaminants were detected in the bedrock groundwater. Figure 5 delineates the lateral extent of the volatile organic compound groundwater plume. Based on the results of the groundwater screening the existing groundwater recovery and treatment system installed as an IRM and in operation since May 1992 appears to have controlled the migration of the plume.

3.2 Interim Remedial Measures:

Interim Remedial Measures (IRMs) were conducted at the site based on findings as the RI progressed. An IRM is implemented when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS.

As previously mentioned an additional cache of buried drums was discovered during the course of the focused RI. To expedite the removal of this additional source of site contaminants an IRM workplan was prepared for removal of the buried drums. The excavation was conducted in November and December 1993 and resulted in removal of 200+ additional drums. Similar to the 1990 removal, most of the 1993 drums were emptied and crushed but a few of the remaining drums did contain liquid waste. The drums were cut, cleaned and stacked on a retaining platform on-site before being disposed off-site. The liquid waste was combined and disposed off-site at a commercial treatment facility. Confirmatory samples were taken from the bottom and side walls of the excavation prior to backfilling with clean soil. Excavated soils were staged on site in covered roll-offs prior to off-site disposal.

The groundwater recovery system installed in 1992 consist of six (6) pumping wells, five on-site and one off-site (Fig.3). The wells pump contaminated groundwater to the on-site treatment system. This system treats the water utilizing activated carbon prior to discharge to a nearby storm sewer. A monitoring network of over twenty (20) monitoring wells and piezometers is also in place. Water level data and groundwater quality sampling is conducted weekly. Results since the system was put in place indicate that the organic groundwater plume has been controlled by the operation of the recovery system.

3.3 Summary of Human Exposure Pathways:

A human health risk assessment was conducted during the focused RI to evaluate current and potential future health risks associated with the site. Under current conditions with restricted site access and with the groundwater recovery and treatment system operating, there are no complete exposure pathways, and the site does not pose an unacceptable risk to human health. Two receptor groups were identified under the future on-site unrestricted residential use scenario. Adult and child residents under this scenario would have complete exposure pathways for soil contact, soil ingestion, indoor vapor inhalation, and ingestion of fruits and vegetables from on-site gardening. The USEPA guidelines for hazard indices and or excess cancer risk are both exceeded for the combined impacts of the four on-site exposure pathways.

3.4 Summary of Environmental Exposure Pathways:

As part of the focused RI a Fish and Wildlife Impact Analysis (FWIA) was conducted for the Maestri Site. The FWIA was conducted in accordance with the NYSDEC Division of Fish and Wildlife's document entitled Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites (1991). Specifically, Step I - Site Description and Step IIA - Contaminant-Specific Impact Analysis, Pathway Analysis of the NYSDEC document are addressed in the report.

The FWIA concluded that the majority of the terrestrial portion of the study area is highly developed, resulting in limited biological community composition. Although complete exposure pathways were identified on-site for small mammals, such as the woodchuck, and seed/fruit eating birds, these species are expected to use the site minimally because of the poor habitat in adjacent areas. Therefore any impacts from site related contaminants to wildlife on-site are expected to also be minimal.

Downgradient surface waters (Onondaga Lake) and wetlands present in the FWIA study area are not affected by site related contaminants because migration of the contaminants is prevented by the groundwater recovery and treatment system and no other migration pathways have been identified. Therefore, off-site impacts to fish, wildlife and resources are not expected.

SECTION 4: ENFORCEMENT STATUS

The NYSDEC and the Stauffer Management Company (SMC) entered into a Consent Order on December 16, 1992. The Order obligates the responsible party to implement a full remedial program. Upon issuance of the Record of Decision, SMC has 30 days to notify the NYSDEC that it will implement the selected remedy under provisions of the existing Order on Consent.

The following is the chronological enforcement history of this site.

Date	Index No.	Subject of Order
8/31/88	A7-0139-88-01	IRM Order
12/16/92	A7-0226-90-03	Remedial Program
11/15/93	A7-0226-90-03	Mod.(Drum Removal)

SECTION 5: SUMMARY OF THE REMEDIATION GOALS

Goals for the remedial program have been established through the remedy selection process stated in 6NYCRR 375-1.10. These goals are established under the guideline of meeting all Standards, Criteria, and Guidance (SCGs) and protecting human health and the environment.

At a minimum, the remedy selected should eliminate or mitigate all significant threats to the public health and to the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

The goals selected for this site are:

- *Reduce, control, or eliminate the contamination present within the soils on site.*
- *Eliminate the potential for direct human or animal contact with the contaminated soils on site.*
- *Prevent, to the extent possible, migration of contaminants in on-site soils to groundwater.*
- *Provide for attainment of SCGs for groundwater quality at the limits of the existing site boundary.*
- *Minimize to the maximum extent practicable long-term restrictions to future site usage*

SECTION 6: SUMMARY OF THE EVALUATION OF ALTERNATIVES

Potential remedial alternatives for the Maestri Site were identified, and evaluated in the report entitled "Feasibility Study - Maestri Site; Geddes, N.Y." prepared by O'Brien & Gere Engineers for SMC. The process for development of alternatives includes the development of remedial action objectives, development of general response actions, identification of volumes or areas of contaminated media, identification and screening of remedial technologies and process options, and the assembly of remedial alternatives. Seven remedial alternatives were developed to address the remedial action objectives. The preliminary screening of alternatives step was not performed in the FS because the number of identified alternatives was a manageable number for detailed analysis. The number of alternatives given consideration and evaluated in the PRAP has been further reduced by NYSDEC to three (3) as presented herein.

Fencing, groundwater recovery and treatment, and groundwater monitoring are common components of each remedial alternative for the site. The current ground water system will continue to operate as part of each remedial alternative. There is currently a fence around the site to restrict human access to the site. The fence will be maintained until completion of the site remediation. Monitoring wells that have previously been installed will continue to be used to track contaminant concentrations in site ground water.

Therefore, the assembly of process options and remedial alternatives has focused on the approximately 8,000 cubic yards of contaminated subsurface soils surrounding the former drum disposal and excavation areas on site (Figure 4). A summary of the detailed analysis follows.

6.1 Description of Alternatives

The potential remedies are intended to address the contaminated soils at the site. Approximately 8000 cubic yards of soil from an estimated area of 100 ft. x 200 ft. on-site require remediation. The predominant soil contaminant is xylene, detected in on-site soils at a concentration of up to approximately 7,000 parts per million (ppm).

Xylene concentrations have driven the selection of remedial technologies and alternatives. The NYSDEC has established a cleanup goal of 1.2 ppm for xylene in site soils. The cleanup goal is based on a particular contaminant's ability to partition off soils into groundwater. For xylene the 1.2 ppm soil level would result in concentrations in groundwater less than the 5 parts per billion (ppb) ground water standard. Due to xylene's predominance each remedial technology and alternative was initially evaluated for its ability to treat xylene to cleanup levels. The technologies evaluated for xylene may also be applicable to other site contaminants, and given the disproportion of low concentrations of other contaminants in soil to the high levels of xylene, there is a strong likelihood that the other volatile contaminants would be rendered non-detectable after treatment. This would be verified by sampling for all site contaminants at the limits of the soil excavation and prior to redeposition of treated soil.

No Further Action
Alternative #1

The no further action alternative was evaluated as a procedual requirement and as a basis for comparison. This alternative recognizes the remedial work already completed under the previously performed IRMs. Continued operation of the groundwater system, implementation of a groundwater monitoring program, fencing, and recommended site deed restrictions, would be included in the no further action alternative.

This is an unacceptable alternative as the site would remain in its present condition, and human health and the environment would not be adequately protected. Site access and potential use would continue to be restricted. Site soils would continue to be a source of ground water contamination though the off-site impacts are minimized by the operation of the ground water system.

Present Worth:	$ 1,590,000
Capital Cost:	$ 20,000
Annual O&M:	$ 100,000
Time to Implement	30 years

In Situ Soil Vapor Extraction
Alternative #2

A series of wells would be installed in the soil to lower the water table and to draw air containing site related organic contaminants from the impacted soils. Since the contamination extends below the water table to an estimated depth of 14 ft. the area would need to be dewatered to allow the passage of air through the full extent of contamination.

The Soil Vapor Extraction (SVE) vacuum unit would draw air through the soil. The air in turn would strip the VOCs from the soil and transport the contaminants to the SVE extraction wells. The off gas from the SVE extraction wells would be directed through a treatment unit such as a carbon adsorption unit. The SVE

vacuum unit would also serve to promote bioventing in the soil. As air is pulled through the soil, oxygen availability to microorganisms would increase, thus enhancing the effectiveness of biodegradation of semi-volatile organics (those site contaminants whose vapor pressure would not be amenable to vapor extraction).

Present Worth:	$1,770,000
Capitol Cost:	$ 710,000
Annual O&M:	$ 150,000
Est. Time To Implement	10 years

Ex Situ Biological Treatment/Ex Situ Soil Vapor Extraction
Alternative #3

This alternative includes excavation of all on-site soils with contaminant concentrations in excess of site cleanup goals, on-site ex situ biological/vapor extraction treatment, and replacement of the treated soils. The soil vapor extraction component would address the volatile (VOC) fraction of the site contaminants and the biological enhancement would treat the semi-volatile organic contaminant (SVOC) fraction. Excavated soils would likely require blending and screening inside a controlled process enclosure prior to placement in windrow piles approximately 20 ft. wide and 8 ft. high. The soil piles would be underlined and covered with a flexible membrane to promote proper drainage.

In order to maintain the proper bioreactive environment, three additives to the soil piles would be provided: oxygen, water, and nutrients. Perforated piping would be placed horizontally within the piles to allow for circulation of oxygen. Provisions would be made to add moisture and nutrients to the pile as needed. A vacuum would be used to actively extract organic vapors from the pile. Drawing air through the soil and controlling moisture content and nutrients would promote biodegradation activity of site contaminants. Off gases from both the soil handling enclosure and the vapor extraction process would require treatment prior to discharge.

Treated soil would be redeposited on site and covered with a minimum of six (6) inches of clean soil. The site will then be regraded and restored, and the site fence removed.

Present Worth:	$1,570,000
Capital Cost:	$1,200,000
Annual O&M:	$ 150,000
Est. Time To Implement	5 Years

6.2 Evaluation of Remedial Alternatives

The criteria used to compare the potential remedial alternatives are defined in the regulation that directs the remediation of inactive hazardous waste sites in New York State (6NYCRR Part 375). For each of the criteria, a brief description is provided followed by an evaluation of the alternatives against that criterion. A detailed discussion of the evaluation criteria and comparative analysis is contained in the Feasibility Study.

1. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance.

Alternative #1, through natural attenuation and operating the existing ground water system over many years, may provide for attainment of NYS Class GA ground water standards for the off site groundwater plume. The alternative would not comply with NYSDEC recommended soil cleanup levels for organic contaminants.

Alternative #2 would provide for attainment of ground water standards and is expected to meet cleanup levels for Volatile Organic Contaminants (VOC) in soils over a 7-10 year period. In situ biodegradation of Semi-Volatile Organic Contaminants (SVOC) to levels meeting soil cleanup levels is uncertain for this site due to difficulties in providing sufficient oxygen and nutrients to the heterogeneous soils.

Alternative #3 would provide attainment of both Class GA ground water standards as well as on- site soil cleanup goals for both VOCs and SVOCs in a 3-5 years after the soil cleanup is completed.

2. Protection of Human Health and the Environment. This criterion is an overall evaluation of the health and environmental impacts to assess whether each alternative is protective.

Alternative #1 would be protective of human health and the environment through site use restrictions and fencing that would restrict access and potential for contact. This Alternative would provide for continued control of the groundwater plume, but does not reduce contaminants in soil from migrating to the groundwater. The risks associated with unrestricted use would remain in excess of USEPA guidelines. However, the existing conditions currently pose little potential risk to the environment.

Alternative #2 may reduce concentrations to levels which do not present unacceptable risk to human health. However, the timeframe to attain clean up levels is uncertain and some residual contamination would remain. Site fencing would be maintained throughout the remediation. Alternative #2 does not pose unacceptable risk to the environment.

Alternative #3 would reduce the risks to human health for all exposure scenarios. Concentrations of all contaminants of concern would be reduced to levels which may support future use. The time frame to attain the target clean up levels for groundwater is estimated as 3-5 years after soil cleanup. Site fencing would be maintained throughout the remediation. Following remediation the fence could be removed because access restrictions would no longer be necessary. The alternative does not pose unacceptable risk to the environment.

3. Short Term Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared with the other alternatives.

Alternative #1 involves no further remedial action other than (O&M) and monitoring. Workers performing O&M are required to wear personal protective equipment to minimize potential hazards during sampling and maintenance activities. There are no additional short-term impacts to the local community or the environment.

Alternative #2 involves a small amount of soil disturbance. As such there is a limited potential for short-term contact with soils and ground water containing contaminants during installation of the vapor extraction system. Workers would be required to wear personal protective equipment and adhere to safe construction practices

to minimize potential hazards. A network of air monitoring would be set up to ensure community protection. It is expected that the cleanup of both soils and ground water would take 7-10 years.

Alternative #3 involves excavation and handling of contaminated soils. As such, the potential for worker exposure is high. Workers would be required to wear personal protective equipment and adhere to safe construction practices to minimize potential hazards. Potential community exposure to vapors would need to be carefully addressed. An air monitoring network would be set up to ensure community protection from release of both particulate (dust) and VOC's. During design an evaluation would be made as to the feasibility to house the excavation and/or the soil processing and piles. It is estimated that the cleanup of soils would take 1-2 years and groundwater would take 3-5 years thereafter.

4. Long-term Effectiveness and Permanence.

This criterion evaluates the long-term effectiveness of alternatives after implementation of the response actions. If wastes or treated residuals remain on site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks; 2) the adequacy of the controls intended to limit the risk; and 3) the reliability of these controls.

Alternative #1 provides for deed restrictions and site access restrictions that minimize the magnitude of the residual risks to site contaminants. Risks associated with off-site migration of contaminated ground water would continue to be mitigated. The existing ground water system is adequate and reliable for collecting and remediating ground water with site contaminants. Potential risks to on-site users would remain.

Alternative #2 has uncertainties whether the in situ soil vapor extraction could minimize risks associated with potential residential use scenario, due to dense tight soils limiting the treatment capability for semi-volatiles. The site conditions create effectiveness and reliability uncertainties. The existing fencing is adequate and reliable for restricting site access, and the existing ground water system is adequate and reliable for collecting and remediating ground water with site contaminants.

Alternative #3 would effectively minimize risks associated with the potential future residential scenario. Risks associated with the off-site migration of ground water continue to be mitigated. Excavation and ex situ biological/vapor extraction treatment of site soils are expected to be adequate and reliable. Existing fencing is reliable in restricting access during remediation. The existing groundwater system is adequate and reliable for collecting and remediating groundwater containing site related contaminants.

5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative #1. The current ground water system would continue to reduce the toxicity, mobility, and volume of site related contaminants in ground water. Reduction of contaminants in site soils above the water table through natural attenuation would be minimal.

Alternative #2. In situ vapor extraction treatment would likely reduce toxicity and mobility of organic contaminants in soils. Both the timeframe and overall ability to reduce toxicity and mobility of VOCs and SVOCs to cleanup levels is uncertain due to dense site soils. The current ground water system would continue to reduce the toxicity, mobility and volume of site related contaminants in ground water. The soil vapor extraction and groundwater treatment systems would be irreversible.

Alternative #3. Ex situ vapor extraction/biological treatment within a soil pile would reduce toxicity, mobility and volume of VOC and SVOC contamination in site soils to target clean up levels. The current groundwater system will continue to reduce the toxicity, mobility, and volume of site related contamination in groundwater. The ex situ vapor extraction/biological soil, and ground- water treatment systems would both be irreversible.

6. Implementability. The technical and administrative feasibility of implementing each alternative is evaluated. Technically, this includes the difficulties associated with the construction, the reliability of the technology, and the ability to monitor the effectiveness of the remedy. Administratively, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.

Alternative #1 continues the current ground water remedial system and is easily implemented. The existing discharge limits remain in effect. Existing monitoring wells would continue to be used to evaluate the effectiveness of the system. Long term site restrictions and access agreements are required between the site owner and Responsible Party.

Alternative #2, the in-situ vapor extraction system is readily available technology and easily installed. The reliability of the technology is limited by the nature of the contaminants and by the site's low permeability and heterogeneous nature of the soils. The effectiveness of the remedy could be easily monitored by implementation of a general site monitoring program as presented in the FS. Influent and effluent monitoring of the vapor extraction and ground water systems would be required. Substantive compliance with air and water discharge limits would also be required. Coordination and access agreements with the site owner may be necessary to allow operation and maintenance of the treatment systems.

Alternative #3 would include excavation of soils to an approximate depth of 15 feet, which is well within the limits of standard practice and construction equipment. Soils would be excavated, treated in piles, and backfilled into the excavation areas. Appropriate measures would be taken to ensure that the backfilled soils would not come in contact with contaminated soil or groundwater. Groundwater infiltrating into the excavation would be collected and treated. The effectiveness of the remedy is easily monitored by implementation of a general site monitoring plan as presented in the FS. Confirmatory samples from the side walls and bottom of the excavation would determine the limits of the excavation. Influent and effluent monitoring of the ground water and soil treatment systems would be required. Substantive compliance with air and water discharge limits would also be required. Coordination and access agreements with the site owner may be necessary to allow operation and maintenance of the treatment systems.

7. Cost. Capital and operation and maintenance costs are estimated for each alternative and compared on a present worth basis. Although cost is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, cost effectiveness can be used as the basis for the final decision. The costs for each alternative are presented in Table 2.

8. Community Acceptance - Concerns of the community regarding the RI/FS reports and the Proposed Remedial Action Plan have been evaluated. The NYSDEC and NYSDOH conducted a public meeting regarding the PRAP on January 19, 1995. There were no public objections to the proposed remedy made at the meeting. In general the public was in strong support of the permanent treatment aspect of the remedy. Concerns raised during the meeting focused on the implementation details of the excavation component and how that may affect adjacent homeowners. The NYSDEC accepted written comments on the PRAP though February 11, 1995. One set of written comments was received from the homeowners on Alhan Parkway that

abut the site. A " Responsiveness Summary" was prepared that addresses the public comments received and briefly describe what measures could be taken during remediation to address the concerns raised. The Responsiveness Summary is included herein as Appendix A. The final remedy selected does not differ significantly from the proposed remedy.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

Based upon the results of the RI/FS, and the evaluation presented in Section 6, the NYSDEC has selected Alternative #3 as the remedy for this site.

This selection is based upon an evaluation of the two threshold criteria and five balancing criteria as presented in Section 6. Alternatives #1 & #2 are not fully protective of human health and the environment under the unrestricted use scenario. Alternative #2 has difficulties in meeting soil clean up objectives particularly for SVOC contamination, and the timeframe for operating the system is uncertain due to site soil conditions. Alternative #3 is effective in meeting site cleanup objectives, and protective in the long term. Short term impacts would be a potential concern but could readily be mitigated through proper controls on excavation, air monitoring, and the use of personal protective equipment for site workers. Alternative #3 uses readily implementable technology that minimizes the timeframe for remedial action objectives. Alternative #3 will result in greater than 95% reduction of all site contamination contained in both ground water and soils. Though higher in initial capital expenditures Alternative #3 is cost effective in that the time required to operate and then monitor the site is substantially less than for Alternatives #1 & #2. Alternative #3 provides the added benefit of allowing future site use with minimal restriction once all remedial activities are completed.

The estimated present worth cost to implement the proposed remedy is $1.57 million. The cost to construct this remedy is $1.20 million and the annual operation and maintenance cost for the 3-5 year operating period is $150,000/yr.

7.1 The Elements Of The Selected Remedy Are As Follows:

1. A remedial design program to verify the conclusions of the conceptual design, and provide the details necessary for construction, operation, maintenance and monitoring of the remedial program.

2. Excavation and preparation for treatment of soils that contain contaminants in excess of soil cleanup objectives. This would involve an estimated 8,000 cubic yards of contaminated soil.

3. Treatment of the soil utilizing ex-situ piles that combines vapor extraction and biological degradation of organic contamination, and collection and treatment of air discharges from the soil treatment process.

4. Redeposition of treated soils on site. Placement of 6 inches of clean top soil over the soil redeposition areas, site regrading, and restoration.

5. Continued operation of the on-site groundwater collection and treatment system with an evaluation annually until concentrations of site contaminants can no longer be effectively removed or cleanup objectives are met. Treatment will be by carbon adsorption with discharge to a nearby storm sewer.

6. Monitoring of the soil treatment, water treatment, air discharges and groundwater to ensure compliance with clean up objectives.

2 Documentation of Significant Changes

There are no significant changes from the Proposed Remedial Action Plan.

SECTION 8: HIGHLIGHTS OF COMMUNITY PARTICIPATION

Document repositories were established at the following locations for public review of project related material:

* Geddes Town Hall Woods Road Solvay, N.Y.	*NYSDEC 50 Wolf Road Albany, N.Y. 12233-7010 Attn: Mr. Gary Kline, P.E.	*NYSDEC Region 7 Office 615 Erie Boulevard West Syracuse, N.Y. 13204 Attn: Mr. Charles Branagh, P.E.

The following citizens participation activities were conducted:

- Fact Sheet, September 1994; Described results from RI activities and identified document repositories.

- Public meeting held September 22, 1994; Presented results of the RI and accepted public inquiry.

Fact Sheet, December 1994; summarized PRAP and announced public meeting on same.

- Public Meeting held January 19, 1995; Presented results of the FS and PRAP for public comment.

- Public Comment period open from December 29, 1994 through February 11, 1995 to receive comments on the PRAP.

Table 1

SUMMARY OF CONTAMINANTS IN SOIL

Focused Remedial Investigation
Maestri Site
904 State Fair Blvd.
Town of Geddes, NY

Compound	Average Soil Concentration (mg/kg)	Upper Bound Soil Concentration (mg/kg)
PCE	28.4	156
Toluene	7.7	45.3
Ethylbenzene	2.2	11.7
Xylene	1360	7070
2-Methylphenol	1	3.7
2,4-Dimethylphenol	2.3	14.7
Benzoic Acid	12.8	71.5

TABLE 2
COST ESTIMATES FOR REMEDIAL ALTERNATIVES
MAESTRI SITE
SITE # 7-34-025
NOVEMBER 1994

ALTERNATIVE #1-NO FURTHER ACTION

CAPITAL (construction) COST	- $ 20,000
EST. O&M COST	- $ 100,000/yr
TIME TO IMPLEMENT	- 30yrs
TOTAL PRESENT WORTH	- $1,590,000

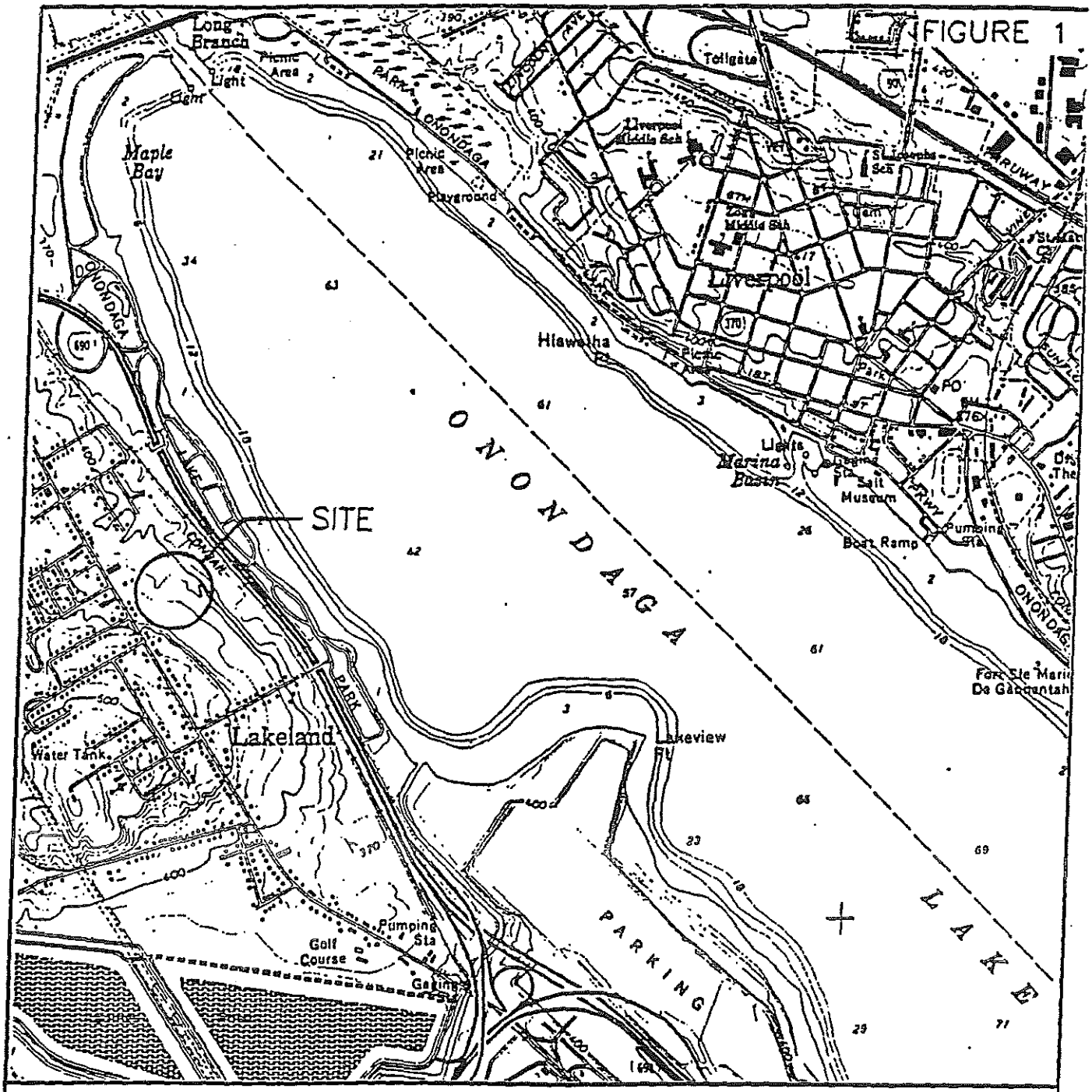
ALTERNATIVE #2-INSITU SOIL VAPOR EXTRACTION

CAPITAL (contruction) COST	- $ 710,000
EST. O&M COST	- $ 150,000/yr
TIME TO IMPLEMENT	- 10yrs
TOTAL PRESENT WORTH	- $1,770,000

ALTERNATIVE #3-EX SITU SOIL VAPOR EXTRACTION w/ BIOREMEDIATION

CAPITAL (construction) COST	- $1,200,000
EST. O&M COST	- $ 150,000/yr
TIME TO IMPLEMENT	- 5yrs
TOTAL PRESENT WORTH	- $1,570,000

FIGURE 1



FEASIBILITY STUDY
MAESTRI SITE
904 STATE FAIR BLVD.
TOWN OF GEDDES, NEW YORK

SITE LOCATION MAP

0 2000 4000

APPROX. SCALE IN FEET

ADAPTED FROM U.S.G.S. SYRACUSE WEST, NEW YORK QUADRANGLE 7.5 MINUTE SERIES

5618.001-05F
May/09/94

CUT & PASTE

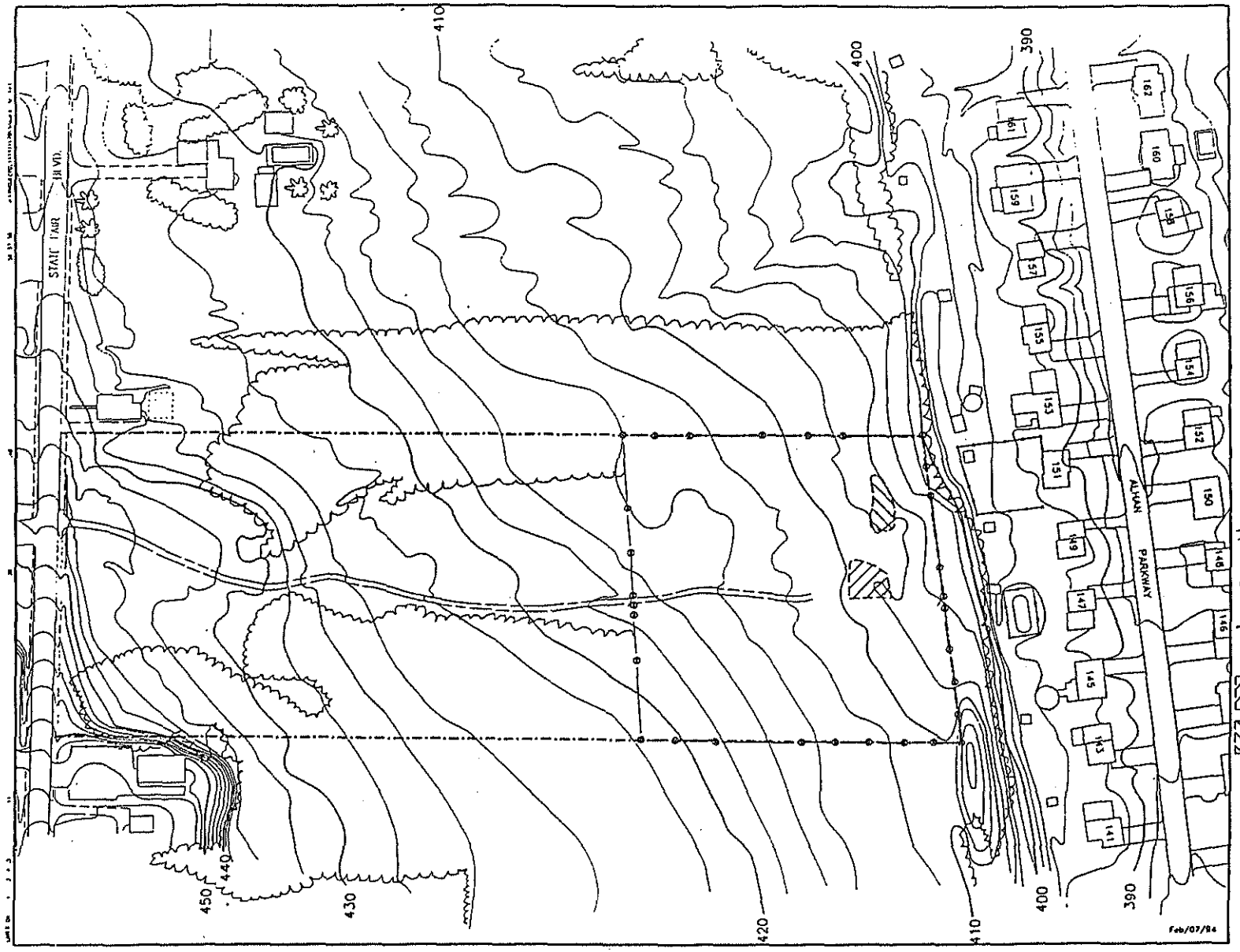


FIGURE 2

FOCUSED REMEDIAL INVESTIGATION
MAESTRI SITE
904 STATE FAIR BLVD.
TOWN OF GEDDES, NEW YORK

SITE TOPOGRAPHIC MAP

LEGEND

- TREE LINE
- ACCESS ROAD
- FENCE
- 8' HIGH SECURITY FENCE
- MAESTRI SITE PROPERTY BOUNDARY
- 150 RESIDENCE
- APPROXIMATE LIMITS OF 1987 EXCAVATION
- APPROXIMATE LIMITS OF 1990 EXCAVATION

0 100 200

SCALE IN FEET

5616.001.138

O'BRIEN & GERE
ENGINEERS, INC.

FIGURE 3

FEASIBILITY STUDY

MAESTRI SITE
904 STATE FAIR BLVD.
TOWN OF GEDDES, NEW YORK

SITE MAP
(ENLARGED)

LEGEND

- TREE LINE
- ACCESS ROAD
- MAESTRI SITE PROPERTY BOUNDARY
- FENCE
- 8' HIGH SECURITY FENCE
- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- APPROXIMATE LIMITS OF 1987 EXCAVATION
- APPROXIMATE LIMITS OF 1990 EXCAVATION
- APPROXIMATE LIMITS OF 1993 EXCAVATION

50 0 50

APP. SCALE IN FEET

O'BRIEN & GERE ENGINEERS, INC.

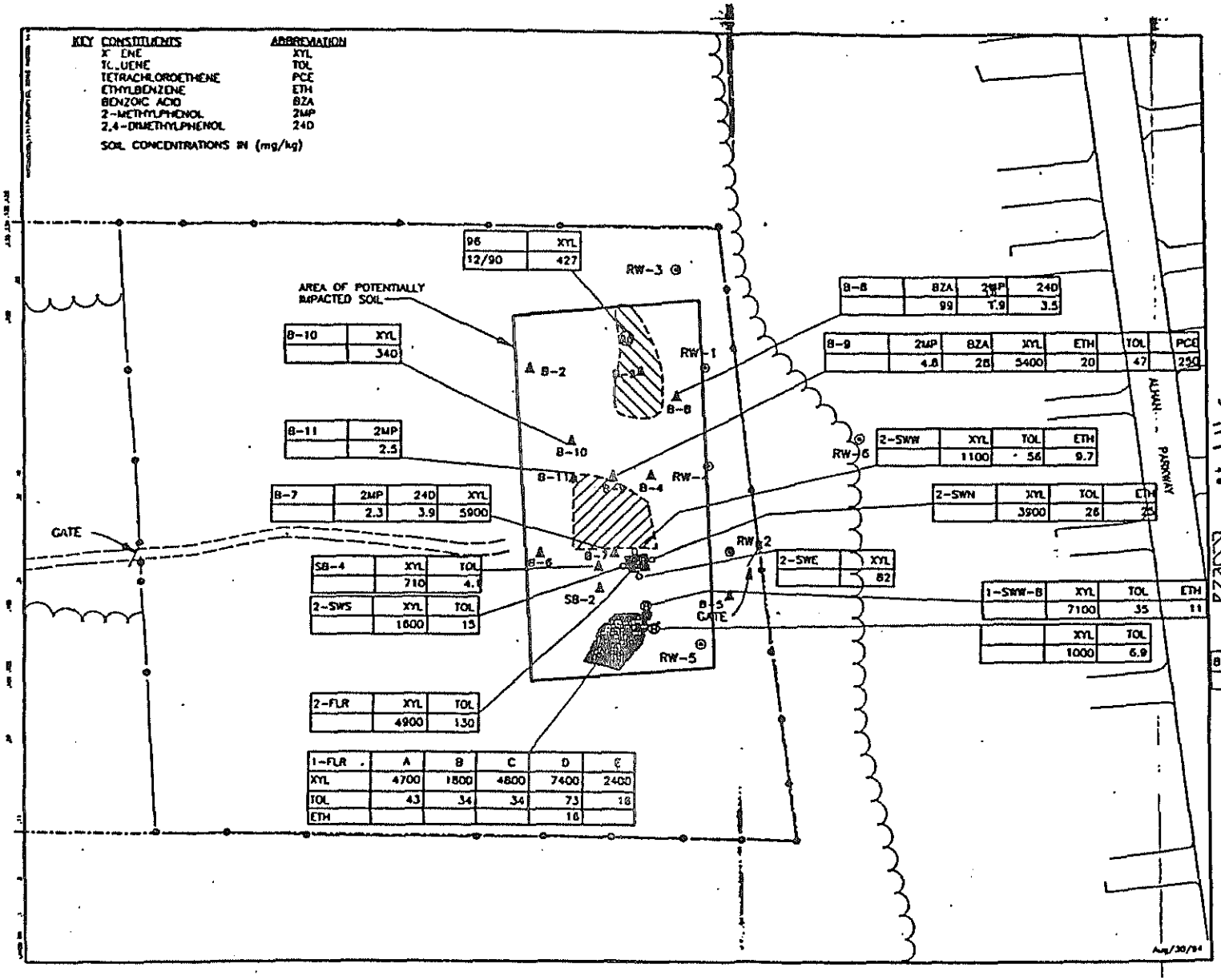


FIGURE 4

FEASIBILITY STUDY

MAESTRI SITE
904 STATE FAIR BLVD.
TOWN OF GEDDES, NEW YORK

AREA OF POTENTIALLY IMPACTED SOIL

LEGEND

- TREE LINE
- ACCESS ROAD
- MAESTRI SITE PROPERTY BOUNDARY
- FENCE
- 6' HIGH SECURITY FENCE
- SOIL BORING
- RECOVERY WELL
- APPROXIMATE LIMITS OF 1987 EXCAVATION
- APPROXIMATE LIMITS OF 1990 EXCAVATION
- APPROXIMATE LIMITS OF 1993 EXCAVATION
- SAMPLE ID

B-10	XYL
	340

CONSTITUENT
CONCENTRATION (mg/k

- B-X SOIL BORING (8/89)
- SB-X SOIL BORING (9/93)
- SWW SOIL SAMPLE TAKEN @ SIDE WALL WI
- FLR SOIL SAMPLE TAKEN @ EXCAVATION F FLOOR

50 0 50

APPROX. SCALE IN FEET

O'BRIEN & GERE ENGINEERS, INC.

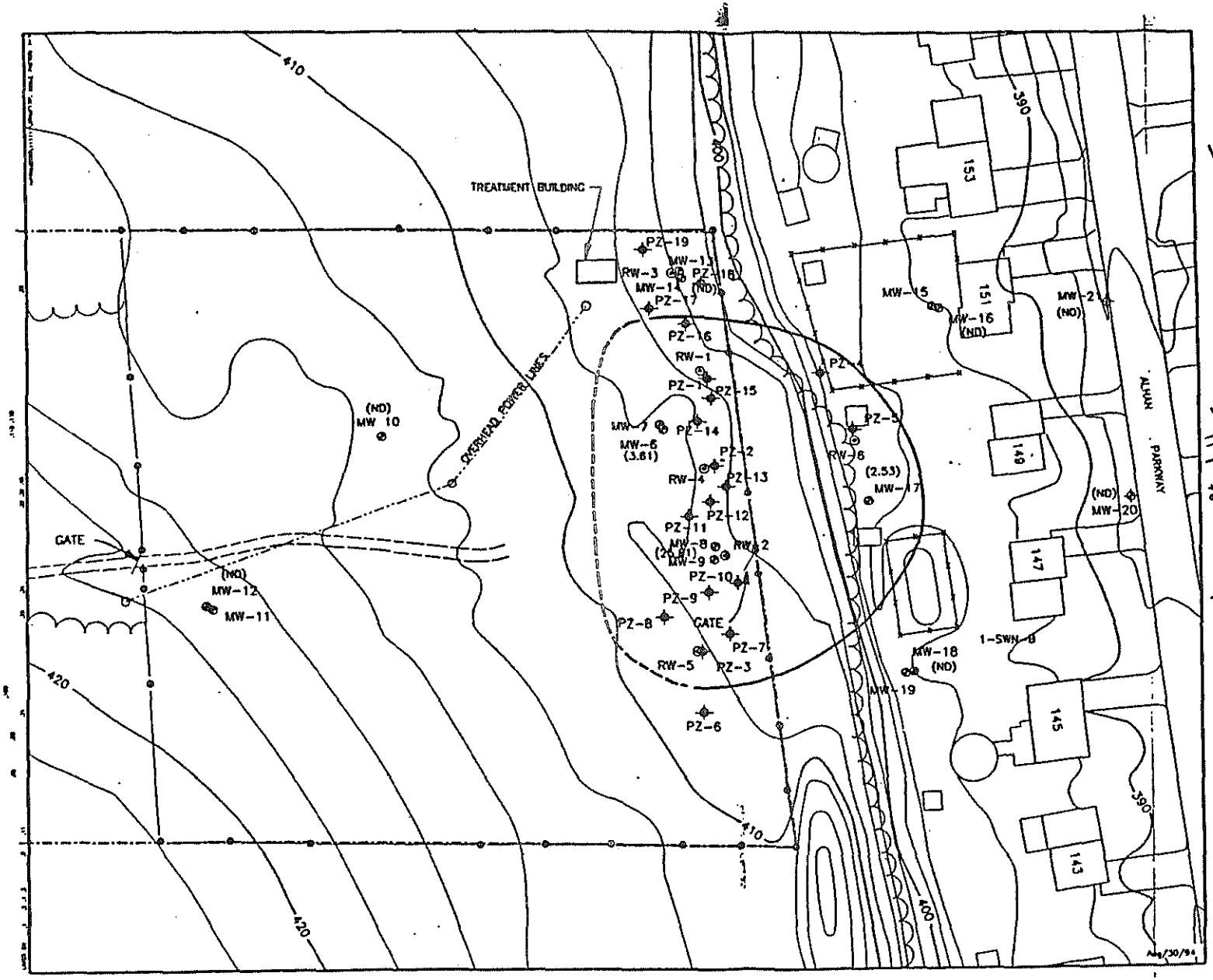


FIGURE 5

FEASIBILITY STUDY

MAESTRI SITE
904 STATE FAIR BLVD.
TOWN OF GEDDES, NEW YORK

VOLATILE ORGANIC COMPOUND GROUND WATER PLUME (JUNE 28, 1993)

LEGEND

- TREE LINE
- ACCESS ROAD
- MAESTRI SITE PROPERTY BOUNDARY
- FENCE
- 8' HIGH SECURITY FENCE
- MONITORING WELLS
- RECOVERY WELL
- PIEZOMETER
- APPROXIMATE LIMITS OF VOLATILE ORGANIC COMPOUND GROUND WATER PLUME (DASHED WHERE INFERRED)
- (3.61) TOTAL VOC CONCENTRATION IN (ppm)

NOTE: EDGES OF VOC PLUME ARE BASED ON GROUND WATER SCREENING AND GROUND WATER MONITORING WELL SAMPLING RESULTS.

50 0 50

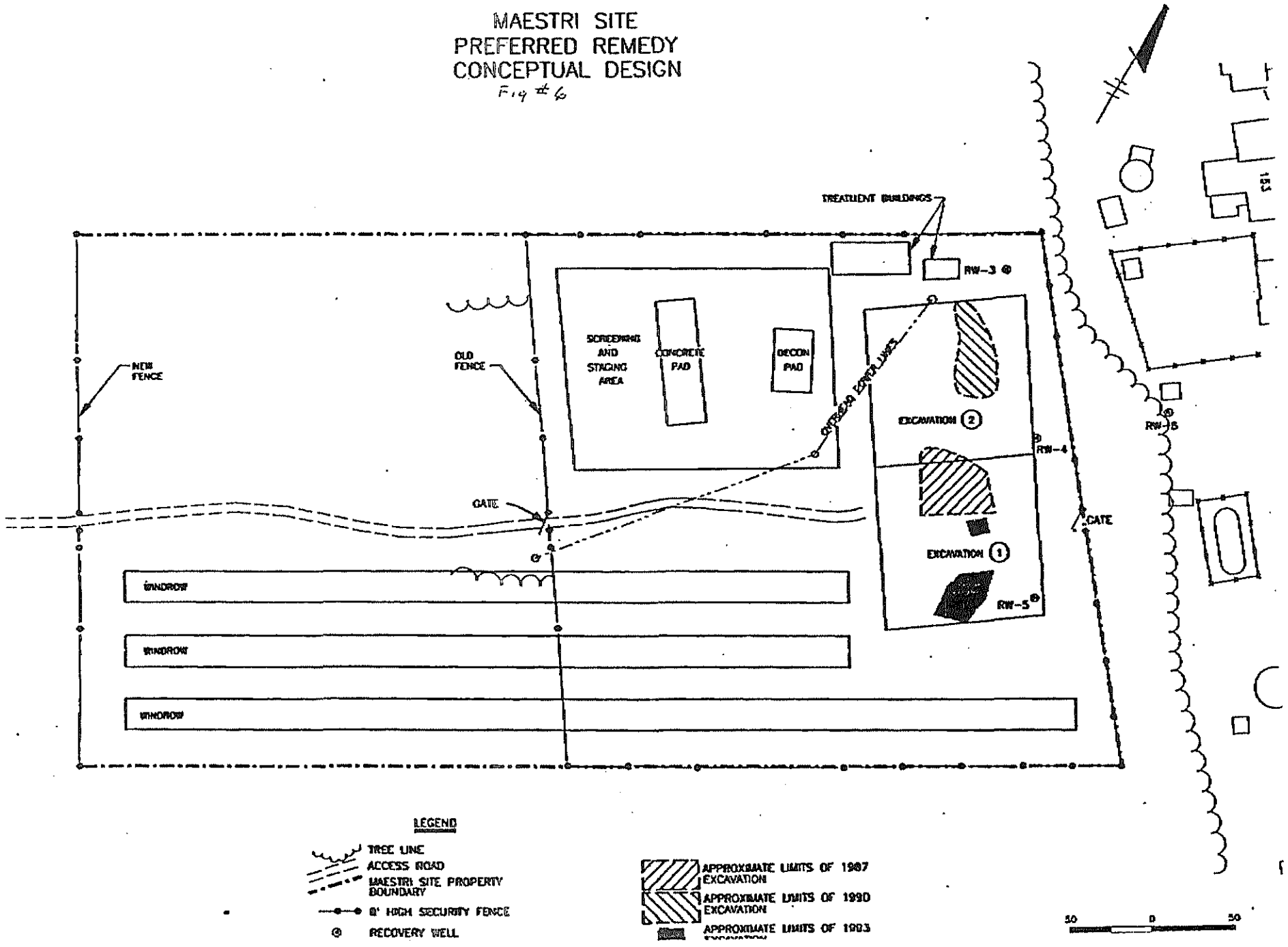
APPROX. SCALE IN FEET

3618.003-04F

O'BRIEN & GERE ENGINEERS, INC.

MAESTRI SITE
PREFERRED REMEDY
CONCEPTUAL DESIGN

Fig #6



APPENDIX A

RESPONSIVENESS SUMMARY

INTRO: Attachment number one to this summary is a list of questions submitted by the homeowners on Alhan Parkway during the January 19, 1995 public meeting. The questions and issues raised by the letter are similar to those raised verbally during the public meeting's question and answer session.

Questions from the letter and meeting have been paraphrased and answered by the following Responsiveness Summary.

1. Q. Was off-site disposal of contaminated soil evaluated in the Feasibility Study?

   A. Disposal of excavated soil off site in a landfill was evaluated in the Feasibility Study. The option was rejected due to the volume of contaminated soil, approximately 8,000 cubic yards. The cost for off-site disposal would approximately double the cost of remediation.

2. Q. What is the proposed location and nature of the process enclosures?

   A. Process enclosures are temporary structures that could house the soil conditioning equipment. Details of this construction is a design consideration, currently there are two additional on-site structures planned that will be equipped with air control systems to prevent migration of airborne contaminants. They will be constructed west of the current groundwater treatment building. The process enclosures are not intended to house the soil piles. The piles will be covered with a heavy plastic sheeting.

3. Q. How long will excavation last?

   A. The actual excavation will be short duration approximately 3-4 weeks per campaign. The site soil will be excavated and treated in two campaigns, each lasting for up to six (6) months. Plans call for one half the site to be remediated in 1996 followed by the second half in 1997.

4. Q. How will the excavated areas be controlled?

   A. Excavated areas during treatment may require stabilization. The use of off-site and/or on-site backfill will be considered during design. More likely the side slopes will be graded back to allow the hole to remain open and be used as a sump to collect precipitation and contaminated groundwater which

would be periodically pumped out for treatment at the existing on-site groundwater treatment system.

5. Q. What is the schedule for site remediation and will the neighborhood be notified?

   A. The current schedule calls for the first soil campaign to start in the Spring of 1996. The local neighborhood will be provided early notice of an anticipated start of remedial activities.

6. Q. What is the reputation and history of ex-situ bioremediation?

   A. Ex-situ bioremediation (soil piles) has been used extensively throughout the environmental industry. In particular, the oil and gasoline refinery industry has had much success remediating soil contaminated with similar compounds. Typical problems with bioremediation are usually associated with the slow down of biological activity during the cold winter months thus prolonging the remedial program.

7. Q. Will there be contingency plans for the soil treatment system? What if problems arise with odors?

   A. Contingency plans will be developed for both the excavation and treatment processes during the design stage. Air monitoring at the perimeter of the site will insure protection of the adjoining homes. Some nuisance odors during remedial activities are likely to occur. All efforts will be made to minimize problems by tight controls on the excavation through the use of plastic covers and foam, weather and wind awareness and odor control systems on the soil handling facility.

8. Q. Is there a potential for the back embankment to be undermined during the excavation? How can the homeowners be assured that there will be no property damage as a result of the remedial activities?

   A. Based on our current knowledge from past experiences excavating drums on site the embankment is believed to be sufficiently stable. A geotechnical review will be made during design to determine if the embankment and/or excavation require additional support.

9. Q. If the excavation is left open, wouldn't the hole be come saturated with runoff?

A. The excavation areas if left open will be bermed to prevent runoff from entering and will be continually pumped out. Water will be directed to the existing water treatment system.

10. Q. Will the remediation and final site regrading affect runoff and drainage?

A. Site regrading will restore the site to approximately its existing conditions. It is not anticipated that drainage or runoff problems will occur.

11. Q. Does soil "cleaned" to 1.2 ppm xylene exhibit any odors?

A. In accordance with NYSDEC TAGM 4046 soil exhibiting nuisance odor, even if it meets target numerical cleanup levels, will not be considered "clean" and therefore in the case of Maestri will be left on the soil piles for further treatment.

12. Q. How will local homes be protected from odors and contaminants?

A. A Health and Safety plan has been developed for the site which addresses precautions necessary to control chemical releases during remedial activities. This plan will be updated to meet the requirements for the proposed construction work. Potential exposure to airborne contaminants will be addressed by real time air monitoring of the remedial activities and by the installation of a site perimeter monitoring network. The monitoring network will provide early warning of possible off-site migration of airborne contaminants. Tight engineering controls on the soil excavation and soil handling will reduce the chance of off-site migration. Should exceedences occur, the activities will be either modified or halted and evaluation of the cause be undertaken.

It should be understood that odor threshold, which is one's ability to detect a volatile organic, may occur at concentrations below that which can be routinely monitored. We agree, that these " nuisance" odors are a concern for the neighborhood and efforts will be made to control them. Limiting the exposed excavation, use of plastic covers, foam, and/or water, and weather pattern awareness (temp, wind direction, etc.) are all practices which can be used effectively to limit odors. Furthermore, excavation is expected to occur during the spring and work can be done when children are in school and adults are at work. Adequate notice will be provided before the excavation

begins.

13. Q. When remediation is complete, what will happen to the site?

A. Plans call for completion of both the soil and groundwater cleanup in 5-6 years. Post remedial monitoring of the groundwater to ensure effectiveness of the program may continue for some time at a select number of wells. Pending the outcome of the remediation and monitoring the site will be either delisted, or reclassified as properly closed. Wells not used for long term monitoring will be decommissioned by pulling the casing and grouting the boreholes. It is expected that the site will be available for use with minimal or no restrictions should the cleanup prove successful.

14. Q. Has Mr. Maestri cooperated in this program?

A. Mr. Maestri has not been involved during the RI/FS process.

15. Q. What guarantees are there that there are no other barrels?

A. The investigation has used the best methods available to ascertain the location and subsequent removal of drums. Magnetometer surveys, numerous test pits and test borings have been completed over the entire site during the RI/FS.

Attachment # 2

Was disposal of the excavated soil to a landfill considered?
If it was, why wasn't it chosen?
What would be the cost of off-site disposal?

Describe the "controlled process enclosures".
What materials are they made of?
Are they temporary structures?
Where will they be?
How many will there be?
These will hold 8000 cubic yards of soil?
Will all the soil be excavated at once?
How long will the excavation take?
How will odors be controlled during the excavation process?
What will happen to the excavated areas during treatment?
Will they be backfilled with other soil?
What soil will be used to backfill excavated areas?
Where is the backfill from?
Was the backfill tested for contamination?

What time of year will the excavation happen?
Odors are worse when the weather is warm.
How much notice will the neighborhood have?
If it is planned during the cold winter months, are there alternate dates if the weather is warm?

What is the reputation of the ex-situ treatment?
Where has it been used?
What problems were encountered?
What contingency plans are in place if problems do arise? (especially with odors)

Has consideration been given to the fact that when severe wet weather occurs the backfilled area may become oversaturated and slide down the hill onto homeowner property possibly causing heavy property damage?
The excavation area is close to the embankment directly behind 147, 149 & 151 Alhan Pkwy.
Does this bank have the structural integrity to retain saturated loose soil behind it?
Should the entire hill be regraded, including the embankment, with a terraced step-like grade?
What protection is going to be provided to homeowners to protect us from mud slides?
We would like to be assured, in writing, that any property damage resulting from the treatment process will be restored to its original form.

When the treatment process is done, the soil will be redeposited and regraded. There has been a history of storm run-off and spring-melt drainage problems in the area. The Town has been approached on several occasions to remedy drainage problems. The Town has responded with regrading and the addition of several catch basins.

How will the regrading effect what the Town has done to help the run-off problem?
Will the regrading cause new run-off problems?
Are additional catch basins planned?
How will the run-off be directed to the basins?

The clean-up level for xylenes is 1.2 ppm in the soil.

Will the cleaned soil contain this concentration?
Does 1.2 ppm of xylene have an odor?
Is there any criteria for acceptable odor levels?
As a homeowner, any odor is unacceptable.
How will exposure to odors be addressed?

What happens 5 years from now when the soil and groundwater treatment is done?

Does everyone pack-up and go home and close the book?
What happens to the monitoring wells?

What guarantees are there that there are no other barrels?

What evidence do you have that leads you to think that there are no other barrels?
Has Mr. Maestri cooperated in this evaluation?

from: Larry Fisher
151 Albow P.

APPENDIX B

ADMINISTRATIVE RECORD
Maestri Site
Site No. 7-34-025

1. **Maestri Site** Investigation and Development of Interim Remedial Measures Final Report including Appendices A-H; O'Brien and Gere, September - 1992.

2. **Administrative Order on Consent No. A7-0226-90-03, Site No. 3-34-025:** Stauffer Management Company Respondent; Development of Remedial Program.

3. **Work Plan including Addendum No. 1 for Remedial Investigation/Feasibility Study**: Maestri Site; O'Brien and Gere, April - 1992.

4. **Health and Safety Plan for Remedial Investigation/Feasibility Study:** Maestri Site; O'Brien and Gere, revised November - 1992.

5. **Quality Assurance/Quality Control Plan for Remedial Investigation/Feasibility Study:** Maestri Site; O'Brien and Gere, revised November - 1992.

6. **Administrative Order on Consent No. A7-0226-90-3 Modification No. 1, Site No. 7-34-025:** Stauffer Management Company Respondent. Implementation of Interim Remedial Measure.

7. **Interim Remedial Measure Work Plan Anomaly Excavation and Removal:** Maestri Site; O'Brien and Gere, October - 1993.

8. **Health and Safety Plan Anomaly Excavation and Removal:** Maestri Site; O'Brien and Gere, November - 1993.

9. **Anomaly Excavation and Removal Final Report:** Maestri Site; O'Brien and Gere, November - 1994.

10. **Focused Remedial Investigation Report:** Maestri Site; O'Brien and Gere, February - 1994.

11. **Fish and Wildlife Impact Analysis:** Maestri Site; O'Brien and Gere, July - 1994.

12. **Groundwater Recovery System Performance Test:** Maestri Site; O'Brien and Gere, August - 1994.

13. **Feasibility Study:** Maestri Site; O'Brien and Gere, September - 1994.

14. **Proposed Remedial Action Plan:** Maestri Site; NYSDEC, December - 1994.

15. **Transcript of January 19, 1995 Public Meeting and Responsiveness Summary to Public Meeting:** NYSDEC, March - 1995; included as Appendix A to the Record of Decision.

APPENDIX E

Site Inspection Form
Well Sampling Field Record Form

enviroSPEC ENGINEERING, PLLC
16 Computer Drive West
Albany, NY 12205
Phone: 518.438.6809
Fax: 518.438.8527

Site Inspection Report

Date: _____
Time: _____

Weather	Temperature
	High _____ Low

Client	Stauffer Management Company, LLC	Project No.	E07-102
Location	Maestri Site, 904 State Fair Blvd, Geddes, NY	Inspected By:	

Please note any deficiencies, issues, or actions taken at the bottom of the page or on continuation pages

Site Security	*Circle one*			Comments/Action Required
1. Was gate closed and locked when arriving at site?	Y	N	NA	
2. Are there any holes or breaks in the fencing?	Y	N	NA	
3. Was the door to the treatment shed locked?	Y	N	NA	
4. Is the back gate closed and locked?	Y	N	NA	
5. Are there any signs of vandalism or unauthorized entry (odd tire tracks, damage to fence, strange debris [bottles, cans, etc])?	Y	N	NA	
5a. If so, explain below and notify SMC and Envirospec immediately				
Wells				
6. Are wells intact? *(except PZ-10 which has been damaged)*	Y	N	NA	
7. Are all wells covered (with lid or cap)? *(except wells noted below)*	Y	N	NA	
8. Are all wells locked? *(except wells noted below)*	Y	N	NA	
Site Maintenance				
9. Is there any garbage or debris? If so, please remove/discard.	Y	N	NA	
10. Is there visible dust?	Y	N	NA	
11. Does the grass need to be mowed?	Y	N	NA	
12. Do any areas need to be weeded or shrub cleared?	Y	N	NA	
13. Are there any bald spots in grassy areas?	Y	N	NA	
14. Are the access roads clear?	Y	N	NA	
15. Do any areas (site roads or access to wells) need to be plowed?	Y	N	NA	
16. Are there any sink holes throughout the site?	Y	N	NA	
17. Any odors onsite?	Y	N	NA	
18. Are site signs still up and visible?	Y	N	NA	
Erosion Control				
19. Is silt fence still intact and upright?	Y	N	NA	
19a. If areas need repair or erosion control installed, indicate below and contact Abscope for repairs.				
20. Is there any evidence of runoff? (i.e. water flow paths on ground)	Y	N	NA	
21. Is there any standing, ponded, or pools of water?	Y	N	NA	
22. Are there any signs of runoff at the northeast corner? *(stone area)*	Y	N	NA	
23. Is there currently any surface water runoff?	Y	N	NA	
23a. If so, describe where, approximate flow, and appearance of water below.				
Treatment System				
24. Are the breakers for the pumps still in the off position?	Y	N	NA	
25. Does effluent totalizer on the wall for still read 2846902?	Y	N	NA	
25a. If not, contact Envirospec or SMC immediately and check that effluent valve is closed.				
26. Are all critical valves in the closed position?	Y	N	NA	
27. Are there any system status alarms on the computer?	Y	N	NA	
27a. If so, describe below how they have been handled. *(this does not include well level alarms)*				
28. Are all flow values on computer "zero"?	Y	N	NA	
("Flow to sewer," "Tot flow to sewer," "tot daily flow," and "TGAL" for each well should each be "zero")				
28. Check level of sump. Does sump need to be pumped out?	Y	N	NA	
29. List water level for each recovery well as shown on computer: (total depth of well is shown in brackets)				

RW-7 [27.5']		RW-5 [24.5']	
RW-2 (not online)		RW-8 [24.5']	
RW-3 [25.3']		RW-6 [21.8']	

30. Are any recovery wells at close to overtopping? (ref total depth above)	Y	N	NA	
Upon leaving the site, check the following;				
31. Is the treatment shed locked?	Y	N	NA	
32. Were the gates closed and locked after leaving site?	Y	N	NA	

Note: Some wells cannot be locked including PZ-10, RW-3, RW-4, and RW-5.

Signature of Inspector:

Include General Site Observations and Follow-Up Actions on the Reverse

enviroSPEC ENGINEERING, PLLC
16 Computer Drive West
Albany, NY 12205
Phone: 518.438.6809
Fax: 518.438.8527

Date: _____

Time: _____

Site Inspection Report

Continuation Page(s)

Page ____ of ____

Client	Stauffer Management Company, LLC	Project No.	E07-102
Location	Maestri Site, 904 State Fair Blvd, Geddes, NY	Inspected By:	

General Site Observations:

Follow-up: *Indicate actions required, person(s) contacted, and dates for completion*

Signature of Inspector:

16 Computer Drive West
Albany, NY 12205

Phone: 518.438.6809
Fax: 518.438.8527

WELL NO _____

Date(s) _____

Weather	Temperature
	High _____ Low _____

Well Sampling Field Record

Project		Project No.	
Location			

Well Info

Well #:		Well Location:		
Well Diameter (in):		Well Condition:		
A. Total Well Depth (ft bgs):		Depth to Bedrock (ft):		
B. TOC to Grade (ft):		TOC Elevation (ft):		
C. Depth to Water TOC (ft):		G. Volume Factors:	2-inch well =	0.163 gal/ft
D. Water Column Height (ft):		*= (A + B) - C*	4-inch well =	0.653 gal/ft
E. Total Well Volume (gal):		*=D*G*	6-inch well =	1.468 gal/ft
F. Purge (3 volumes) (gal):		*=E*3*	8-inch well =	2.609 gal/ft

Purge

Purge Date:		Pump/Method:	
Purge Start Time:		Approx Flow Rate:	
Purge Stop Time:		Approx Volume Removed:	
Did well dry out?			

Sampling		Time:			
Sample ID:		pH			
Sample Method:		Temp (C)			
Sample Date:		Conductivity (mS/cm)			
Sample Time:		TDS (ppt)			

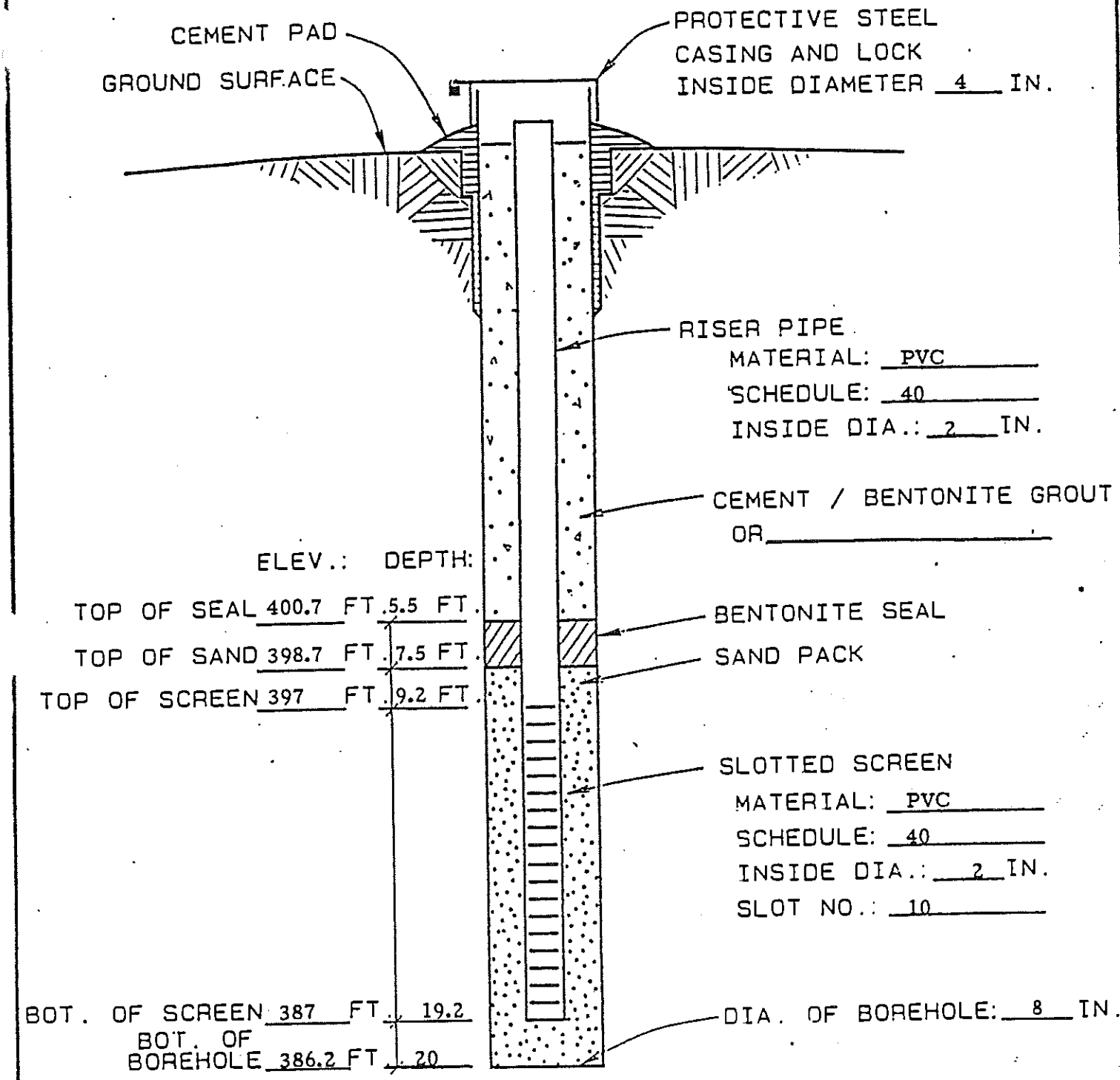
Appearance

Comments

APPENDIX F

Monitoring Wells Construction Logs

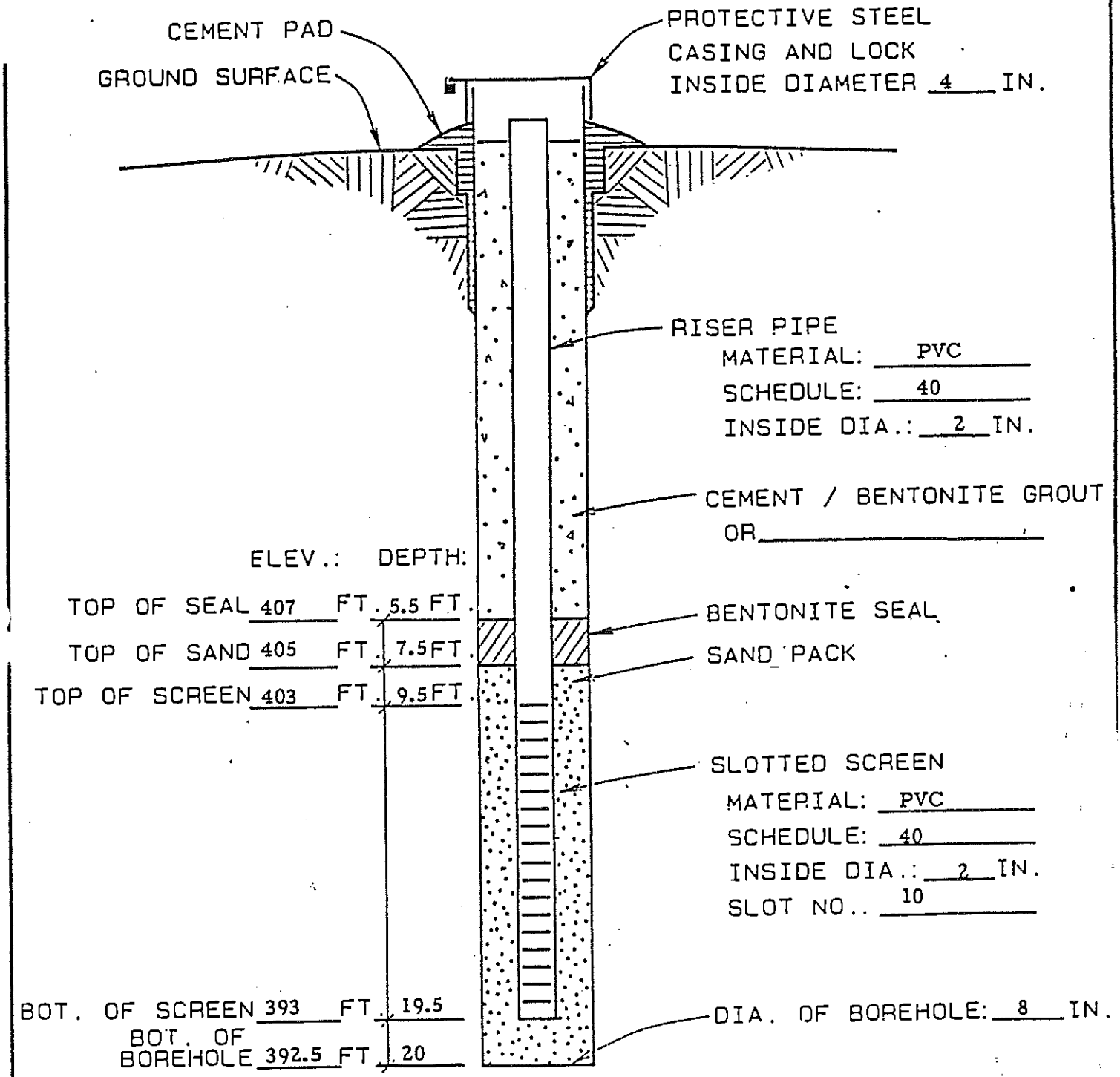
MAESTRI SITE INVESTIGATION
MW-9



TYPICAL OVERBURDEN MONITORING WELL

N.T.S.

MAESTRI SITE INVESTIGATION
MW-10



TYPICAL OVERBURDEN MONITORING WELL

N.T.S.

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

Report of Boring No. MW-10
Sheet 1 of 1

Project Location: Maestri Site Investigation
Geddes, N.Y.
Client: Stauffer Management Company

SAMPLER
Type: 3" Split Spoon
Hammer: 140 lbs. Fall: 30 inches

Ground Water Depth 6.5' Date 7/24/89
Depth 7.9' Date 7/31/89
File No.: 3213.004.576

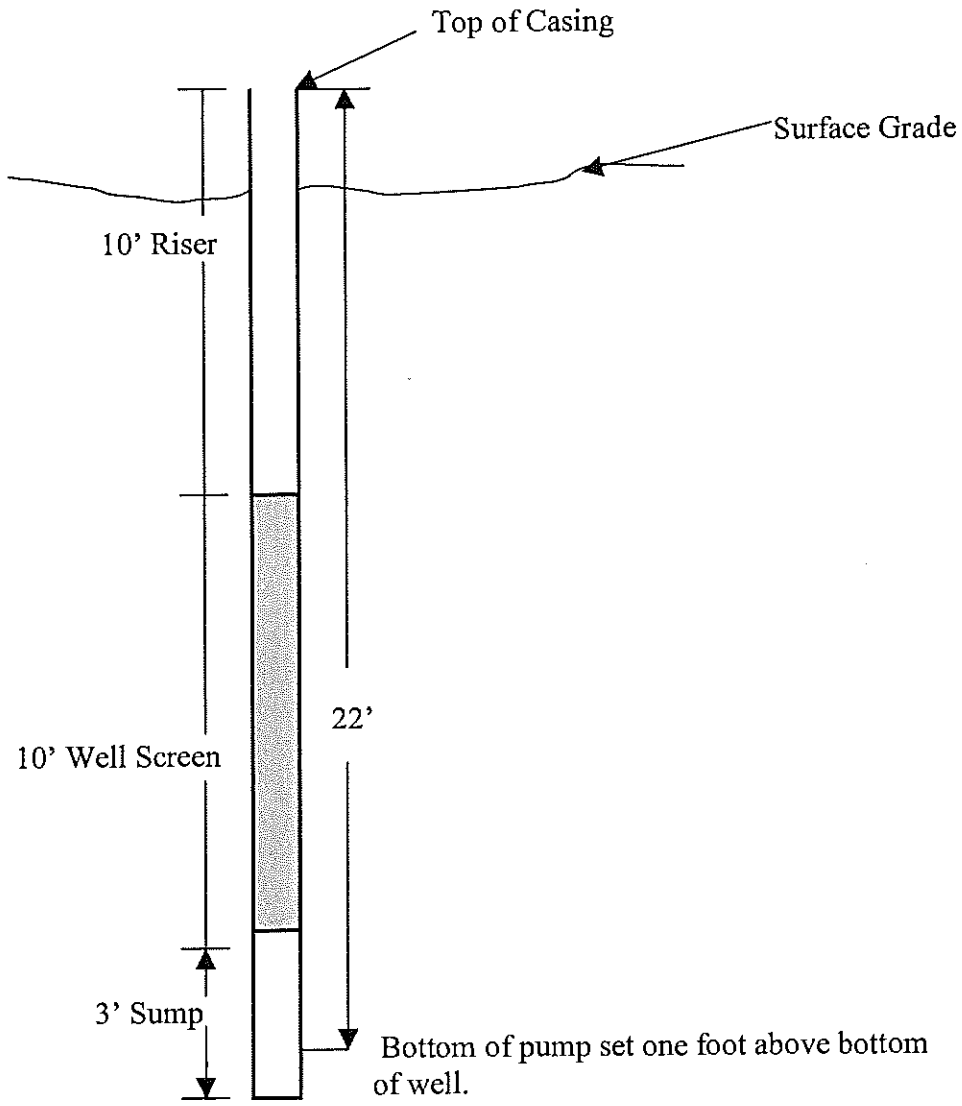
Boring Co.: Parratt-Wolff, Inc.
Foreman: Kevin White
OBG Geologist: Dennis Theoret

Boring Location: South West of main disposal area
Ground Elevation: 412.5 ft.
Dates: Started: 7/24/89 Ended: 7/25/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks
0	1	0-1.5'	2/3/7	1.5/1.0'	10	Light brown, damp, medium dense, fine/medium SAND, some silt, trace roots.					0	
5	2	5-6.5'	6/4/6	1.5/1.1'	10	- As above, no roots, very moist. Auger cuttings saturated at approx. 6.5 ft.					1.2	
10	3	10-11.5	3/8/13	1.5/1.3'	21	- As above, saturated.					0.2	
15	4	15-16.5	21/29/33	1.5/1.4'	62	Light brown, very moist, very dense, fine/medium gravel, little fine/coarse sand, little silt, trace clay. Matrix is clay, silt and fine sand.	15.8'				0	
20	5	20-20.2	50/.2'	.2'/.2'	50+	Gray green and dark gray, non-calcareous, weathered fissile SHALE.	20.0'				0	
						Bottom of boring at 20 ft.	20.4'					

MW10.KJK
8/15/89

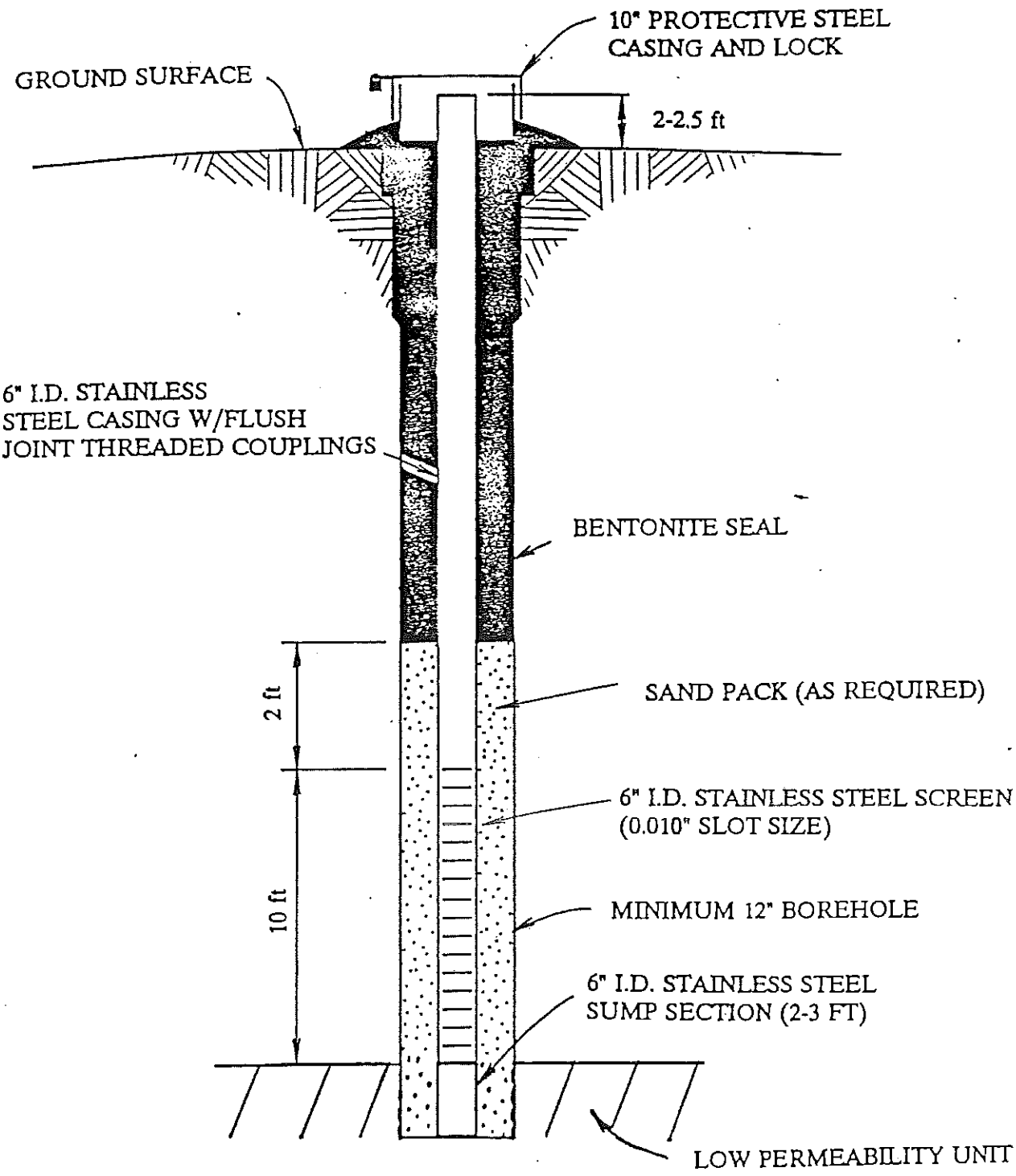
Stauffer Management Co.
Maestri Site



Not to Scale

SPEC CONSULTING
Professional Engineering Services

Maestri Site
RW-2 8" Reconfiguration

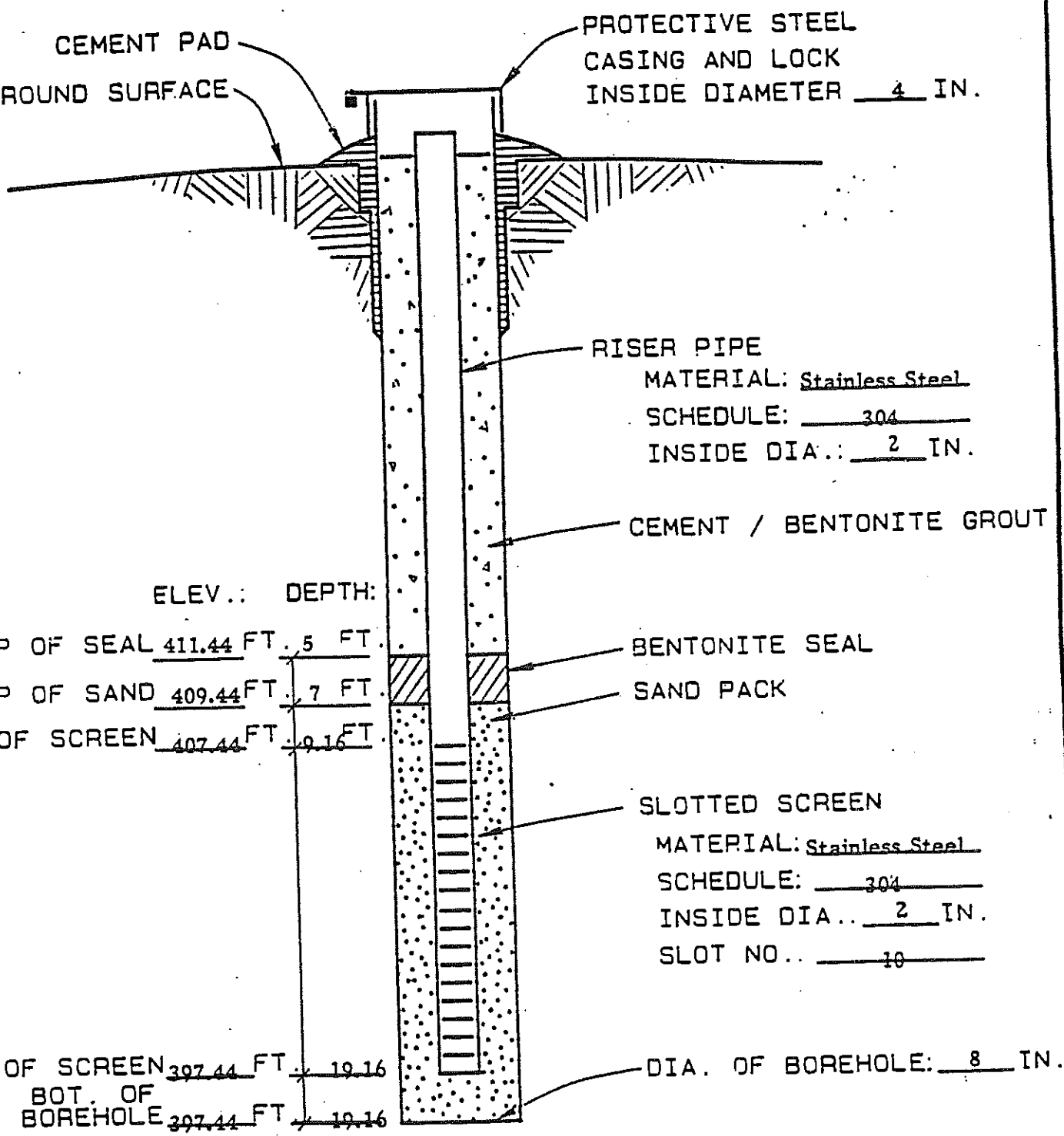


TYPICAL RECOVERY WELL

NOT TO SCALE

WELL0050 R42 L1

MAESTRI SITE INVESTIGATION
MW-12



TYPICAL OVERBURDEN MONITORING WELL

N.T.S.

O'BRIEN & GERE
ENGINEERS, INC.

TEST BORING LOG

Report of Boring No. MW-12
Sheet 1 of 1

Location: Maestri Site Investigation
Geddes, New York
ent: Stauffer Management Company

SAMPLER
Type: Split Spoon
Hammer: 140 lb. Fall: 30"

Ground Water Depth Date
Depth Date
File No.: 3213.004.577

ing Co.: Parratt-Wolff, Inc.
eman: Billy Rice
BG Geologist: Dennis R. Theoret

Boring Location: Adjacent MW-11
Ground Elevation: 416.6 Ft.
Dates: Started: 6/25/90 Ended: 6/25/90

Depth	Sample No	Sample Depth	Sample Blows /6"	Sample Penetr/ Recovry	Sample "N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Remarks
0						Augered to 19 feet without sampling. See boring log MW-11 for descriptions.						
5												
10												
15												
20						Bottom of Boring at 19 feet.	19'					

N & GERE
ERS, INC.

TEST BORING LOG

Report of Boring No. MW-14
Sheet 1 of 1

Project Location: Maestri Site Investigation
Geddes, New York

SAMPLER
Type: Split Spoon
Hammer: 140 lb. Fall: 30"

Ground Water Depth
Depth
Date
Date

File No.: 3213.004.577

ent: Stauffer Management Company

Boring Location: Northern Corner of Site, Adjacent MW-13
Ground Elevation: 404.5 Ft.
Dates: Started: 7/3/90 Ended: 7/3/90

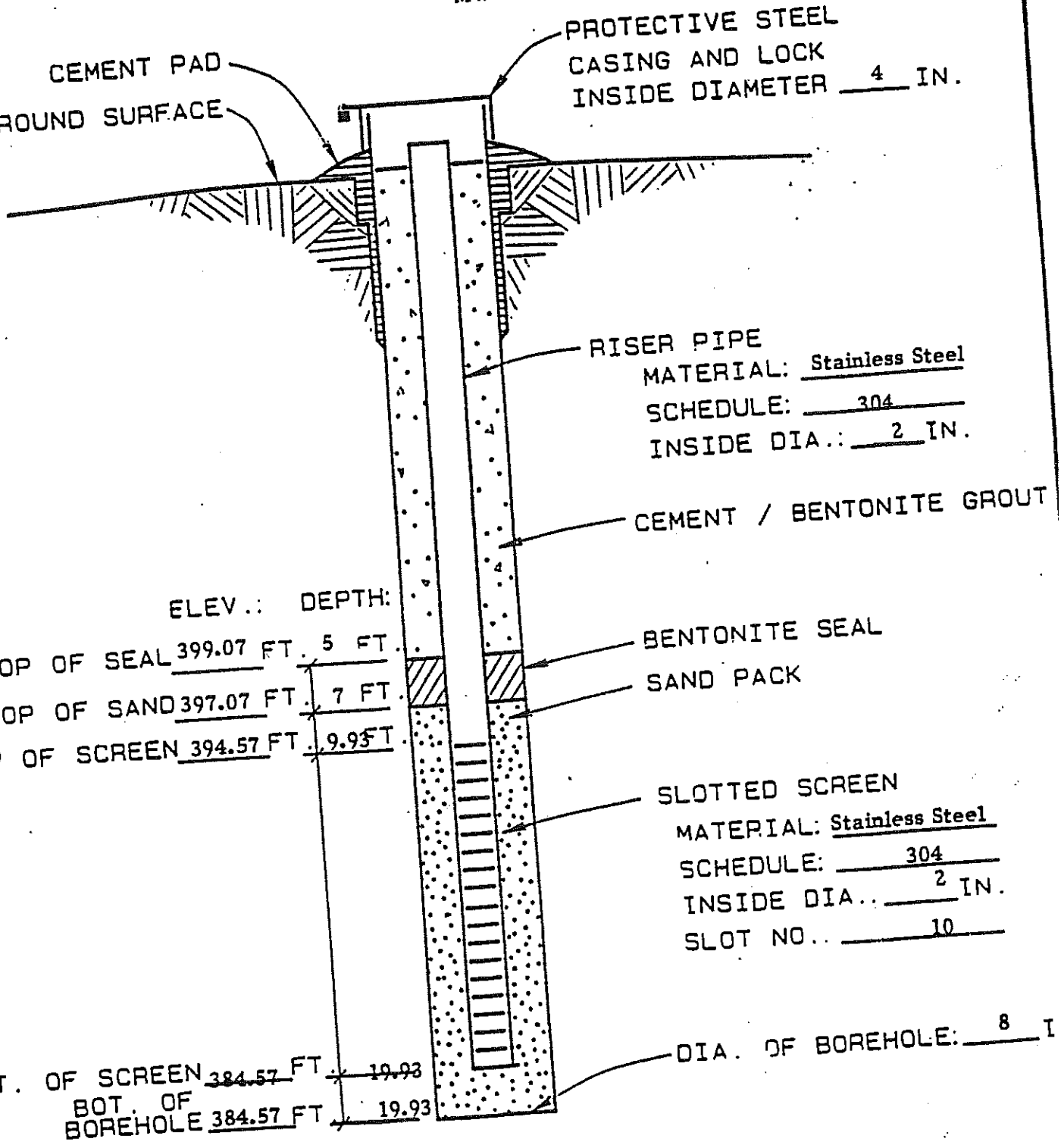
ng Co.: Parratt-Wolff, Inc.
eman: Billy Rice
Geologist: Dennis R. Theoret

pth 0	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Sp Cond	HNU	Remarks
						Augered to 19.9 feet without sampling. See boring log Mw-13 for descriptions.						
5												
10												
15												
20							19.9'					

MW14.CE

FIGURE

MAESTRI SITE INVESTIGATION
MW-14



TYPICAL OVERBURDEN MONITORING WELL

N.T.S.

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

Report of Boring No. PZ-2
Sheet 1 of 1

ct Location: Maestri Site Investigation
Geddes, New York
: Stauffer Management Company

SAMPLER
Type: 2" Split Spoon
Hammer: 140 lbs. Fall: 30"

Ground Water Depth
Depth
Date
Date
File No.: 3213.004

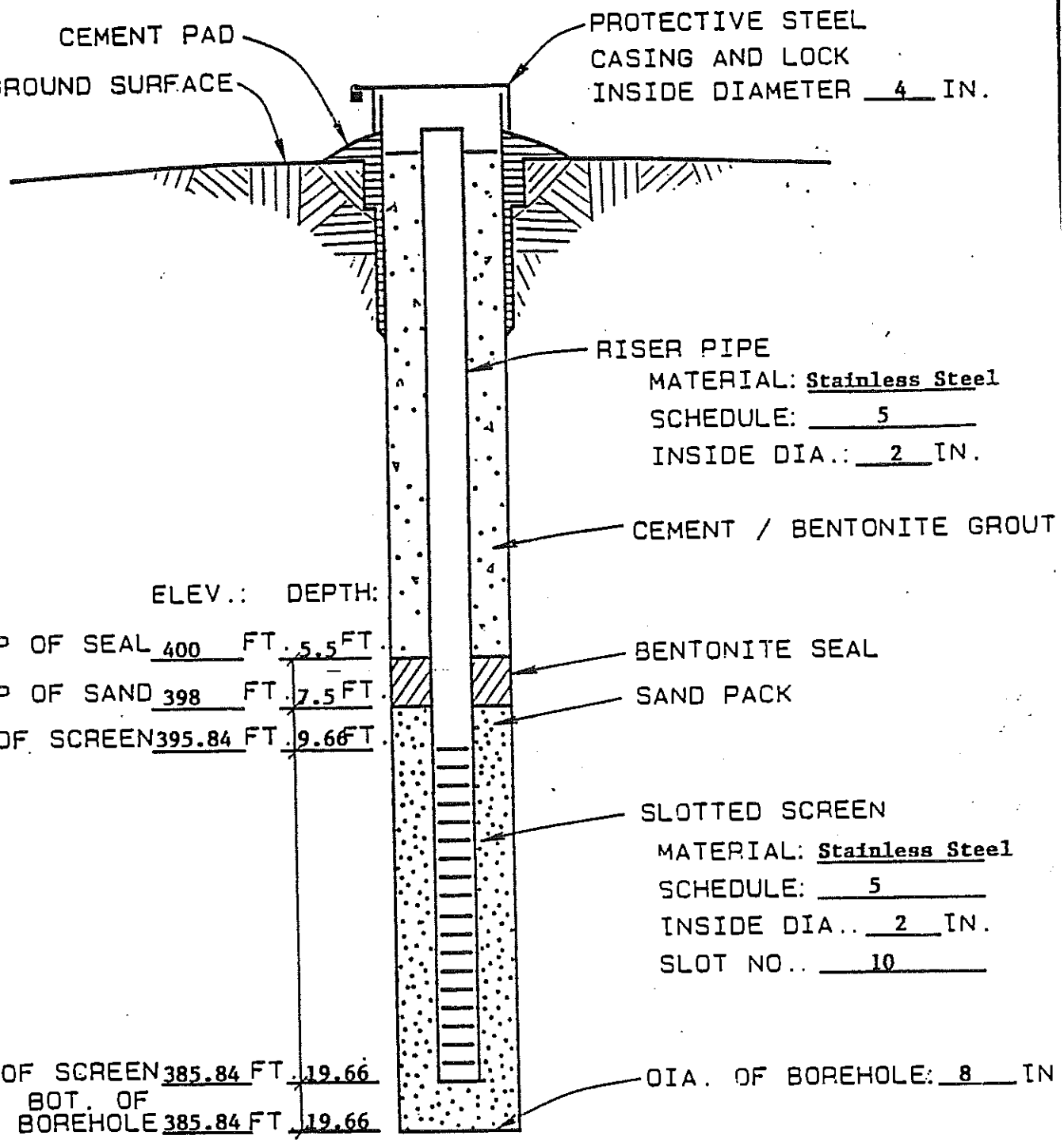
oring Co.: Parratt-Wolff, Inc.
oreman: Arnold Chappel
BS Geologist: Dennis Theoret

Boring Location: East of MW-6
Ground Elevation:
Dates: Started: 10/31/90 Ended: 10/31/90

epth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Sp Cond	HNU	Remarks
0	1	0-2'	4-5-6-6	2'/0.8'	11	Brown and reddish brown, moist SILT and very fine to medium SAND, trace fine to medium gravel						
5	2	5-7'	10-15-	2'/0.5'	35	Same as above						
			20-28				7.0'					
	3	10-12'	7-11-	2'/1.2'	25	Dark red, moist, hard CLAY, some embedded fine to coarse gravel, trace coarse to very coarse sand						
			14-20									
	4	12-13'	14-75	1'/1'	75+	Greenish brown, saturated, very dense silty very fine to medium SAND interbedded with reddish brown, medium to coarse gravel (12-13')						
	5	14-15'	11-12-	2'/2'	25							
			13-24				14.5'					
15						Reddish brown, saturated, medium dense, very fine to medium SAND, little silt At 15', Grades to medium to coarse GRAVEL and COBBLES, little medium to very coarse sand						
	6	16-18'										
	7	18-19.9	17-30-	1.9/1.9'	54							
			24-50/.4			Dark red, damp, hard CLAY, some embedded coarse to very coarse sand and fine to coarse gravel	19.0'					
20						(Bottom of boring 19.9 ft.)						

FIGURE

Maestri Site Investigation
PZ-2



TYPICAL OVERBURDEN MONITORING WELL

N.T.S.

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

Report of Boring No. PZ-3
Sheet 1 of 1

Project Location: Maestri Site Investigation
Geddes, New York
Client: Stauffer Management Company

SAMPLER
Type: 2" Split Spoon
Hammer: 140 lbs. Fall: 30"

Ground Water Depth
Depth
Date
Date
File No.: 3213.004

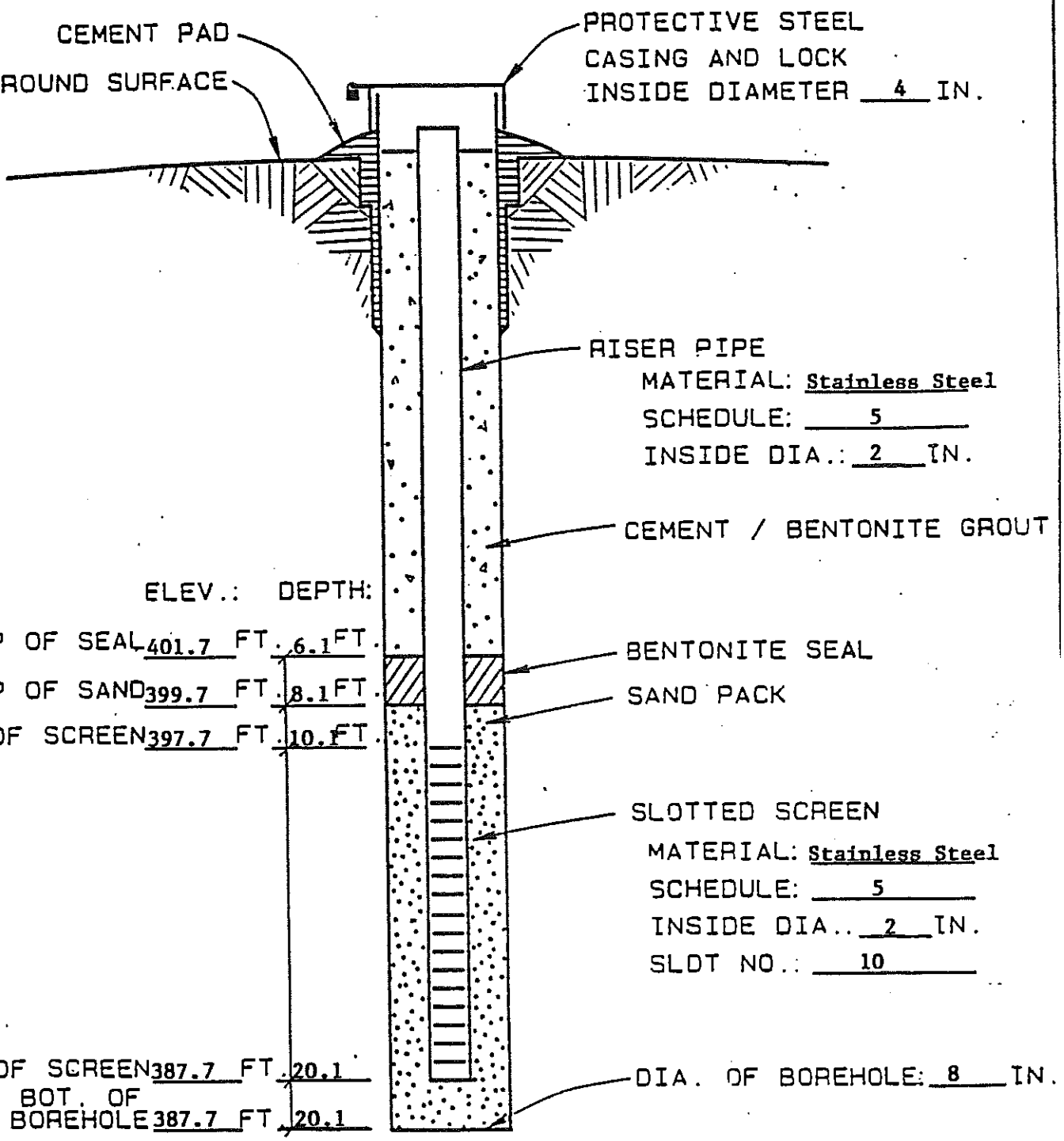
Boring Co.: Parratt-Wolff, Inc.
Foreman: Arnold Chappel
OBG Geologist: Dennis Theoret

Boring Location: Southeast of MW-6
Ground Elevation:
Dates: Started: 10/30/90 Ended: 10/30/90

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Remarks
0	1	0-2'	2-2-5-5	2'/0.8'	7	Reddish brown, very moist, stiff SILT, little very fine to medium sand, trace clay						
	2	2-4'	5-7-6-4	2'/0.9'	13							
5	3	5-6.5'	18-28-50	1.5'/1'	78		6.0'					
						Reddish brown, moist, very dense, medium to coarse GRAVEL and very fine to coarse SAND, trace silt						
	4	10-10.6	27-50/.1	0.6/0.6'		Same as above						
	5	12-12.7	42-50/.2	0.7/0.7'		Reddish brown, very moist, fine to medium SAND, trace coarse to very coarse sand (12.5')						
							14.5'					
15	6	15-17'	15-14-13-17	2'/0'	27	Reddish brown, saturated, medium dense, very fine to medium SAND, little silt						
	7	17-19'	20-22-27-20	2'/2'	47	Same as above						
	8	19-20.5	26-44-86/.5	1.5/1.5'	124+	Same as above, little coarse sand, very dense						
20							21.0'					
	9	21-23'	21-37-43-70	2'/1.5'	80	Dark, red, damp, hard CLAY, some embedded coarse to very coarse sand and fine to coarse gravel						
						(Bottom of boring 23')						

FIGURE

Maestri Site Investigation
PZ-3



TYPICAL OVERBURDEN MONITORING WELL

N.T.S.

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING RW-7

Client: Maestri Site

Proj. Loc: Town of Geddes, New York

File No.: 5618.007

Sampler: 2" Split Spoon

Hammer: 140 lb

Fall: 30 inch

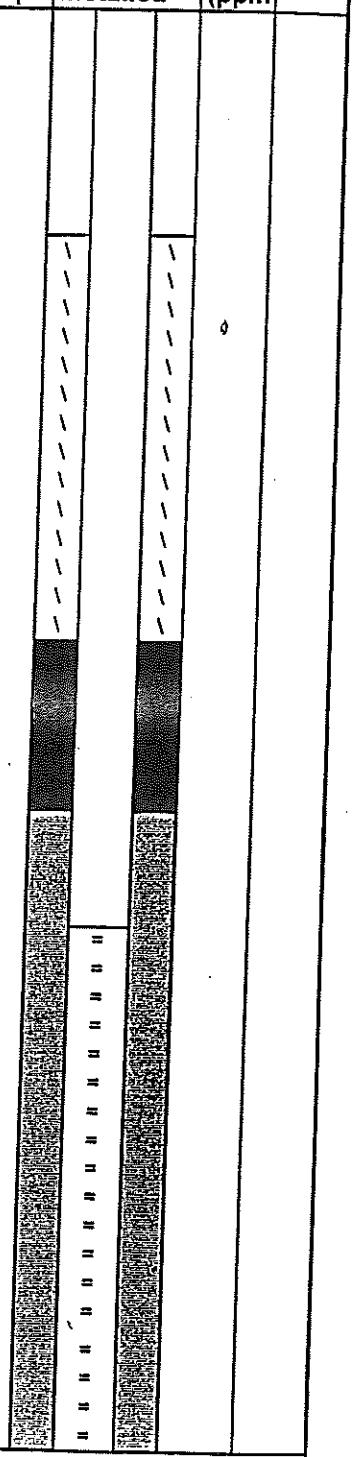
Page 1 of 2
Location:

Start Date: 6/24/96
End Date: 6/27/96

Boring Company: OP-TECH Environmental Services
Foreman: Todd Burnham
OBG Geologist: James Fitch

Screen / Riser — Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppm
		0	3	24/22"	9	Grayish brown (5YR 3/2), damp, loose, SILT, trace very fine sand and clay-grades to moderate brown (5YR 3/4), damp, SILT, some very fine SAND (matrix), little medium to coarse SAND, trace gravel - subrounded			
			4						
			5						
		2	5						
		2	2	24/15"	16	Moderate brown (5YR 3/4), damp, medium dense, SILT, some very fine sand (matrix), little medium to coarse sand, trace gravel, subrounded			
			4						
			6						
		4	4						
		4	4	24/1"	10	Poor recovery. moderate brown (5YR 3/4), damp medium dense, SILT, some very fine sand (matrix) little medium to coarse sand, trace gravel, subrounded			
			4						
			6						
		6	6						
		6	14	12/7"		Moderate brown (5YR 3/4), damp, very dense SILT, little very fine sand (matrix), some gravel and rock fragments, little medium to coarse sand			
		7	50/0.5						
		8	23	24/20"	17	Moderate brown (5YR 3/4), damp to wet, medium, dense, GRAVEL and rock fragments, some to little fine to coarse sand, trace silt and clay, angular to subrounded			
			7						
			10						
		10	56						
		10	50/0.4	5/5"		Moderate brown (5YR 3/4), damp to wet, medium, very dense, GRAVEL and rock fragments, some to little fine to coarse sand, trace silt and clay, angular to subrounded			
		10.4							
		12	28	24/24"	60	Pale brown (5YR 5/2), moist to wet, very dense gravelly medium to very coarse SAND, trace fine sand, silt and clay, angular to subrounded			
			36						
			24						
		14	28						
		14	19	24/19"	41	Pale brown (5YR 5/2), wet, dense, medium to very coarse SAND and gravel, trace fine sand, silt and clay			
			18						
			23						
		16	18						
		16	18	24/17"	50	Pale brown (5YR 5/2), wet, dense, GRAVEL and coarse to very coarse, sand, trace fine to medium sand, silt and clay, angular to subrounded			
			20						
			30						
		18	40						
		18	17	24/19"	53	Pale brown (5YR 5/2), saturated, very dense, GRAVEL and coarse to very coarse sand, trace fine to medium sand, silt and clay, angular to subrounded.			
			22						
			31						
		20	22						



O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING RW-7

Client: Maestri Site

Proj. Loc: Town of Geddes, New York

File No.: 5618.007

Sampler: 2" Split Spoon

Hammer: 140 lb

Fall: 30 inch

Location:

Start Date: 6/24/96

End Date: 6/27/96

Boring Company: OP-TECH Environmental Services

Foreman: Todd Burnham

OBG Geologist: James Fitch

Screen / Riser / Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppm
		20	29	24/24"	64	Pale brown (5YR 5/2) saturated, very dense GRAVEL and coarse to very coarse sand, trace fine to medium sand, silt and clay, angular to subrounded			
			30						
			34						
		22	45						
		22	12	24/22"	54	Pale brown (5YR 5/2), saturated, very dense GRAVEL and coarse to very coarse, sand, trace fine to medium sand, silt and clay, angular to subrounded to 23.1 ft, then grayish brown (5YR 4/2), moist, very dense SILT, some to little clay and very fine sand (matrix), little fine to coarse sand and fine to coarse gravel approximately '(in suspension), angular to subrounded to '23.5 ft then medium greenish gray, weathered SHALE with several inches mixed with above materials in pockets			X
			25						
			29						
		24	50						
		24	16	24/21"	78	Greenish gray (5GY 6/1), weathered SHALE			
			29						
			49						
		26	57						
						Bottom of boring 26.0 ft; pilot hole was advanced using 4 1/4 inch I.D. augers. Advanced 8 1/4 inch I.D. augers to 27.5 ft below grade (26.8 ft specified to driller)	27.5'		

Note: 6 1/2 ft of water on rods measured from the bottom of the split spoon when removed from a depth of 24.0 ft. A bentonite chip plug was placed '.5 to 24.3 ft, a 6-inch diameter carbon steel well sump was placed from 26.7 to 23.1 ft, a stainless steel 6-inch diameter (0.010 slot) well screen ıced from 23.1 to 13.1 ft, with a carbon steel riser, to 1.7 ft above ground. A 0 morie sand pack was placed from 24.3 to 10.8 ft, a bentonite chip seal was placed from 10.8 to 8.3 ft, and a bentonite cement grout to approximately 3 ft below ground surface.

JF:ers/4_notes/2RW-7

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LC

REPORT OF BORING RW-8

Client: Maestri Site

Proj. Loc: Town of Geddes, New York

File No.: 5618.007

Sampler: 2" Split Spoon

Hammer: 140 lb

Fall: 30 inch

Page 1 of 2

Location:

Start Date: 6/25/96

End Date: 6/27/96

Boring Company: OP-TECH Environmental Services

Foreman: Todd Burnham

OBG Geologist: James Fitch

Screen / Riser — Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppm
		0	2	24/24"	12	Grayish brown (5YR 3/2), damp, medium dense, SILT, little very fine sand, trace medium to coarse sand, gravel and clay, angular to subangular			
			5						
			7						
		2	10						
		5	2	24/21"	6	Grayish brown (5YR 3/2), damp, loose, SILT, little very fine sand, trace medium to coarse sand, gravel and clay, angular to subrounded			
			3						
			3						
		7	4						
		10	22	12/12"		Grayish brown (5YR 3/2) to moderate yellowish brown (10YR 5/4), moist to wet, fine to coarse GRAVEL, some fine to coarse sand, little silt, trace clay			
		11	50/0.5						
		12	14	24/18"	61	Moderate brown (5YR 3/4), moist to wet, very dense, fine to coarse GRAVEL, some fine to coarse sand, trace silt and clay, sub-rounded			
			35						
			26						
		14	38						
		14 to 14.5	50/0.5	6/3"		Moderate brown (5YR 3/4), saturated , very dense, fine to coarse GRAVEL, little fine to coarse sand trace silt and clay, subrounded			
		16-16.3	50/0.3	4/4"		Grayish brown (5YR 3/2), moist to slightly wet, very dense, fine to coarse SAND, some gravel, little to trace silt, trace clay			
		18	10	24/24	26	Grayish brown (5YR 3/2) to moderate brown (5YR 3/4), saturated, medium dense, medium SAND, some coarse sand, little fine sand trace silt to 19.5 ft then fine to medium sand, little silt to 19.45' then fine SAND, little silt, with 1/2 inch clayey SILT to 19.8 ft then moist grayish brown (5YR 3/2), clayey SILT, little very fine sand (matrix), trace medium to coarse sand, subrounded (in suspension) moderately plastic			
			12						
			14						
		20	19						
		20	15	24/22"	49	Grayish brown (5YR 3/2) saturated, dense, clayey SILT, little very fine sand (matrix), some to little medium to coarse sand and gravel (in suspension) subrounded to angular, changes at 21.3 ft to greenish gray (5GY 6/1), damp, very weathered SHALE, soft, fissile with clayey component, mixed in pockets with above material to 21.8 ft	20.9'		
			22						
			27						
		22	48						

ent cobbles between 11 and 18 feet. Noted 4 1/2 feet of water on rods when measured from tip of spoon driven to 20 ft depth.

JF:ers/4_notes/RW-8

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING RW-8

Client: Maestri Site

Proj. Loc: Town of Geddes, New York

File No.: 5618.007

Sampler: 2" Split Spoon

Hammer: 140 lb

Fall: 30 inch

Location:

Start Date: 6/25/96

End Date: 6/27/96

Boring Company: OP-TECH Environmental Services

Foreman: Todd Burnham

OBG Geologist: James Fitch

Screen / Riser

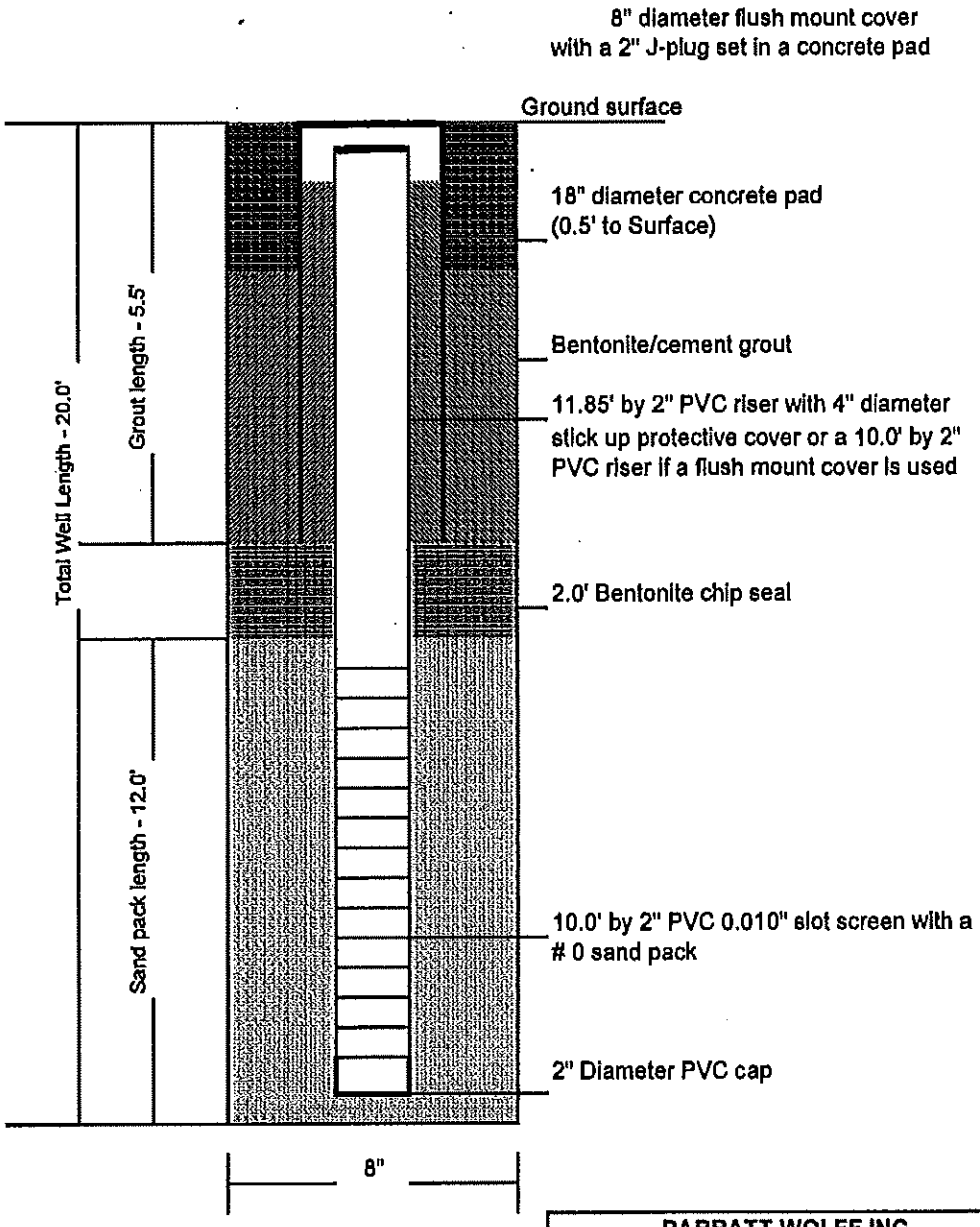
Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppm
		22	13	14/14		Greenish gray (5GY 6/1), damp, very dense, very weathered SHALE, soft, fissile with clayey component.			
			26						
		23.2	25/0.2						
						Bottom of boring at 24.5'			
						Bottom of pilot hole at 23.3 ft using 4 1/4 inch I.D. augers. Advanced 8 1/4 inch I.D. augers to 24.5 ft below grade (23.5 ft specified to driller).			
						Backfilled bentonite chips to 20.9 ft while seating well.			

...onite chip plug was placed from 24.5 to 20.9 ft, a 6-inch diameter carbon steel well sump was placed from 23.4 to 19.8 ft, a stainless steel 6-inch diameter (0.010 slot) well screen was placed from 19.8 to 9.8 ft, with carbon steel riser to 2.5 ft above ground. A 0 morie sand pack was placed from 20.9 to 7.5 ft, a bentonite chip seal from 7.5 to 4.8 ft and bentonite grout up to approximately 3.5 ft.

JF:ers/4_notes/2RW-8

P2-20.



PARRATT-WOLFF INC.	
PIEZOMETER P-1 FORMER MAESTRI SITE GEDDES, NEW YORK	
NOT TO SCALE	MAY 2009

APPENDIX G

Sampling, Analysis, and Monitoring Plan

5618.005

Report

Sampling, Analysis, and Monitoring Plan
Soil Remediation Project
Maestri Site
Geddes, New York

Stauffer Management Company
Wilmington, DE

January 12, 1996

O'BRIEN & GERE ENGINEERS, INC.

5000 Brittonfield Parkway
Syracuse, NY 13221

Contents

1. Introduction

1.1. General

This Sampling, Analysis, and Monitoring Plan is written in accordance with Section 3.3.7 of the Remedial Design/Remedial Action (RD/RA) Work Plan dated July 1995 and the Order on Consent. Presented herein are the tasks and analytical requirements for monitoring the effectiveness of the soil remediation project at the Maestri Site located in Geddes, New York (Figure 1). The plan identifies the matrices to be sampled, analytical methods to be used, sampling frequency, quality assurance and quality control measures, and reporting requirements.

Data collected during these efforts will be used for the following:

- To assess the pre-mechanical screening concentrations of volatile organic compounds (VOCs) and semi-VOCs (SVOCs) in the soils;
- To assess the concentrations of VOCs and SVOCs, if any, remaining in the excavation (verification sampling) following removal of soils exhibiting VOCs and SVOCs above the remedial action objectives (RAOs) established for the site;
- To evaluate the effectiveness of the mechanical screening component of the soil remediation activities for the removal of VOCs from the soils;
- To evaluate the effectiveness of the bioremediation/soil vapor extraction (BIO/SVE) soil pile component of the soil remediation activities for the removal of VOCs and SVOCs from the soils; and
- To document that the modifications to the ground water treatment system have not resulted in a release of VOCs or SVOCs above the New York State Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) effluent limits.

2. Soil sampling during construction

2.1. Excavated soils sampling

WHAT IS PID EQUIPMENT UNIVE?

Sampling and analysis of excavated soils will involve initial screening at the excavator bucket by the Contractor for the upper four feet of the excavation using a photoionization detector (PID). Soils removed from 1987, 1990, and 1993 excavations are exempt from the sampling requirements specified herein. Soils will be segregated based on PID concentrations and placed into 200 cubic yard (cy) stockpiles designated as either "contaminated" or "potentially contaminated" until more thorough testing can be performed. After the soil is placed in these stockpiles, four samples (three grab and one composite sample) will be collected from each pile designated "potentially contaminated" and analyzed for VOCs using EPA Method 8010/8020. If the concentrations of VOCs in the soils exceed the RAOs, the entire 200 cy soil stockpile will be processed through the mechanical screening system. However, if the concentrations of VOC in the soil are less than the RAOs for the site, the four soil samples will then be analyzed for SVOCs using EPA Method 8270. If SVOC levels also meet the RAOs, the soil will be stockpiled for use as "clean" backfill within the excavation. However, if the soil VOC or SVOC concentrations in the soil exceed the RAOs, the soil pile will later be designated to require treatment in a bioremediation/soil vapor extraction pile (BIO/SVE) soil pile.

Soils below four feet will be excavated and treated on site.

2.2. Excavation verification soils sampling

A 30 ft. grid pattern (as shown on the Contract Drawing G-8) will be established in the field and will be used in connection with excavation verification sampling. After excavating to the predetermined horizontal and vertical limits shown on the Contract Drawings, a photoionization detector

will be used to assess the need for additional excavating. Once PID measurements indicate that the RAOs may have been achieved, a soil sample will be collected by the Contractor at each node of the grid which represents a soil sampling point. The samples will be analyzed for VOCs using EPA Method 8010/8020, and SVOCs using EPA Method 8270. The purpose of this soil sampling and analyses is to document that the soils exhibiting VOCs and/or SVOCs above the RAOs have been removed to the extent practicable.

Following sampling and analyses at each of the grid nodes, the analytical results will be compared to the RAOs established for the Site and presented in Table 2. If any of the samples exhibit VOCs and/or SVOCs above the RAOs, the soils (in one to two feet lifts) at each of the grid nodes and extending 3/4 the distance to the next "clean" grid node will be removed. Following removal of the additional soils, soil sampling and analyses at the grid node will be re-performed by the Contractor as described above.

2.3. Mechanical screening soil sampling

Following processing of soils through the mechanical screening system, the soil stockpiles will be sampled and analyzed for VOCs and SVOCs using EPA Methods 8010/8020 and 8270, respectively. Two samples will be collected for every 200 cy pile processed to assess the concentration of VOCs/SVOCs within the soil pile. If the VOC concentrations exceed the RAOs for the Site, further mechanical screening of the soils will be performed. If the SVOC concentrations exceed the RAOs for the Site, the soils will be staged for treatment in a bioremediation/soil vapor extraction pile. Following processing, if the soils do not exhibit VOCs and SVOCs above the RAOs, the soils will be used later as backfill material.

2.4. Soils staged for bioremediation/soil vapor extraction treatment

Following mechanical screening, soils exhibiting VOC/SVOC concentrations above the RAOs will be stockpiled for treatment through bioremediation/soil vapor extraction (BIO/SVE) soil piles. The soils sampling and analyses to be performed to prepare the soils for BIO/SVE pile treatment are presented in Table 3.

3. Air sampling during construction

3.1. Health and safety plan sampling and analysis

The Contractor's Health and Safety Plan (HASP) will include an air monitoring plan describing specific air sampling and analysis, and monitoring procedures to be implemented during completion of the remedial actions. The Contractor will be required to, at a minimum, perform the following items and address these items in the HASP:

ARE WE EXCAVATING OUTSIDE ENCLOSURE? →

- Wind direction will be monitored each day that soil handling activities are occurring outside the environmental enclosures.
- Real-time monitoring (i.e. photoionization detector) for VOCs and particulates (minimum) will be performed at the Site within the enclosures, and along the perimeters of the work zone and Site.
- Verification sampling and analyses for VOCs and particulates (using Tedlar bags or charcoal tubes) will be performed at the Site within the enclosures, and along the perimeters of the work zone and Site.

3.2. Air exhaust

The Contractor will be required to monitor air exhausted from the environmental enclosure to assess the effectiveness of the air treatment system and document that VOCs and air treatment system particulates are not being released above NYSDEC requirements established for the project. At a minimum, air sampling and analysis of the exhaust from these systems will be performed daily for the first week and then on a weekly basis during completion of the soil excavation and mechanical screening activities.

4. Ground water treatment system sampling

4.1. General

During construction, the Contractor will be required to sample and analyze the effluent from the ground water remediation system in compliance with the Monitoring Requirements established by the NYSDEC under the State Pollution Discharge Elimination System (SPDES) fact sheet. Present requirements are included in Appendix A. Analysis of pH will be performed in the field at the time of the effluent sample collection. The analytical results will be transmitted to the NYSDEC in accordance with the SPDES fact sheet reporting requirements. The Contractor will be responsible for operating the ground water remediation system so that the effluent complies with the Effluent Limitations established by the SPDES fact sheet.

5. Bioremediation/soil vapor extraction piles monitoring

5.1. General

This section presents the air, water, and soil sampling and analyses that will be required during the construction and operation of the (BIO/SVE) soil piles.

5.2. Air sampling and analysis

Air sampling and analysis, and monitoring will be performed to assess biological activity, and document VOC concentrations in the exhaust from the biopiles and air treatment system.

Specifically, the following air monitoring, sampling and analyses will be performed:

- Air flow rate extracted from each of the biopiles;
- Air sampling the soils within the biopiles for oxygen and carbon dioxide; and
- Air sampling the exhaust from the BIO/SVE soil pile and exhaust from the granular activated carbon canisters prior to discharge to the atmosphere.

Table 5 presents a summary of the air sampling to be performed during the BIO/SVE soil pile remediation.

6. Quality assurance/quality control

6.1. General

This section presents an overview of the quality assurance/quality control program that will be performed as part of this project.

6.2. Sampling handling

Samples for chemical analysis will be collected and placed in labeled containers provided by the laboratory. The laboratory will pre-label sample containers with the following information: project name, preservation if applicable, and analyses to be performed. Sample labels will have sufficient space for the sampling team to record the following information: sample identification, data and time of collection, and initials of sampling team. Sample containers for water analyses will be pre-preserved. Samples will be uniquely identified for each sample location. This numbering system will provide a tracking procedure to allow retrieval of information regarding a particular sample.

Prior to sample shipment, preserved samples (except volatile organics) will be checked with pH paper to verify sample preservation. Samples requiring refrigeration will be transferred to coolers packed with ice and ice packs to maintain the temperature inside the cooler at approximately 4 °C.

6.4. Sample custody

Chain of custody procedures will be instituted and followed throughout this project. These procedures include field custody, laboratory custody. When the information has been gathered, the file will be inventoried, numbered, and stored for future reference.

Chain of custody records will be initiated in the field when sample collection has been completed. In the field notebook, samplers will note meteorological data, equipment employed for sample collection, well evacuation techniques, calculations, and information regarding collection of QA/QC samples. The following physical information will be recorded in the field notebook, on sample labels, and on chain of custody records by the field sampling team:

- project identification
- sampling location
- required analysis
- date and time of sample collection
- type of sample (matrix)
- sampling technique
- preservation used if applicable
- initials of the sampler.

The field sampler signs the chain of custody when relinquishing custody and includes the form in an air-tight plastic bag in the sample cooler with the associated samples. Sampling containers will be packed in styrofoam sheets, and put in plastic bags to help prevent breakage and cross-contamination. Samples will be shipped in coolers containing ice and ice packs to maintain inside temperature at approximately 4 °C. If commercial vendors are used, they will be required to document the transfer of the package within their organization.

7. Reporting

7.1. General

The Contractor will be required to present all analytical reports to the Engineer upon receipt. In addition, the Contractor will be required to prepare weekly reports that are to include the following information:

- Copies of laboratory reports and chain of custody records prepared since the last weekly report.
- A tabulation of results for each matrix sampled.
- A summary of the upcoming sampling and analysis, and monitoring activities to be completed over the next month.
- A summary of any violations/exceedences to the permit limits of other requirements established for the project, and description of actions taken to correct and/or remedy the violation.

Tables

Table 1
Data - 1995
Volatile Organic Compounds
Maestri Site
Geddes, New York

Sample ID Number:	B-12	B-12	B-13	B-14	B-15	B-16	B-16	B-17	B-17	B-18
Sample Depth (ft):	4-6'	22-24'	10-12'	6-8'	8-10'	8-10'	16-18'	8-10'	14-16'	6-8'
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1.1 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.11 U	0.001
Ethylbenzene	1.1 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002	0.001 U	0.11 U	0.001
Toluene	1.1 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.11 U	0.001
Xylene	41	0.47	0.004 U	0.003 U	0.004 U	0.003	0.2	0.003 U	0.28	0.004

NOTES: All analytical values measured in mg/kg.
U - below detection limit.
Analytical quantitation limits are sample specific and may vary.
Quantitation limits for each sample and analyte are presented in laboratory reports.

Table 1
Data - 1995
Volatile Organic Compounds
Maestri Site
Geddes, New York

Sample ID Number:	B-19	B-20	B-21	B-21	B-22	B-23	B-23	B-24	B-25	B-25
Sample Depth (ft):	14-16'	10-12'	16-18'	20-22'	12-14'	12-14'	14-16'	8-10'	10-12'	18-20'
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.11 U	0.001 U	0.001 U	0.001
Ethylbenzene	0.001 U	0.001 U	0.002	0.001 U	0.001 U	0.001 U	0.11 U	0.001 U	0.001 U	0.001
Toluene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.11 U	0.001 U	0.001 U	0.001
Xylene	0.004 U	0.003 U	0.21	0.004 U	0.003 U	0.003 U	0.37	0.003 U	0.004 U	0.003

NOTES: All analytical values measured in mg/kg.
U - below detection limit.
Analytical quantitation limits are sample specific and may vary.
Quantitation limits for each sample and analyte are presented in laboratory reports.

Table 1
Data - 1995
Semi-Volatile Organic Compounds
Maestri Site
Geddes, New York

Sample ID Number:	B-12	B-12	B-13	B-14	B-15	B-16	B-16	B-17	B-17	B-18	B-18
Sample Depth (ft):	4-6'	22-24'	10-12'	6-8'	8-10'	8-10'	16-18'	8-10'	14-16'	6-8'	12-14'
2-Methylphenol	0.36 U	0.36 U	0.43 U	0.35 U	0.39 U	0.38 U	0.4 U	0.34 U	0.37 U	0.4 U	0.36 U
4-Methylphenol	0.36 U	0.36 U	0.43 U	0.35 U	0.39 U	0.38 U	0.4 U	0.34 U	0.37 U	0.4 U	0.36 U
2,4-Dimethylphenol	0.36 U	0.36 U	0.43 U	0.35 U	0.39 U	0.38 U	0.4 U	0.34 U	0.37 U	0.4 U	0.36 U
Benzoic Acid	1.7 U	1.7 U	2.1 U	1.7 U	1.9 U	1.9 U	2 U	1.7 U	1.8 U	1.9 U	1.8 U
bis(2-Ethylhexyl)phthalate	0.36 U	0.36 U	0.43 U	0.48	0.39 U	0.53	0.4 U	0.34 U	0.37 U	0.4 U	0.36 U

NOTES: All analytical values measured in mg/kg.
U - below detection limit.
Analytical quantitation limits are sample specific and may vary.
Quantitation limits for each sample and analyte are presented in laboratory reports.

Table 1
Data - 1995
Semi-Volatile Organic Compounds
Maestri Site
Geddes, New York

Sample ID Number:	B-19	B-20	B-21	B-21	B-22	B-23	B-23	B-24	B-25	B-25
Sample Depth (ft):	14-16'	10-12'	16-18'	20-22'	12-14'	12-14'	14-16'	8-10'	10-12'	18-20'
2-Methylphenol	0.4 U	0.37 U	0.4 U	0.39 U	0.38 U	0.36 U	0.37 U	0.36 U	0.4 U	0.38 U
4-Methylphenol	0.4 U	0.37 U	0.4 U	0.39 U	0.38 U	0.36 U	0.37 U	0.36 U	0.4 U	0.38 U
2,4-Dimethylphenol	0.4 U	0.37 U	0.4 U	0.39 U	0.38 U	0.36 U	0.37 U	0.36 U	0.4 U	0.38 U
Benzoic Acid	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.7 U	1.8 U	1.8 U	2 U	1.8 U
bis(2-Ethylhexyl)phthalate	0.4 U	0.37 U	0.4 U	0.39 U	0.38 U	0.36 U	0.37 U	0.36 U	0.4 U	0.38 U

NOTES: All analytical values measured in mg/kg.
U - below detection limit.
Analytical quantitation limits are sample specific and may vary.
Quantitation limits for each sample and analyte are presented in laboratory reports.

Table 2
Remedial Action Objectives
Maestri Site
Geddes, New York

Parameter	Soil Clean-up Objective (mg/kg, dry weight)	Ground water clean-up level (ug/l)
Volatile organic compounds (VOCs)		
benzene	0.06	5
ethylbenzene	5.5	5
t-1,2-dichloroethylene	0.3	5
tetrachloroethylene	1.4	5
toluene	1.5	5
xylene	1.2	5
Total VOCs	10	100
Semi-volatile organic compounds (SVOCs)		
benzoic acid	2.7	5
2,4-dimethylphenol	none established	none established
2-methylphenol	0.1	50
4-methylphenol	0.9	50
Total SVOCs	500	none established

DST/maest2.wk1

Table 3
Soil Sampling During Construction
Maestri Site
Geddes, New York

Location	Analysis/Method	Frequency	Action Level	Action
Excavated Soils	Photoionization Detector (PID) with 10.2 eV lamp	Continuous at excavator bucket	background	Soils with PID readings below background are placed in clean stockpile Soils with PID readings above background are placed in mechanical screening stockpile
	VOCs (EPA Method 8010/8020) SVOCs (EPA Method 8270)	Within top 4 ft. of excavation, 3 grab and 1-5 pt. composite per 200 cy excavated	RAOs	Soils with levels above action level are to be mechanical screened Soils with levels below action level will be used for backfill
Excavation	VOCs (EPA Method 8010/8020) SVOCs (EPA Method 8270)	at 30 ft. grid nodes as shown on Contract Drawing G-8	RAOs	If VOC/SVOC levels are below action level excavation can be backfilled If VOC/SVOC levels are above action level, soils in 1 to 2 ft. lifts at a distance 3/4 to the next clean grid node are to be removed to the extent practicable
Mechanical Screening	VOCs (EPA Method 8010/8020) SVOCs (EPA Method 8270)	2 grab samples per 200 cubic yards excavated and stockpiled	RAOs	If VOC/SVOC levels are below action level excavation can be backfilled If VOC levels are above action level, soils will be reprocessed through mechanical screening up to 2 times If SVOC levels are above action level, soils will be staged for treatment in a BIO/SVE soil pile
Soils Stockpiled for Placement in BIO/SVE Soil Pile	VOCs (EPA Method 8010/8020) SVOCs (EPA Method 8270) Moisture Content Moisture Holding Capacity Soil Texture Total Organic Carbon (SW846 9060) Total Kjeldahl Nitrogen Nitrate & Nitrite Nitrogen Ammonia Nitrogen Phosphate Phosphorus Soil pH Total Heterotrophs Petroleum Degraders	2 composite samples per 200 cubic yards stockpiled	none	utilize data to determine moisture and nutrient addition requirements

DST/maest3.wk1

Table 4
Air Sampling During Construction
Maestri Site
Geddes, New York

Location	Analysis/Method	Frequency	Action Level	Action
Within Environmental Enclosure over excavation and Mechanical Screening Operations	VOCs particulates/dust	Refer to HASP	Refer to HASP	Refer to HASP
Exhaust from Air Collection and Treatment System	benzene (NIOSH 1500/1501) ethylbenzene (NIOSH 1500/1501) t,1,2-dichloroethylene (NIOSH 1015) tetrachloroethylene (NIOSH 1019) toluene (NIOSH 1500/1501) xylene (NIOSH 1500/1501) particulates (miniram)	weekly for soil excavation and mechanical screening activities	Annual Guideline Concentrations (AGCs) in Air Guide 1	Change-out filters upo exceedence of action levels

DST/maest4.wk1

Table 5
Bioremediation/soil vapor extraction
soil pile remediation monitoring
Maestri Site
Geddes, New York

Location	Analysis/Method	Frequency	Action Level	Action
Exhaust from BIO/SVE soil pile air collection and treatment system	benzene (NIOSH 1500/1501) ethylbenzene (NIOSH 1500/1501) t,1,2-dichloroethylene (NIOSH 1015) tetrachloroethylene (NIOSH 1019) toluene (NIOSH 1500/1501) xylene (NIOSH 1500/1501) particulates (miniram)	weekly for first month and monthly for balance of BIO/SVE soil pile remediation activities at exhaust from each pile, and exhaust from treatment system	none for soil piles Annual Guideline Concentrations (AGCs) in Air Guide 1 for exhaust from treatment system	use data to make system adjustments Change-out filters upon exceedence of action levels
BIO/SVE soil pile leachate	VOCs (EPA Method 8010/8020) SVOCs (EPA Method 8270) Total Kjeldahl Nitrogen Nitrate & Nitrite Nitrogen Ammonia Nitrogen Phosphate Phosphorus	monthly upon occurrence of leachate from BIO/SVE soil piles	upon occurrence of leachate from BIO/SVE soil piles	use data to make system adjustments
BIO/SVE soil pile soil samples	Moisture content Moisture holding capacity Total Kjeldahl Nitrogen Nitrate & Nitrite Nitrogen Ammonia Nitrogen Phosphate Phosphorus soil pH Total Heterotrophs Petroleum Degraders	weekly for first month monthly thereafter	none	use data to make system adjustments
	VOCs (EPA Method 8010/8020) SVOCs (EPA Method 8270)	monthly at five locations per BIO/SVE soil pile	RAOs	use data to make system adjustments, or to make determination that remediation is complete

DST/maest5.wk1

APPENDIX H

Laboratory Sample Results from Test Pits and Soil Borings Near MW-9

CES Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153-
Attn: Ms. Gianna Aiezza

PROJECT NAME: Maestri Soil Borings
DATE: 11/28/2007

SAMPLE NUMBER- 508078 SAMPLE ID- SB-1(18-20) SAMPLE MATRIX- SO
DATE SAMPLED- 11/19/07 TIME SAMPLED- 1450
DATE RECEIVED- 11/21/07 SAMPLER- Laura Mona RECEIVED BY- RS
TIME RECEIVED- 1245 DELIVERED BY- Tom Barry TYPE SAMPLE- Grab

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				11/21/07		RS	3.0	Degrees C
Percent Solids	EPA 160.3			11/26/07	1010	MM	88.	%
Total Xylenes	SW846 8260	11/21/07	LRE	11/27/07		LRE	4400	ug/Kg

Note: Analysis performed and reported on a wet weight basis.

NYSDOH LAB ID NO. 11246 APPROVED BY:

(Terms and Conditions on Reverse Side)

Barbara L. DuChene
Laboratory Manager

The analytical results on this sample are representative of the sample as received by the Laboratory.

CES Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153-
Attn: Ms. Gianna Aiezza

PROJECT NAME: Maestri Soil Borings
DATE: 11/28/2007

SAMPLE NUMBER- 508079 SAMPLE ID- SB-2(13-15) SAMPLE MATRIX- SO
DATE SAMPLED- 11/20/07 TIME SAMPLED- 1415
DATE RECEIVED- 11/21/07 SAMPLER- Laura Mona RECEIVED BY- RS
TIME RECEIVED- 1245 DELIVERED BY- Tom Barry TYPE SAMPLE- Grab

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				11/21/07	.	RS	3.0	Degrees C
Percent Solids	EPA 160.3			11/26/07	1010	MM	86.	%
Total Xylenes	SW846 8260	11/21/07	LRE	11/27/07		LRE	< 150	ug/Kg

Note: Analysis performed and reported on a wet weight basis.

NYSDOH LAB ID NO. 11246 APPROVED BY:

(Terms and Conditions on Reverse Side)

Barbara L. DuChene
Laboratory Manager

The analytical results on this sample are representative of the sample as received by the Laboratory.

CES Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153-
Attn: Ms. Gianna Aiezza

PROJECT NAME: Maestri Soil Borings
DATE: 11/28/2007

SAMPLE NUMBER- 508080 SAMPLE ID- SB-3(15-16.5) SAMPLE MATRIX- SO
DATE SAMPLED- 11/20/07 TIME SAMPLED- 1235
DATE RECEIVED- 11/21/07 SAMPLER- Laura Mona RECEIVED BY- RS
TIME RECEIVED- 1245 DELIVERED BY- Tom Barry TYPE SAMPLE- Grab

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				11/21/07		RS	3.0	Degrees C
Percent Solids	EPA 160.3			11/26/07	1010	MM	87.	%
Total Xylenes	SW846 8260	11/21/07	LRE	11/27/07		LRE	810	ug/Kg

Note: Analysis performed and reported on a wet weight basis.

NYSDOH LAB ID NO. 11246 APPROVED BY:

(Terms and Conditions on Reverse Side)

Barbara L. DuChene
Laboratory Manager

The analytical results on this sample are representative of the sample as received by the Laboratory.

CES Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
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Fax 315-478-2107

REPORT OF ANALYSES

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153-
Attn: Ms. Gianna Aiezza

PROJECT NAME: Maestri Soil Borings
DATE: 11/28/2007

SAMPLE NUMBER- 508081 SAMPLE ID- SB-4(17-18.3) SAMPLE MATRIX- SO
DATE SAMPLED- 11/19/07 TIME SAMPLED- 1615
DATE RECEIVED- 11/21/07 SAMPLER- Laura Mona RECEIVED BY- RS
TIME RECEIVED- 1245 DELIVERED BY- Tom Barry TYPE SAMPLE- Grab

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				11/21/07		RS	3.0	Degrees C
Percent Solids	EPA 160.3			11/26/07	1010	MM	87.	%
Total Xylenes	SW846 8260	11/21/07	LRE	11/27/07		LRE	540	ug/Kg

Note: Analysis performed and reported on a wet weight basis.

NYSDOH LAB ID NO. 11246 APPROVED BY: _____
(Terms and Conditions on Reverse Side)

Barbara L. DuChene
Laboratory Manager

The analytical results on this sample are representative of the sample as received by the Laboratory.

CHAIN OF C_STODY RECORD

CES
Certified Environmental Services, Inc.
1401 Erie Blvd. East
Syracuse, NY 13210
Phone: 315-478-2374 Fax: 315-478-2107

BATCH NO: [illegible]

Page 1 of 1

Turn-Around Time:
- ☑ Standard
- ☐ 1 Week
- ☐ 72 Hours
- ☐ 48 Hours
- ☐ 24 Hours

CLIENT NAME: Hamilton Management
ADDRESS: Shore Drive D O
Maerdi Site
PHONE: (315) 685-[illegible]
FAX: (315) 685-[illegible]
CONTACT NAME: Laura Maa

PROJECT NUMBER/NAME: Maerdi - Yol Boring
PURCHASE ORDER NO:

Sampler's Name: Laura Maa Signature: [signature]

LAB USE ONLY CES Sample Numbers	Collected Date	Collected Time	TYPE Comp.	TYPE Grab	MATRIX Aqueous	MATRIX Soil	MATRIX Other	CLIENT ID/SAMPLE LOCATION	TOTAL NUMBER OF CONTAINERS	PARAMETERS FOR ANALYSIS: Xylene								
[illegible]	11/20/07	1450		X		X		SB-1 (18-20)	1	X								
[illegible]	11/20/07	1415		X		X		SB-2 (13-15)	1	X								
[illegible]	11/20/07	1235		X		X		SB-3 (15-16.5)	1	X								
[illegible]	11/19/07	1015		X		X		SB-4 (17-18.3)	1	X								

SPECIAL REMARKS:

TOTAL NUMBER OF CONTAINERS: 4

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:		
NAME: Laura Maa SIGNATURE: [signature]	DATE: 11/20/07 TIME: 1800	NAME: Tom O'Brien SIGNATURE: [signature]	DATE: 11/21/07 TIME: 1200	Samples Received in Good Condition: ☐ Yes ☐ No Temperature [illegible] °C
NAME: Tom Barry SIGNATURE: [signature]	DATE: 11/21/07 TIME: 1245	NAME: [illegible] SIGNATURE: [signature]	DATE: [illegible] TIME: 1245	

White - CES's Copy • Canary - Return to Client With Report • Pink - Clients Initial Copy

CES
Certified Environmental Services, Inc.
1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153-
Attn: Ms. Gianna Aiezza

PROJECT NAME: Maestri
DATE: 08/07/2007

SAMPLE NUMBER- 495756 SAMPLE ID- TP-Ex
DATE SAMPLED- 07/30/07
DATE RECEIVED- 08/02/07 SAMPLER- Alan Clark
TIME RECEIVED- 1555 DELIVERED BY- Tom Barry

SAMPLE MATRIX- SO
TIME SAMPLED- 1400
RECEIVED BY- RS
TYPE SAMPLE- Composite

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				08/02/07		RS	3.0	Degrees C
TCLP Extraction	40CFR 1311			08/02/07		MD	Complete	
ZERO HEADSPACE EXTRACTION	40CFR 1311			08/02/07		MD	Complete	
CYANIDE REACTIVITY	SW846 9010	08/06/07	JDC	08/06/07	1945	JDC	< 10.	mg/Kg
SULFIDE REACTIVITY	SW846 9030			08/06/07	1745	JDC	< 50.	mg/Kg
Percent Solids	EPA 160.3			08/02/07		CD	90.	%
TCLP Metals	SW846-6010	08/03/07	KB	08/06/07		KB		
Arsenic, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
Barium, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 10.0	mg/L
Cadmium, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.10	mg/L
Chromium, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
Lead, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
Selenium, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
Silver, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
MERCURY, TCLP (HG)	EPA 245.1			08/03/07		MM	< 0.02	mg/L
PCB's in Solid	EPA 8082	08/02/07	CD	08/04/07		BLD		
Aroclor 1221	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
Aroclor 1232	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
Aroclor 1242/1016	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
Aroclor 1248	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
Aroclor 1254	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg

The analytical results on this sample are representative of the sample as received by the Laboratory.

CES
Certified Environmental Services, Inc.
1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

CONTINUATION OF DATA FOR SAMPLE NUMBER 495756

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Aroclor 1260	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
TCLP VOLATILES	EPA 8260			08/03/07		LRE		
BENZENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
CARBON TETRACHLORIDE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
CHLOROBENZENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
CHLOROFORM, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
1,2-DICHLOROETHANE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
1,1-DICHLOROETHENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
METHYL ETHYL KETONE, TCLP	EPA 8260			08/03/07		LRE	< 0.20	mg/L
TETRACHLOROETHENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
TRICHLOROETHENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
VINYL CHLORIDE, TCLP	EPA 8260			08/03/07		LRE	< 0.20	mg/L
1,4-DICHLOROBENZENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
SEMI-VOLATILES, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC		
NITROBENZENE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
PYRIDINE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
CRESOLS (TOTAL), TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
2,4-DINITROTOLUENE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
HEXACHLOROBENZENE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
HEXACHLOROBUTADIENE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
HEXACHLOROETHANE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
PENTACHLOROPHENOL, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
2,4,5-TRICHLOROPHENOL, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
2,4,6-TRICHLOROPHENOL, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L

NYSDOH LAB ID NO. 11246 APPROVED BY:

(Terms and Conditions on Reverse Side)

The analytical results on this sample are representative of the sample as received by the Laboratory.

CES
Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153-
Attn: Ms. Gianna Aiezza

PROJECT NAME: Maestri
DATE: 08/07/2007

SAMPLE NUMBER- 495757 SAMPLE ID- TP-Ex SAMPLE MATRIX- SO
DATE SAMPLED- 07/30/07 TIME SAMPLED- 1405
DATE RECEIVED- 08/02/07 SAMPLER- Alan Clark RECEIVED BY- RS
TIME RECEIVED- 1555 DELIVERED BY- Tom Barry TYPE SAMPLE- Grab

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature		08/02/07		RS	3.0	Degrees C
Ignitability of Solids	SW846 1030	08/06/07	1345	RRB	NO BURN	mm/sec

NYSDOH LAB ID NO. 11246 APPROVED BY:

(Terms and Conditions on Reverse Side)

The analytical results on this sample are representative of the sample as received by the Laboratory.

CHAIN OF CUSTODY RECORD

CES
Certified Environmental Services, Inc.
1401 Erie Blvd. East
Syracuse, NY 13210
Phone: 315-478-2374 Fax: 315-478-2107

BATCH NO: 95196

Page 1 of 1

Turn-Around Time:
- ☐ Standard
- ☒ 1 Week
- ☐ 72 Hours
- ☐ 48 Hours
- ☐ 24 Hours

CLIENT NAME: Stauffer Management
ADDRESS: 4512 Jordan Rd
Skaneateles Falls NY 13153
PHONE: (315) 685-6195
FAX: (315) 685-6209
CONTACT NAME: Laura Mena

PROJECT NUMBER/NAME: Maestri

PURCHASE ORDER NO:

Sampler's Name: Alan Clark Signature: Alan Clark

LAB USE ONLY CES Sample Numbers	Collected Date	Collected Time	TYPE Comp.	TYPE Grab	MATRIX Aqueous	MATRIX Soil	MATRIX Other	CLIENT ID/SAMPLE LOCATION	TOTAL NUMBER OF CONTAINERS	PARAMETERS FOR ANALYSIS: TCLP VOC/SVOC/Metals	Reactivity	PCB's	Ignitability
495155	7/30/07	2:00	X			X		TP-E1	1	X	X	X	
495156	7/30/07	2:05		X		X		TP-E2	1				X

SPECIAL REMARKS:

2 TOTAL NUMBER OF CONTAINERS

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:	
NAME: Alan Clark SIGNATURE:	DATE: 8/1/07 TIME: 1:00	NAME: Tom Barry SIGNATURE: Thomas M Barry	DATE: 8/2/07 TIME: 1430
NAME: Tom Barry SIGNATURE: Thomas M Barry	DATE: 8/2/07 TIME: 1555	NAME: SIGNATURE:	DATE: TIME: 1555

Samples Received in Good Condition: ☐ Yes ☐ No
Temperature ___ °C

White - CES's Copy • Canary - Return to Client With Report • Pink - Clients Initial Copy

APPENDIX I

Letter to NYSDEC Detailing Work Done Near MW-9 in July 2007

enviroSPEC ENGINEERING, PLLC
16 Computer Drive West
Albany, NY 12205
Phone: 518.453.2203
Fax: 518.689.4800

October 24, 2007

Mr. David Chiusano
NYS Department of Environmental Conservation
Remedial Bureau E, Section A
Division of Environmental Remediation
625 Broadway 12th Floor
Albany, NY 12233-7017

Re: Stauffer Management Company, Maestri Site #7-34-025, Onondaga County
Summary of Work Report - Revised

Dear Mr. Chiusano:

On behalf of Stauffer Management Company, LLC (SMC), Envirospec Engineering, PLLC (Envirospec) has prepared the following letter report to summarize field work completed at the SMC Maestri Site on July 25, 2007. The work was completed in accordance with the letter work plan submitted by Envirospec on June 19, 2007 with a response to NYSDEC comments on July 12, 2007. NYSDEC approval was granted in a letter dated July 13, 2007.

General Overview
Field activities completed were at the request of the NYSDEC in order to address concerns resulting from a groundwater sample collected from MW-9 on April 3, 2007 which showed elevated levels of xylene at 827 ppb**.** The NYSDEC had concerns that an area of soil contamination remains in the area of MW-9 and MW-2A (formerly RW-2). To address NYSDEC concerns, two test pits were excavated in the vicinity of these wells to determine if a source of soil contamination remains. Field work began with excavation of the first test pit (TP1) running from east to west beginning inside the footprint of the original excavation completed during the remedial action near MW-9. The test pit TP1 extended to outside the original footprint. A second test pit (TP2) was then excavated from north to south perpendicular to TP1 creating a "T" shape. TP2 included the area of MW-9 and MW-8. The locations of the test pits are shown on Figure 1.

During the test pit activities, an odor was noted at a depth of approximately 6.5 to 8 feet below ground surface (bgs). Headspace samples were taken throughout excavation of both test pits with results ranging from 0.0 ppm to 258 ppm. Overburden soils were staged on poly adjacent to the excavation, screened with the PID, and ultimately re-used as backfill upon confirmation of non-detectable PID screen readings and concurrence with the DEC. Excavated soils were loaded into lined rolloff boxes positioned next to the excavation. TP1 and TP2 were delineated with poly and backfilled with clean backfill and overburden soil from TP1.

Objectives
The purpose of the field activities was to determine if there was an area of soil contamination remaining in the vicinity of MW-2A and MW-9.

Project Team
Envirospec Engineering, PLLC provided project management and field oversight. Abscope Environmental, Inc completed the site work. The NYSDEC provided regulatory oversight of the excavation activities.

Summary of Work
Field work was completed on July 25, 2007. A photographic log and field notes documenting the project tasks are attached to this letter report.

Work began at 9:00 AM with representatives from Envirospec and the NYSDEC discussing where to begin TP1. Once the location was determined, the test pit was excavated from east to west with a length of approximately twenty-one (21) feet and a width of four (4) feet. A three (3) foot layer of overburden was first removed. Three (3) headspace samples were taken from the overburden, all of which showed PID readings of 0.0 ppm. The next layer observed in TP1 was a sandy layer beginning approximately three (3) feet bgs. This layer continued to approximately eight (8) feet bgs where a solid, cobblestone-like layer was encountered. Excavation continued through the cobblestone layer into a silt layer, which began at approximately eleven (11) feet bgs and ended at bedrock which was encountered at sixteen (16) feet bgs. The NYSDEC representative indicated the presence of an odor from approximately 8 feet to 16 feet bgs. Two (2) headspace samples from the silt layer exhibiting the odor had PID readings of 24.5 and 40.6 ppm.

TP2 began at approximately 10:00 am and was first excavated perpendicular to TP1, at a safe distance to maintain MW-8 and MW-9. The initial test pit was excavated from east to west to a length of four (4) feet. During the excavation, an electrical conduit and two waterlines were encountered. The two water lines were determined to be plugged lines connected to MW-2A which was formerly a recovery well and was replaced with a monitoring well during field work completed the week of April 24-28, 2006. The electrical conduit was former power to the RW-2 pump and was not live. The conduit and water lines were removed from the test pit.

The layers observed in TP2 were similar in appearance to those observed in TP1. The cobble layer of TP2 began at a depth of approximately 6.5 feet bgs. The silt layer began at approximately 10.5 feet below grade and ended at bedrock at a depth of sixteen (16) feet bgs. After discussion between Envirospec and the NYSDEC, it was decided to extend TP2 in order to excavate additional material that exhibited an odor. In order to extend TP2, MW-8 and MW-9 were removed. Odors were again noted by the NYSDEC representative at similar depths as encountered in TP1.

Samples for PID screening and headspace readings were collected throughout the excavation. The results are outlined in Table 1. The highest PID reading was from TP2 which had a PID screen of 432 ppm and a headspace reading of 258 ppm.

Table 1 – PID/Headspace Sample Summary

Test Pit	Depth (ft)	Time	Screen	Headspace	Other Details
2	~11-12.5	-	185	171	1st sample below hard cobble
2	13.0	-	30.2	147	Exact time not recorded, collected between 10:47 and 11:13 am
2	14.0	-	9.5	16.4	Exact time not recorded, collected between 10:47 and 11:13 am
2	14.5	11:13 AM	196	76.9	NYSDEC collected sample from same area
2	15.5	-	227	158	Exact time not recorded, between 11:13 and 11:35 am
2	16.0	-	100	121	Exact time not recorded, between 11:13 and 11:35 am
2	13.0	11:52 AM	432	258	1st sample taken directly below MW-8 and MW-9
2	15.0	-	10.4	5.1	Exact time not recorded, between 11:52 am and 12:25 pm
1	~13-14	12:25 PM	97.0	16.5	South wall of TP1
2	~14-15	1:14 PM	68.0	20.5	Near the locations of MW-9 and MW-8
-	~15-16	1:27 PM	77.0	93.4	On the corner between TP1 and TP2
2	15.0	1:34 PM	241	129	West wall of TP2
2	~3-6.5	1:46 PM	22.0	9.0	West wall, just above cobble layer
2	~3-6.6	1:53 PM	0.5	0.0	North wall, just above cobble layer
2	~10.5-16	1:57 PM	127	73.3	North wall, just below cobble layer
2	~3-6.6	2:00 PM	0.0	0.0	East wall, just above cobble layer
2	~10.5-16	2:02 PM	26.0	16.9	East wall, just below cobble layer
1	~3-8	2:11 PM	0.0	0.0	South wall, just above cobble layer
1	~11-16	2:07 PM	224	45.4	South wall, just below cobble layer

After excavation, the area was delineated with poly and backfilled. The DEC concurred that overburden material could be utilized as backfill within the excavated area based on visual assessment and non-detectable PID readings. Overburden material (approximately 30 cy) was placed in the bottom of the excavation followed by a layer of crusher-run stone (approximately 35 cy) and then clean import sand (approximately 85 cy). Material was compacted with the excavator as backfilling progressed. Clean import sand was obtained from stockpiles of backfill material staged at the SMC Skaneateles Falls site. The import sand originated from an approved source located on Depot Road in Sennett, NY. Crusher-run stone was obtained from Hanson Aggregates in Skaneateles, NY. To facilitate site restoration, the excavation area was restored with topsoil, seed, and mulch.

Waste Management

Waste generated from the field work consisted of excavated soil and solid waste (e.g. PPE, PVC piping, conduit, and removed monitoring wells). Soil generated from the excavation was loaded into five (5) rolloffs staged adjacent to the excavation. In order to remove as much of the impacted soil as possible, each rolloff was loaded to maximum holding capacity (approximately 30 cubic yards each) with the understanding that material would need to be appropriately redistributed for offsite disposal. Excavation ceased upon reaching maximum capacity in all rolloffs.

One RCRA sample (Sample ID: TP-Ex) was collected from the five (5) rolloffs on July 30, 2007 to characterize the waste for offsite disposal. A five-point composite sample was collected with one point from each rolloff. Rolloffs were screened with a PID and a discrete grab sample was

collected from a randomly selected rolloff as each exhibited a PID reading of 0.0 ppm. The composite sample was analyzed for TCLP VOC, SVOC, and metals; PCBs; and reactivity. The grab sample was analyzed for ignitability. Analytical data showed the material was non-hazardous and it was approved for offsite disposal at Waste Management's Mill Seat Landfill in Bergen, NY. Prior to transportation, additional rolloff boxes were brought onsite and the material redistributed so each rolloff would be within appropriate weight limits. A total of nine (9) rolloff boxes were shipped from August 22, 2007 to August 27, 2007 for a total of 170.31 tons. The chain of custody, analytical results, and waste manifests are attached to this letter report.

Proposed Additional Work

Monitoring Well

Two (2) monitoring wells were removed during the excavation (MW-8 and MW-9). SMC is proposing to install one new monitoring well to replace MW-9 which had exhibited elevated levels of xylene. The new well will be installed in the area where MW-9 was located.

Construction of the monitoring well will consist of a two-inch diameter well casing with ten feet of Schedule 40 PVC screen and riser. The well screen will be installed starting at 5 feet above the bottom of the well boring. The annular space in the screened interval will be sand packed with a No. 2 filter sand pack to one to two feet above the top of the screen. The annular space above the screened interval will be sealed with a layer of bentonite to provide a seal above the sand pack. The surface completion will consist of either a stick-up protective steel casing set in concrete and fitted with a lockable cap or a flush-to grade, bolt down, gasketed curb box set in concrete and a lockable sanitary plug.

The monitoring well will be developed no sooner than 24 hours after installation. The well will be purged with a low flow submersible pump. Purging will continue until the water is visibly free of suspended materials and field parameters (pH, temperature) stabilize, or a maximum of 24 hours.

After installation and development of the monitoring well, it will be sampled. If time has elapsed between development and sampling, three well volumes will be purged prior to sampling. The well will be gauged for depth-to -water and total depth from the top of casing to determine the elevation of groundwater and volume of water in the well. The well will be sampled using a dedicated disposable bailer. Samples will be collected in laboratory provided sample jars and placed on ice for shipping or delivery under chain-of-custody protocols. Samples will be analyzed for xylene via EPA Method 8260.

Soil Borings

To further investigate soil conditions in the area of work, SMC is proposing to install four (4) soil borings outside the area of the test pits. Proposed locations are shown on Figure 1. Soil borings will be completed with two-foot split-spoon samplers advanced to bedrock. Soil will be placed back into the hole after the boring is completed.

Each boring will be characterized, screened with a PID, and sampled. A headspace reading will be taken from each interval that has an elevated PID reading and a sample retained from the interval with the highest headspace reading to be sent to the lab for analysis. If there is no reading

on the PID, the interval above bedrock will be sampled. Samples will be analyzed for xylene via EPA Method 8620.

Schedule

SMC is proposing to complete the additional work upon approval by the NYSDEC. The NYSDEC will be provided with at least five (5) days notice prior to the initiation of work. After completion of the work, a letter report will be submitted to the NYSDEC summarizing the results. The report will also contain a plan for shutting down the groundwater recovery system which will consist of sampling perimeter wells to ensure the plume does not migrate.

Should you have any questions regarding the project, please do not hesitate to contact me at (518) 438-6809.

Sincerely,

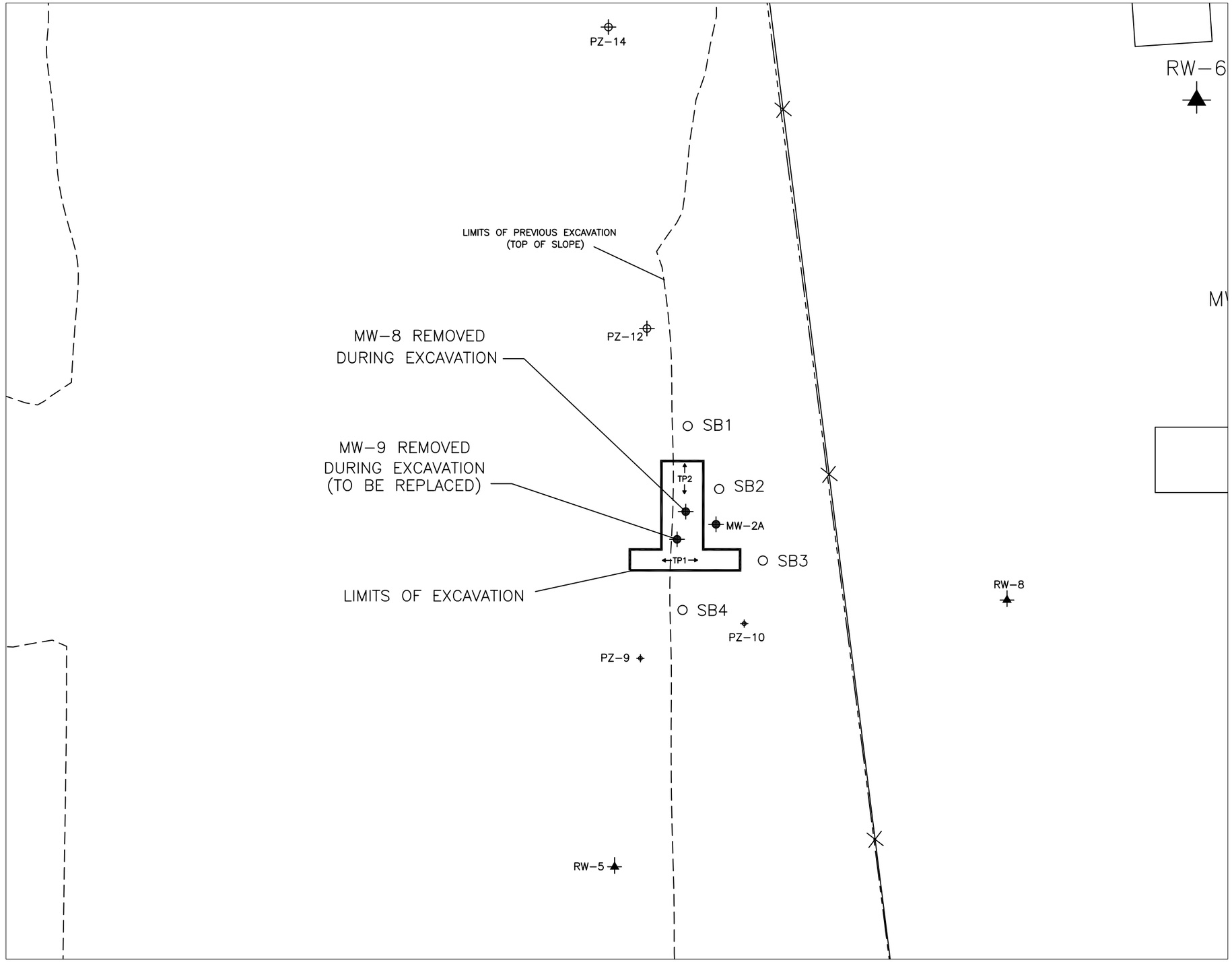
Gianna Aiezza

Gianna Aiezza, PE
Principal Engineer
Envirospec Engineering, PLLC

Enc

cc: B. Shay/P. Ekoniak – SMC
J. Abraham – SMC
L. Mona/M. Newman - Envirospec

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	ALB	DEO 7-19-99	---	---	SUMJUL99



LEGEND

- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER
- MAESTRI SITE PROPERTY BOUNDARY
- 8' HIGH SECURITY FENCE
- EP ELECTRIC POLE
- PROPOSED SOIL BORING LOCATIONS

SPEC CONSULTING, LLC
18 COMPUTER DRIVE WEST
ALBANY, NY 12205
PHONE: 518.438.6809
FAX: 518.438.8527

STAUFFER
MANAGEMENT COMPANY

BASE MAP PROVIDED BY IT CORPORATION

FIGURE 1
SITE MAP

MAESTRI SITE
904 STATE FAIR BLVD.
GEDDES, NEW YORK

CES Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153-
Attn: Ms. Gianna Aiezza

PROJECT NAME: Maestri
DATE: 08/07/2007

SAMPLE NUMBER- 495756 SAMPLE ID- TP-Ex
DATE SAMPLED- 07/30/07
DATE RECEIVED- 08/02/07 SAMPLER- Alan Clark
TIME RECEIVED- 1555 DELIVERED BY- Tom Barry

SAMPLE MATRIX- SO
TIME SAMPLED- 1400
RECEIVED BY- RS
TYPE SAMPLE- Composite

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				08/02/07		RS	3.0	Degrees C
TCLP Extraction	40CFR 1311			08/02/07		MD	Complete	
ZERO HEADSPACE EXTRACTION	40CFR 1311			08/02/07		MD	Complete	
CYANIDE REACTIVITY	SW846 9010	08/06/07	JDC	08/06/07	1945	JDC	< 10.	mg/Kg
SULFIDE REACTIVITY	SW846 9030			08/06/07	1745	JDC	< 50.	mg/Kg
Percent Solids	EPA 160.3			08/02/07		CD	90.	%
TCLP Metals	SW846-6010	08/03/07	KB	08/06/07		KB		
Arsenic, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
Barium, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 10.0	mg/L
Cadmium, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.10	mg/L
Chromium, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
Lead, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
Selenium, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
Silver, TCLP	SW846-6010	08/03/07	KB	08/06/07		KB	< 0.50	mg/L
MERCURY, TCLP (HG)	EPA 245.1			08/03/07		MM	< 0.02	mg/L
PCB's in Solid	EPA 8082	08/02/07	CD	08/04/07		BLD		
Aroclor 1221	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
Aroclor 1232	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
Aroclor 1242/1016	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
Aroclor 1248	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
Aroclor 1254	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg

The analytical results on this sample are representative of the sample as received by the Laboratory.

CES Certified Environmental Services

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

CONTINUATION OF DATA FOR SAMPLE NUMBER 495756

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Aroclor 1260	EPA 8082	08/02/07	CD	08/04/07		BLD	< 0.5	mg/Kg
TCLP VOLATILES	EPA 8260			08/03/07		LRE		
BENZENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
CARBON TETRACHLORIDE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
CHLOROBENZENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
CHLOROFORM, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
1,2-DICHLOROETHANE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
1,1-DICHLOROETHENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
METHYL ETHYL KETONE, TCLP	EPA 8260			08/03/07		LRE	< 0.20	mg/L
TETRACHLOROETHENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
TRICHLOROETHENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
VINYL CHLORIDE, TCLP	EPA 8260			08/03/07		LRE	< 0.20	mg/L
1,4-DICHLOROBENZENE, TCLP	EPA 8260			08/03/07		LRE	< 0.050	mg/L
SEMI-VOLATILES, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC		
NITROBENZENE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
PYRIDINE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
CRESOLS(TOTAL), TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
2,4-DINITROTOLUENE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
HEXACHLOROBENZENE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
HEXACHLOROBUTADIENE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
HEXACHLOROETHANE, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
PENTACHLOROPHENOL, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
2,4,5-TRICHLOROPHENOL, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L
2,4,6-TRICHLOROPHENOL, TCLP	EPA 8270	08/03/07	LRE	08/06/07		KEC	< 0.10	mg/L

NYSDOH LAB ID NO. 11246 APPROVED BY: _____

(Terms and Conditions on Reverse Side)

The analytical results on this sample are representative of the sample as received by the Laboratory.

CES Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153-
Attn: Ms. Gianna Aiezza

PROJECT NAME: Maestri
DATE: 08/07/2007

SAMPLE NUMBER- 495757 SAMPLE ID- TP-Ex
DATE SAMPLED- 07/30/07
DATE RECEIVED- 08/02/07 SAMPLER- Alan Clark
TIME RECEIVED- 1555 DELIVERED BY- Tom Barry

SAMPLE MATRIX- SO
TIME SAMPLED- 1405
RECEIVED BY- RS
TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature		08/02/07		RS	3.0	Degrees C
Ignitability of Solids	SW846 1030	08/06/07	1345	RRB	NO BURN	mm/sec

NYSDOH LAB ID NO. 11246 APPROVED BY:

(Terms and Conditions on Reverse Side)

The analytical results on this sample are representative of the sample as received by the Laboratory.

CHAIN OF CUSTODY RECORD

CES

Certified Environmental Services, Inc.
1401 Erie Blvd. East
Syracuse, NY 13210

Phone: 315-478-2374 Fax: 315-478-2107

BATCH NO: 95196

Page 1 of 1

Turn-Around Time:
- ☐ Standard
- ☒ 1 Week
- ☐ 72 Hours
- ☐ 48 Hours
- ☐ 24 Hours

CLIENT NAME: Stauffer Management
ADDRESS: 4512 Jordan Rd
Skaneateles Falls N.Y. 13153
PHONE: (315) 685-6195
FAX: (315) 685-6209
CONTACT NAME: Laura Mona

PROJECT NUMBER/NAME: Maestri

PURCHASE ORDER NO:

Sampler's Name: Alan Clark Signature: Alan Clark

LAB USE ONLY CES Sample Numbers	Collected Date	Collected Time	TYPE Comp.	TYPE Grab	MATRIX Aqueous	MATRIX Soil	MATRIX Other	CLIENT ID/SAMPLE LOCATION	TOTAL NUMBER OF CONTAINERS	PARAMETERS FOR ANALYSIS: TCLP VOC/SVOC/Metals	Reactivity	PCB's	Ignitability
495756	7/26/07	2:00	X			X		TP-EX	1	X	X	X	
495757	7/30/07	2:05		X		X		TP-EX	1				X

SPECIAL REMARKS:

2 TOTAL NUMBER OF CONTAINERS

SAMPLES RELINQUISHED BY:

NAME: Alan Clark DATE: 8/1/07
SIGNATURE: Alan Clark TIME: 1:00

NAME: Tom BARRY DATE: 8/2/07
SIGNATURE: Thomas M Barry TIME: 1555

SAMPLES RECEIVED BY:

NAME: Tom BARRY DATE: 8/2/07
SIGNATURE: Thomas M Barry TIME: 1430

NAME: [illegible] DATE: 8/2/07
SIGNATURE: [illegible] TIME: 1555

Samples Received in Good Condition:
☐ Yes ☐ No
Temperature 3.0 °C

White - CES's Copy • Canary - Return to Client With Report • Pink - Clients Initial Copy

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD982796914 | 2. Page 1 of 1 | 3. Emergency Response Phone: 800-424-9300 | 4. Waste Tracking Number: 16010

5. Generator's Name and Mailing Address: STAUFFER MANAGEMENT CO, LLC, 1800 CONCORD PIKE, WILMINGTON, DE
Generator's Phone: 302-886-5147

Generator's Site Address (if different than mailing address): STAUFFER MANAGEMENT CO, LLC (MAESTRI SITE), 404 STATE FAIR BLVD, SYRACUSE, NY 13209

6. Transporter 1 Company Name: ABSCOPE — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: WM OF NY - MILLSEAT LANDFILL, 399 BROWN ROAD, BERGEN, NY 14416 (585) 494-3000 (EST)
Facility's Phone: — U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON REGULATED MATERIAL	002	CM	44,100	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
PROFILE: 101823 NY SOIL/DEBRIS
SAMPLE ID: TP-EX
Act: 25.18 T

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Laura Mora on behalf of Stauffer Management — Signature: Laura Mora — Month 08 Day 21 Year 07

INTL
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Randy Furcinow — Signature: [signature] — Month 8 Day 21 Year 07
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

Jane Gracie-scalehouse
Wm Millseat Landfill
Bergen, New York 14482
585-494-3000 ext.230
Tuesday August 21, 2007

18. Designated Facility Printed/Typed Name — the manifest except as noted in Item 17a
Signature — Month Day Year

169-BLS-C 6 10497 (Rev. 8/06)

TRANSPORTER #1

FLAT LINED scale #89

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD182796914
2. Page 1 of: 1
3. Emergency Response Phone: 800-424-9300
4. Waste Tracking Number: 160111

5. Generator's Name and Mailing Address: STAUFFER MANAGEMENT COMPANY, 1800 CONCORD PIKE, WILMINGTON, DE
Generator's Phone: (302) 886-5147

Generator's Site Address (if different than mailing address): STAUFFER MANAGEMENT CO (MAESTRI SITE), 904 STATE FAIR BLVD, SYRACUSE, NY 13209

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: WM OF NY - MILL SEAT LANDFILL, 303 BROWN ROAD, BERGEN, NY. 14416
Facility's Phone: (585) 494-3000 — U.S. EPA ID Number: EST

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
GENERATOR	1. NON-REGULATED MATERIAL	002	CM DM	60,000	P
	2.				
	3.				
	4.				

13. Special Handling Instructions and Additional Information: PROFILE: 101823NY SOIL/DEBRIS NOTE: WEIGHT IS ESTIMATED Act: 43.94T
SAMPLE ID: TP-EX OVERWEIGHT !!!

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Laura Mora on behalf of Stauffer — Signature: [signature] — Month: 08 Day: 30 Year: 07

INTL
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter Signature (for exports only):

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name — Signature — Month Day Year
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: U.S. EPA ID Number
17b. Alternate Facility (or Generator)
Facility's Phone: Month Day Year
17c. Signature of Alternate Facility (or Generator)
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name — Signature — Month Day Year

TRANSPORTER #:

169-BLS-C 6 10497 (Rev. 8/06)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD982796614
2. Page 1 of 1
3. Emergency Response Phone: 800-424-9300
4. Waste Tracking Number: 116012

5. Generator's Name and Mailing Address: STAUFFER MANAGEMENT COMPANY, 1800 CONCORD PIKE, WILMINGTON, DE 19850

Generator's Phone: (302) 886-5147

Generator's Site Address (if different than mailing address): STAUFFER MANAGEMENT COMPANY/MAESTRI SITE, 904 STATE FAIR BLVD, SYRACUSE, NY 13209

6. Transporter 1 Company Name: RICCELLI — U.S. EPA ID Number:

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: WM OF NY - MILLSEAT LANDFILL, 303 BREW ROAD, BERGEN, NY 14416 — U.S. EPA ID Number:

Facility's Phone: (585) 494-3000

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. NON REGULATED MATERIAL	2 Containers	CM	60,000 lbs	P
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information

PROFILE: 101803NY SOIL/DEBRIS

SAMPLE: TREX

ACT: 37.50T

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Laura Mona on behalf of Stauffer Management — Signature: [signature] — Month 08 Day 22 Year 07

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:

Transporter Signature (for exports only):

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Ollie Turner — Signature: [signature] — Month 8 Day 22 Year 07

Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner ... except as noted in Item 17a

Printed/Typed Name: Jane Gracie=Scalehouse, WM Millseat Landfill, Bergen, NY 14416, 585-494 -3000 ext 230, Thursday August 23, 2007 — Signature — Month Day Year

TRANSPORTER #2

169-BLS-C 6 10497 (Rev. 8/06)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD982796414 | 2. Page 1 of: 1 | 3. Emergency Response Phone: 800-424-9300 | 4. Waste Tracking Number: 16013

5. Generator's Name and Mailing Address:
STAUFFER MANAGEMENT COMPANY, LLC
ROD CONCORD PIKE
WILMINGTON, DE 19850 (302) 886-5147

Generator's Site Address (if different than mailing address):
STAUFFER MANAGEMENT CO. (MAESTRI SITE)
904 STATE FAIR BLVD.
SYRACUSE, NY 13209 (315) 485-5717

Generator's Phone:

6. Transporter 1 Company Name: RICCELLI — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
WM OF NY - MILL SEAT LANDFILL
303 BREW ROAD
BERGEN, NY 14416 (585) 494-3000 (EST.)

U.S. EPA ID Number:

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
GENERATOR	1. NON-REGULATED MATERIAL	1	DM	30,100	P	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
PROFILE: 101893NY SOIL/DEBRIS NOTE: WEIGHT IS ESTIMATED
SAMPLE: TP-EX ACT: 21.60T

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Laura Mora on behalf of Stauffer Management — Signature: Laura Mora — Month 8 Day 24 Year 07

INT'L
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter Signature (for exports only):

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Timothy D Sheard — Signature: Timothy D. Sheard — Month 8 Day 24 Year 07
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

Jane Gracie Scalehouse
Wm Millseat Landfill
Bergen, NY 14416
585-494-3000 ext.230
Friday August 24, 2007

18. Designated F
Printed/Typed N
he manifest except as noted in Item 17a
Signature — Month Day Year

TRANSPORTER #1

169-BLS-C 6 10497 (Rev. 8/06)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD982796914
2. Page 1 of: 1
3. Emergency Response Phone: 800-424-9300
4. Waste Tracking Number: 11614

5. Generator's Name and Mailing Address: STAFFER MANAGEMENT COMPANY, LLC
1800 CONCORD PIKE
WILMINGTON, DE 19850 (302) 886-5147

Generator's Site Address (if different than mailing address): STAFFER MANAGEMENT, CO (MAESTRI SITE)
401 STATE FAIR BLVD
SYRACUSE NY 13209 (315) 685-6015

Generator's Phone:

6. Transporter 1 Company Name: RICCELLI — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: WM OF NY - MILLSEAT LANDFILL
205 BREW ROAD
BERGEN, NY 14416 (585) 494-3000 (EST)

Facility's Phone: — U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
GENERATOR	1. NON REGULATED MATERIAL	001	DM CM	30,000	P	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
PROFILE: 101823NY SOIL/DEBRIS
NOTE: WEIGHT IS ESTIMATED
SAMPLE: TP-EX
ACT: 19.71T

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Laura Mara on behalf of Stauffer Management — Signature — Month 08 Day 23 Year 07

INT'L
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter Signature (for exports only):

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Ollie Turner — Signature — Month 8 Day 23 Year 07
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

Jane Gracie=Scalehouse
WM Millseat Landfill
Bergen, NY 14416
585-494 -3000 ext 230
Thursday August 23, 2007

18. Designated/Printed/Typed — the manifest except as noted in item 17a
Signature — Month Day Year

169-BLS-C 6 10497 (Rev. 8/06)

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD982796914
2. Page 1 of: 1
3. Emergency Response Phone: 800-424-9300
4. Waste Tracking Number: 160014

GENERATOR

5. Generator's Name and Mailing Address
STAUFFER MANAGEMENT COMPANY, LLC
1800 CONCORD PIKE
WILMINGTON, DE 19850
Generator's Phone: (302) 886-5147

Generator's Site Address (if different than mailing address)
STAUFFER MANAGEMENT CO. (MAESTRI SITE)
904 STATE FAIR BLVD
SYRACUSE, NY 13209 (315) 485-5717

6. Transporter 1 Company Name: RICCELLI
U.S. EPA ID Number:

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
WM OF NJ - MILL SEAT LANDFILL
303 BREED ROAD
BERGEN, NJ 14416
Facility's Phone: (585) 494-3000 (EST)
U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON-REGULATED MATERIAL	1	CM	38,000	P
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
PROFILE: 101823 NJ SOIL/DEBRIS
NOTE: WEIGHT IS ESTIMATED
SAMPLE: TP-EX
ACT: 21.78T

INT'L

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Laura Mora on behalf of Stauffer Management
Signature: Laura Mora
Month: 08 Day: 27 Year: 07

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Tim Sheard
Signature: Tim Sheard
Month: 8 Day: 27 Year: 07

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Jane Gracie
Signature: J. Gracie
Month: 9 Day: 27 Year: 07

169-BLS-C 6 10497 (Rev. 8/06)

TRANSPORTER #1

Envirospec Engineering, PLLC
Photographic Record

Customer: **Stauffer Management Co.**	Project Number: **E07-102**
Site Name: **SMC Maestri**	Site Location: **Geddes, New York**

Pic #: **070725076**

Date: **07/25/07**

Direction: **Looking SE**

Comments:

Orange fence shows demarcation of previous excavation

Pic #: **070725077**

Date: **07/25/07**

Direction: **Looking S**

Comments:

Overburden pile from TP1

Envirospec Engineering, PLLC
Photographic Record

Customer: **Stauffer Management Co.**	Project Number: **E07-102**
Site Name: **SMC Maestri**	Site Location: **Geddes, New York**

Pic #: **070725086**

Date: **07/25/07**

Direction: **Looking W, Into TP1**

Comments:

TP1's three primary layers can be viewed. Odor observed in cobble layer.

Pic #: **070725093**

Date: **07/25/07**

Direction: **Looking E**

Comments:

Two (2) waterlines and one (1) electrical line were found in TP2. None were live, removed from the test pits.

Envirospec Engineering, PLLC
Photographic Record

Customer: **Stauffer Management Co.**	Project Number: **E07-102**
Site Name: **SMC Maestri**	Site Location: **Geddes, New York**

Pic #: **070725107**

Date: **07/25/07**

Direction: **Looking W**

Comments:

Profile along western wall of TP2 showing distinct layers in soil.

Pic #: **0707251442**

Date: **07/25/07**

Direction: **Looking S**

Comments:

Overview of excavated area

Envirospec Engineering, PLLC
Photographic Record

Customer: **Stauffer Management Co.**	Project Number: **E07-102**
Site Name: **SMC Maestri**	Site Location: **Geddes, New York**

Pic #: **070725134**

Date: **07/25/07**

Direction: **Into Test Pits**

Comments:

Groundwater seepage near bedrock.

Pic #: **070725147**

Date: **07/25/07**

Direction: **Into Excavator Bucket**

Comments:

Excavated soils from just above bedrock.

Envirospec Engineering, PLLC
Photographic Record

Customer: **Stauffer Management Co.**	Project Number: **E07-102**
Site Name: **SMC Maestri**	Site Location: **Geddes, New York**

Pic #: **070725148**

Date: **07/25/07**

Direction:
Looking E

Comments:

Delineated sides of excavated area with poly.

Envirospec Engineering, PLLC
16 Computer Drive West
Albany, NY 12205

Phone: 518.438.6809
Fax: 518.438.8527

Date Wednesday July 25, 2007

Weather	Temperature
Partly Sunny	High 84
	Low 64

SITE OBSERVATION REPORT

Project SMC Maestri Project No. 07-102

Location Geddes, NY

On-Site: Abscope (refer to sign in sheet)
David Chiusano (NYSDEC)
Laura Mona (SPEC)
Matthew Newman (SPEC)

General

- Test pits dug to observe sediment near MW8 and MW9
- Two test pits labeled TP1 and TP2
- Monitoring wells 8 and 9 were removed during the excavation of TP2
    - MW9 removed at 11:42 AM
    - MW8 removed at 11:44 AM
- The topmost section of the well piping for PZ9 was broken at approximately 12:57 PM
- Test pits were delineated with poly prior to backfill

Test Pit 1 (TP1)

- TP1 ran east to west with MW9 along its north wall
- TP1 ran from the area where previous cleaning activities had occurred and into untouched area with approximate dimensions of 21'×4' (East/West×North/South)
- TP1 showed three general layers
    - Top layer was a soft, sandy layer beginning 3' bgs and ending 8' bgs
    - Second layer was a solid, "cobblestone-like" layer that began at the end of the top layer and extended 11' bgs. It had the appearance of a concrete/cobblestone slab and an odor was noted
    - Third layer was a silt layer beginning at the end of the "cobblestone" layer and ending at bedrock at a depth of 16 feet. It had a clay-like appearance with sand-like properties and also was noted with a similar odor found in the previous layer
- Three initial samples were taken from the overburden, all three of which had a PID of 0.00
- Two additional samples were screened from all the sediment taken into the first rolloff at 9:56 AM, with head spaces of 24.5 and 40.6 ppm respectively

Test Pit 2 (TP2)

- TP2 ran north to south with MW8 and MW9 both removed
- TP2 ran close to the line between area from previous remediation work and untouched area with approximate dimensions of 8'×14' (East/West×North/South)
- TP2 could be divided into similar sediment layers to those found in TP1
    - Top soft, sandy layer began at 3' and ended at 6.5' bgs.
    - Second, "cobblestone" layer ranged from 6.5' to 10.5' bgs
    - Third, high silt layer ranged from 10.5' to 16' bgs
    - Odors were noted in the same layers as TP1
- Two water lines and one electrical conduit were struck during the digging of TP2 at 10:33 AM
    - The conduit/line were at a depth of 5' and a distance of 5' from MW9 to center of piping
    - Casing of electrical conduit was struck
    - The water lines were connected to RW2A and had been plugged when it was overdrilled and converted into a monitoring well
    - The electrical line was not live and was cut
    - Electrical and water lines were removed from TP2

Continued next page

Envirospec Engineering, PLLC
16 Computer Drive West
Albany, NY 12205

Phone: 518.438.6809
Fax: 518.438.8527

CONTINUATION PAGE

Page No. 2 of 2
Date 07/25/07

SITE OBSERVATION REPORT

Project SMC Maestri Project No. 07-102
Location City Name, NY

Sampling/Offsite Disposal

Samples

- Headspace samples were taken at random intervals based upon color, texture, and odor of the sediment being extracted
- DEC collected period samples from the bucket of the excavator during work
- A table of the samples can be found below

Test Pit	Depth (ft)	Time	Screen	Headspace	Other Details
2	~11-12.5	-	185	171	1st sample below hard cobble
2	13.0	-	30.2	147	Exact time not recorded, collected between 10:47 and 11:13 am
2	14.0	-	9.5	16.4	Exact time not recorded, collected between 10:47 and 11:13 am
2	14.5	11:13 AM	196	76.9	NYSDEC collected sample from same area
2	15.5	-	227	158	Exact time not recorded, between 11:13 and 11:35 am
2	16.0	-	100	121	Exact time not recorded, between 11:13 and 11:35 am
2	13.0	11:52 AM	432	258	1st sample taken directly below MW-8 and MW-9
2	15.0	-	10.4	5.1	Exact time not recorded, between 11:52 am and 12:25 pm
1	~13-14	12:25 PM	97.0	16.5	South wall of TP1
2	~14-15	1:14 PM	68.0	20.5	Near the locations of MW-9 and MW-8
-	~15-16	1:27 PM	77.0	93.4	On the corner between TP1 and TP2
2	15.0	1:34 PM	241	129	West wall of TP2
2	~3-6.5	1:46 PM	22.0	9.0	West wall, just above cobble layer
2	~3-6.6	1:53 PM	0.5	0.0	North wall, just above cobble layer
2	~10.5-16	1:57 PM	127	73.3	North wall, just below cobble layer
2	~3-6.6	2:00 PM	0.0	0.0	East wall, just above cobble layer
2	~10.5-16	2:02 PM	26.0	16.9	East wall, just below cobble layer
1	~3-8	2:11 PM	0.0	0.0	South wall, just above cobble layer
1	~11-16	2:07 PM	224	45.4	South wall, just below cobble layer

Rolloffs

- 5 rolloffs were loaded with sediment extracted from the two test pits
- First contained sediment extracted from TP1 from 3' bgs to a depth of 14'
- Second contained sediment extracted from TP2 from 3-4' bgs to a depth of 14'
- Third contained sediment extracted from both TP1 and TP2
    - TP1 sediment was extracted from 14-16' bgs
    - TP2 sediment was extracted from 3-4' bgs to a depth of 13' primarily beneath MW8 and MW9
- Fourth contained sediment extracted from TP2 from 13' to 16' bgs
- Fifth contained sediment extracted from both TP1 and TP2 ranging from 3' to 16' bgs

Backfill

- Delineated all sides with poly
- Overburden was placed on bottom (after discussions with DEC)
- 2 loads of Crusher-run (Hanson) placed on top of overburden
- 5 loads of clean sand (trucked in from stockpiles of clean fill Skan Falls site – initially from Sennett Pit) placed on top of crusher-run
- Sand backfill compacted with excavator bucket as much as possible with each "lift"

The above comments were made by: M. Newman

APPENDIX J

SPDES Permit

SPDES PERMIT FACT SHEET

Prepared by: Robert Wither Date: 01/28/92

Company: ICI Americas Inc. Site No.: 7-34-025

Location: Geddes (T), Onondaga County Industrial Code No.: 9511

Industrial Segment: N/A Part No.: N/A

Type of Processing & Production Rate:

Groundwater Remdiation

Basis for Technology Effluent Limitations:

N/A

PARAMETER	BASIS FOR PERMIT CONDITION
Outfall No.: 001 ; Treated Groundwater Discharge; Nominal Flow: 8 gpm	
Flow	Monitor
Benzene	6NYCRR Part 703.6
Methylene Chloride	6NYCRR Part 703.6
Toluene	6NYCRR Part 703.6
1,2-(trans)-Dichloroethylene	6NYCRR Part 703.6
Vinyl Chloride	6NYCRR Part 703.6
Ethylbenzene	6NYCRR Part 703.6
o-Xylene	6NYCRR Part 703.6
m-Xylene	6NYCRR Part 703.6
p-Xylene	6NYCRR Part 703.6
Phenolics, Total	6NYCRR Part 703.6/Detection Limit
Bis (2-Ethylhexyl) Phthalate	6NYCRR Part 703.6
Di (N-Butyl) Phthalate	6NYCRR Part 703.6
Aluminum, Total	6NYCRR Part 703.6
Arsenic, Total	6NYCRR Part 703.6
Barium, Total	6NYCRR Part 703.6
Cadmium, Total	6NYCRR Part 703.6
Chromium, Total	6NYCRR Part 703.6
Copper, Total	6NYCRR Part 703.6
Iron, Total	6NYCRR Part 703.6
Manganese, Total	6NYCRR Part 703.6
Nickel, Total	6NYCRR Part 703.6
Silver, Total	6NYCRR Part 703.6
Zinc, Total	6NYCRR Part 703.6

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start up of groundwater remediation and treatme: system and lasting until 5 years from date of startup of groundwater remediation and treatment system. The discharges from the treatment facility shall be limited and monitored by the operator as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sampl Type
001 - Treated Groundwater					
Flow	Monitor	Monitor	gpd	Continuous	Recorder
Benzene	Monitor	0.7	ug/l	Weekly	Grab
Methylene Chloride	Monitor	5.0	ug/l	Weekly	Grab
Toluene	Monitor	5.0	ug/l	Weekly	Grab
1,2-(trans)-Dichloroethylene	Monitor	5.0	ug/l	Weekly	Grab
Vinyl Chloride	Monitor	5.0	ug/l	Weekly	Grab
Ethylbenzene	Monitor	5.0	ug/l	Weekly	Grab
o-Xylene	Monitor	5.0	ug/l	Weekly	Grab
m-Xylene	Monitor	5.0	ug/l	Weekly	Grab
p-Xylene	Monitor	5.0	ug/l	Weekly	Grab
Phenolics, Total	Monitor	2.0	ug/l	Weekly	Grab
Bis(2-Ethylhexyl) Phthalate	Monitor	4.2	mg/l	Weekly	Grab
Di-(N-Butyl) Phthalate	Monitor	0.77	mg/l	Weekly	Grab
Aluminum, Total	Monitor	2.0	mg/l	Monthly	Grab
Arsenic, Total	Monitor	0.05	mg/l	Monthly	Grab
Barium, Total	Monitor	2.0	mg/l	Monthly	Grab
Cadmium, Total	Monitor	0.02	mg/l	Monthly	Grab
Chromium, Total	Monitor	0.1	mg/l	Monthly	Grab

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start up of grundwater remediation and treatment system and lasting until 5 years from date of startup of groundwater remediation and treatment system. The discharges from the treatment facility shall be limited and monitored by the operator as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
001 - Treated Groundwater:					
Copper, Total	Monitor	1.0	mg/l	Monthly	Grab
Iron Total[1]	Monitor	0.6	mg/l	Monthly	Grab
Manganese, Total[1]	Monitor	0.6	mg/l	Monthly	Grab
Nickel, Total	Monitor	2.0	mg/l	Monthly	Grab
Silver, Total	Monitor	0.1	mg/l	Monthly	Grab
Zinc, Total	Monitor	5.0	mg/l	Monthly	Grab

1. The combined concentration of iron, total and manganese, total shall not exceed 1.0 mg/l.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPENDIX A

GENERAL CONDITIONS (Consent Orders)*

* This version of General Conditions is intended to be incorporated as Appendix A of all Consent Orders for site remediation projects where a State Pollutant Discharge Elimination System permit is not required but where the order authorizes the treatment and discharge of wastewaters to the surface or groundwaters of New York State.

1. GENERAL PROVISIONS

a. This order, or a true copy, shall be kept readily available for reference at the wastewater treatment facility.

b. A determination has been made on the basis of a submitted plans, or other available information, that compliance with the provisions specified in this order will reasonably protect classified water use and assure compliance with applicable water quality standards. Satisfaction of these provisions notwithstanding, if operation pursuant to the order causes or contributes to a condition in contravention of State water quality standards, or if the Department determines, on the basis of notice provided by the operator and any related investigation, inspection or sampling, that a modification of the order is necessary to prevent impairment of the best use of the waters or to assure maintenance of water quality standards or compliance with other provisions of ECL, the Department may require such a modification and may require abatement action to be taken by the operator and may also prohibit the noticed act until the order has been modified.

c. All discharges authorized by this order shall be consistent with the terms and conditions of this order. Facility expansion or other modifications, treatment and disposal system changes which will result in new or increased discharges of pollutants into the waters of the state must be reported by submission of a formal request for modification of this order. The discharge of any pollutant, not identified and authorized, or the discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this order shall constitute a violation of the terms and conditions of this order. Facility modifications which result in decreased discharges of pollutants must be reported by submission of written notice to the Department.

d. Where the operator becomes aware that he/she failed to submit any relevant facts or submitted incorrect information prior to or in pursuit of this order or in any report to the Department, the operator shall promptly submit such facts or information.

e. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the authorized activity in order to maintain compliance with the conditions of this order, unless directed by the Department to continue the activity.

f. The filing of a request for a modification of this order, or a notification of planned changes or anticipated noncompliance, does not stay any condition of this order.

g. The operator shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, suspending, or revoking this order, or to determine compliance with this order. The operator shall also furnish to the Department, upon request, copies of records required to be kept by this order.

2. SPECIAL REPORTING REQUIREMENTS

Dischargers must notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant (USEPA Priority Pollutants plus phenols, total) which is not specifically controlled in the order, pursuant to General Provision 1 (c) herein. For the purposes of this section, recurrent accidental or unintentional spills or releases on a frequent basis shall be considered to be a discharge.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the order, if that discharge will exceed five times the maximum concentration value reported for that pollutant in the information submitted prior to this order; or the level established by the Department.

c. That they will begin to use any toxic pollutant which was not reported prior to this order and which is being or may be discharged to waters of the state.

3. EXCLUSIONS

a. The issuance of this order by the Department and the receipt thereof by the operator does not supersede, revoke or rescind an order or modification thereof on consent or determination by the Commissioner issued heretofore by the Department or any of the terms, conditions or requirements contained in such order or modification thereof unless specifically intended by said order.

b. The issuance of this order does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations; nor does it obviate the necessity of obtaining the assent of any other jurisdiction as required by law for the discharge authorized.

c. Unless specifically authorized in this order, the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters is not approved.

4. REPORTING NONCOMPLIANCE

a. Anticipated noncompliance. The operator shall give advance notice to the Department of any planned changes in the authorized facility or activity which may result in noncompliance with this order as soon as the operator becomes aware that non-compliance will be unavoidable.

b. Immediate and twenty-four hour reporting. The operator shall report any noncompliance which may endanger health or the environment. Any unusual situation, caused by a deviation from normal operation or experience (e.g. upsets, bypasses, inoperative treatment process units, spills or illegal chemical discharges or releases to the collection system) which create a potentially hazardous condition shall be orally reported immediately. Other information shall be provided orally within 24 hours from the time he or she becomes aware of the circumstances. A written noncompliance report shall also be provided within five (5) days of the time the operator becomes aware of the circumstances. The written noncompliance report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent the noncompliance and its reoccurrence.

(1) The following shall be included as information which must be reported within 24 hours under paragraph (b) above:

(i) any unanticipated bypass which violates any effluent limitation in the order;

(ii) any upset which violates any effluent limitation in the order;

(iii) violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the order to be reported within 24 hours.

(2) The Department may waive, at their discretion, the written report on a case-by-case basis if the oral report has been received within 24 hours.

(3) Reports required by this section shall be filed with the Department's regional office having jurisdiction over the facility. During weekends and holidays, oral noncompliance reports, required by this paragraph, may be made at (518) 457-7362.

c. Duty to mitigate. The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this order which has a reasonable likelihood of adversely affecting human health or the environment.

5. INSPECTION AND ENTRY

The operator shall allow the Commissioner of the Department, the New York State Department of Health, the County Health Department, or their authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

a. enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this order;

b. have access to and copy, at reasonable times, any records that must be kept under the conditions of this order, including records maintained for purposes of operation and maintenance;

c. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order, and

d. sample or monitor at reasonable times, for the purposes of assuring compliance with this order or as otherwise authorized by the Environmental Conservation Law, any substances or parameters at any location.

6. SPECIAL PROVISIONS - NEW OR MODIFIED DISPOSAL SYSTEMS

a. Prior to construction of any new or modified waste disposal system or modification of a facility generating wastewater which could alter the design volume of, or the method or effect of treatment or disposing of the wastes from an existing waste disposal system, the operator shall submit to the Department or its designated field office for review, an approvable engineering report, plans, and specifications which have been prepared by a person or firm licensed to practice Professional Engineering in the State of New York.

b. The construction of the above new or modified disposal system shall not start until the operator receives written approval of the system from the Department or its designated field office.

c. The construction of the above new or modified disposal system shall be under the general supervision of a person or firm licensed to practice Professional Engineering in New York State. Upon completion of construction, that person or firm shall certify to the Department or its designated field office that the system has been fully completed in accordance with the approved engineering report, plans and specifications and letter of approval; and the operator shall receive written acceptance of such certificate from the Department or designated field agency prior to commencing discharge.

d. The Department and its designated field offices review wastewater disposal system reports, plans, and specifications for treatment process capability only, and approval by either office does not constitute approval of the system's structural integrity.

7. MONITORING, RECORDING, AND REPORTING

7.1 GENERAL

a. The operator shall comply with all recording, reporting, monitoring and sampling requirements specified in this order and such other additional terms, provisions, requirements or conditions that the Department may deem to be reasonably necessary to achieve the purposes of the Environmental Conservation Law, or rules and regulations adopted pursuant thereto.

b. Samples and measurements taken to meet the monitoring requirements specified in this order shall be representative of the quantity and character of the monitored discharges. Composite samples shall be composed of a minimum of 8 grab samples, collected over the specified collection period, either at a constant sample volume for a constant flow interval or at a flow-proportioned sample volume for a constant time interval, unless otherwise specified in this order. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. At least 4 (rather than 8) aliquots or grab samples should be collected over the specified collection period. Grab sample means a single sample, taken over a period not exceeding 15 minutes.

c. Accessable sampling locations must be provided, maintained and identified by the operator. New sampling locations shall be provided if proposed or existing locations are deemed unsuitable by the Department or its designated field agency.

d. Actual measured values of all positive analytical results obtained above the Practical Quantitation Limit (PQL)[1] for all monitored parameters shall be recorded and reported, as required by this order; except, for parameters which are limited in this order to values below the PQL, actual measured values for all positive analytical results above the Method Detection Limit (MDL)[2] shall be reported.

e. The operator shall periodically calibrate and perform manufacturer's recommended maintenance procedures on all monitoring and analytical instrumentation to insure accuracy of measurements. Verification of maintenance shall be logged into the daily record book(s) of the facility. The operator shall notify the Department's regional office immediately if any required instrumentation becomes inoperable. In addition, the operator shall verify the accuracy of their measuring equipment to the Department's Regional Office annually.

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1 Practical Quantitation Limit (PQL) is the lowest level that can be measured within specified limits of precision and accuracy during routine laboratory operations on most effluent matrices.

2 Method Detection Limit (MDL) is the level at which the analytical procedure referenced is capable of determining with a 99% probability that the substance is present. This value is determined in distilled water with no interfering substances present. The precision at this level is +/- 100%.

7.2 SIGNATORIES AND CERTIFICATION

a. All reports required by this order shall be signed as follows:

(1) for a corporation: by a responsible corporate officer. For the purposes of this section, a responsible corporate officer means:

(I) a president, secretary, treasurer, or a vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making function for the corporation, or

(II) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars),if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) for a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) for a municipality, state, federal, or other public agency: by either a principal or executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (I) the chief executive officer of the agency, or (II) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or

(4) a duly authorized representative of the person described in items (1), (2), or (3). A person is a duly authorized representative only if:

(I) the authorization is made in writing by a person described in paragraph (a)(1), (2), or (3) of this section;

(ii) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(iii) the written authorization is submitted to the Department.

b. Changes to authorization: If an authorization under subparagraph (a)(4) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subparagrapph (a)(4) of this section must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

c. Certification: Any person signing a report shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision, in accordance with a system, designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the order or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

7.3 RECORDING OF MONITORING ACTIVITIES AND RESULTS

a. The operator shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this order, and records of all data used to complete the application for this order, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

b. Records of monitoring information shall include:

(1) the date, exact place, and time of sampling or measurements;

(2) the individual(s) who performed the sampling or measurements;

(3) the date(s) analyses were performed;

(4) the individual(s) who performed the analyses;

(5) the analytical techniques or methods used; and

(6) the results of such analyses.

7.4 TEST AND ANALYTICAL PROCEDURES

a. Monitoring and analysis must be conducted using test procedures promulgated, pursuant to 40 CFR Part 136, except:

(1) should the Department require the use of a particular test procedure, such test procedure will be specified in this order.

(2) should the operator desire to use a test method not approved herein, prior Department approval is required, pursuant to paragraph (b) of this section.

b. Application for approval of test procedures shall be made to the Director of DEC's Division of Water, and shall contain:

(1) the name and address of the applicant or the responsible person making the discharge, identification of this particular order and the telephone number of applicant's contact person;

(2) the names of the pollutants or parameters for which an alternate testing procedure is being requested, and the monitoring location(s) at which each testing procedure will be utilized;

(3) justification for using test procedures, other than those approved in paragraph (a) of this section; and

(4) a detailed description of the alternate procedure, together with:

(i) references to published studies, if any, of the applicability of the alternate test procedure to the effluent in question;

(ii) information on known interferences, if any; and

(5) a comparability study, using both approved and proposed methods. The study shall consist of 8 replicates of 3 samples from a well mixed waste stream for each outfall if less than 5 outfalls are involved, or from 5 outfalls if 5 or more outfalls are involved. Four (4) replicates from each of the samples must be analyzed using a method approved in paragraph (a) of this section, and four replicates of each sample must be analyzed using the proposed method. This results in 24 analyses per outfall up to a maximum of 120 analyses. A statistical analysis of the data must be submitted that shall include, as a minimum:

(i) calculated statistical mean and standard deviation;

(ii) a test for outliers at the mean ± 3 standard deviations level. Where an outlier is detected an additional sample must be collected and 8 replicates of the sample must be analyzed as specified above;

(iii) a plot distribution with frequency counts and histogram;

(iv) a test for equality among with-in sample standard deviation;

(v) a check for equality of pooled with-in sample variance with an F-Test;

(vi) a t-Test to determine equality of method means; and

copies of all data generated in the study.

Additional information can be obtained by contacting the Bureau of Technical Services & Research (NYSDEC, 50 Wolf Road, Albany, New York 12233 - 3502).

8.1 GENERAL

a. The disposal system shall not receive or be committed to receive wastes from unapproved sources, nor wastes beyond its design capacity as to volume and character of wastes treated, nor shall the system be materially altered as to: type, degree, or capacity of treatment provided; disposal of treated effluent; or treatment and disposal of separated scum, liquids, solids or combination thereof resulting from the treatment process without written approval of the Department of Environmental Conservation or its designated field office.

b. The operator shall, at all times, properly operate and maintain all facilities and systems of treatment and control (or related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this order. Proper operation and maintenance also includes as a minimum, the following: 1) A preventive/corrective maintenance program. 2) A site specific action orientated operation and maintenance manual for routine use, training new operators, adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of installed backup or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the order.

c. The operator shall not discharge floating solids or visible foam.

8.2 BYPASS

a. Definitions:

(1) "Bypass" means the intentional or unintentional diversion of waste stream(s) around any portion of a treatment facility for the purpose or having the effect of reducing the degree of treatment intended for the bypassed portion of the treatment facility.

(2) "Severe property damage" means substantial damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which would not reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations:

The operator may allow any bypass to occur which does not cause effluent limitations to be violated, but only if it also is for essential maintenance, repair or replacement to assure efficient and proper operation. These bypasses are not subject to the provisions of pargraph (c) and (d) of this section, provided that written notice is submitted prior to bypass (if anticipated) or as soon as possible after bypass (if unanticipated), and no public health hazard is created by the bypass.

c. Notice:

(1) Anticipated bypass - If the operator knows in advance of the need for a bypass, it shall submit prior written notice, at least forty five (45) days before the date of the bypass.

(2) Unanticipated bypass - The operator shall submit notice of an unanticipated bypass as required in Section 4, paragraph b. of this Part (24 hour notice).

d. Prohibition of bypass:

(1) Bypass is prohibited, and the Department may take enforcement action against a operator for bypass, unless:

(i) bypass was unavoidable to prevent loss of life, personal injury, public health hazard, or severe property damage;

(ii) there were no feasible alternatives to the bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal period of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance or if designed and installed backup equipment which could have prevented or mitigated the impact of the bypass is not operating during the bypass; and

(iii) the operator submitted notices as required under paragraph (c) of this section and, excepting emergency conditions, the proposed bypass was accepted by the Department.

a. Definition:

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with order effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset:

An upset constitutes an affirmative defense to an action brought for noncompliance with such order effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset:

An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operation logs, or other relevant evidence that:

(1) an upset occurred and that the operator can identify the cause(s) of the upset;

(2) the facility was at the time being properly operated; and

(3) the operator submitted notice of the upset as required in Section 4, paragraph b of this part (24 hour notice).

(4) the operator complied with any remedial measures required under Section 4, paragraph d of this part.

d. Burden of proof:

In any enforcement proceeding the operator seeking to establish the occurrence of an upset has the burden of proof.

8.4 SPECIAL CONDITION - DISPOSAL SYSTEMS WITH SEPTIC TANKS

If a septic tank is installed as part of the disposal system, it shall be inspected by the operator or his agent for scum and sludge accumulation at intervals not to exceed one year's duration, and such accumulation will be removed before the depth of either exceeds one-fourth (1/4) of the liquid depth so that no settleable solids or scum will leave in the septic tank effluent. Such accumulation shall be disposed of in an approved manner.

8.5 SLUDGE DISPOSAL

The storage or disposal of collected screenings, sludges, other solids, or precipitates separated from the authorized discharges and/or intake or supply water by the operator shall be done in such a manner as to prevent creation of nuisance conditions or entry of such materials into classified waters or their tributaries, and in a manner approved by the Department. Any live fish, shellfish, or other animals collected or trapped as a result of intake water screening or treatment should be returned to their water body habitat. The operator shall maintain records of disposal on all effluent screenings, sludges and other solids associated with the discharge(s) herein described. The following data shall be compiled and reported to the Department or its designated field office upon request:

a. the sources of the materials to be disposed of;

b. the approximate volumes, weights, water content and (if other than sewage sludge) chemical composition;

c. the method by which they were removed and transported, including the name and permit number of the waste transporter; and

d. their final disposal locations.

APPENDIX K

Letter to NYSDEC Detailing Work Done in November 2007

enviroSPEC ENGINEERING, PLLC
16 Computer Drive West
Albany, NY 12205
Phone: 518.453.2203
Fax: 518.689.4800

May 8, 2008

Mr. David Chiusano
NYS Department of Environmental Conservation
Remedial Bureau E, Section A
Division of Environmental Remediation
625 Broadway 12th Floor
Albany, NY 12233-7017

RE: Stauffer Management Company, Maestri Site #7-34-025, Onondaga County
Summary of Work Report

Dear Mr. Chiusano:

On behalf of Stauffer Management Company, LLC (SMC), Envirospec Engineering, PLLC (Envirospec) has prepared the following letter report to summarize field work completed at the SMC Maestri Site from November 19 to 20, 2007. The work was completed in accordance with the letter work plan submitted by Envirospec on October 5, 2007 with a response to New York State Department of Environmental Conservation (NYSDEC) comments on October 24, 2007. NYSDEC approval was granted in a letter dated October 24, 2007.

General Overview
Field activities were in response to site activities conducted on July 25, 2007, when two (2) test pits were excavated to address NYSDEC concerns resulting from a groundwater sample collected from MW-9 on April 3, 2007 which showed elevated levels of xylene. In order to complete the test pit activities, two (2) monitoring wells (MW-8 and MW-9) were removed. Field activities conducted in November 2007 consisted of the reinstallation of monitoring well MW-9 and the installation of four (4) soil borings outside the area of the July 2007 test pits in an effort to define the areal extent of possible xylene contamination. The locations of the new well and soil borings are shown on Figure 1.

Soil borings were advanced to refusal with split spoons collected at approximately two (2) foot intervals. Split spoons with recovery were characterized, screened with a PID, and bagged for headspace readings. The interval with the highest headspace reading was sent to the lab for analysis.

The replacement well MW-9 was installed in approximately the same location as the previous well. Purging and sampling of MW-9 was delayed until early January 2008 due to ground stability issues in the area of the new well.

The soil samples and subsequent groundwater sample were analyzed for xylene via EPA Method 8260. The concentration of xylene in the soil borings ranged from 0.54 to 4.4 ppm and groundwater sample collected from MW-9 showed xylene at 11 ppb. Details of the installation and sampling conducted for soil borings and the monitoring well are discussed further in subsequent sections.

Background
Field activities on July 25, 2007 were completed at the request of the NYSDEC in order to address concerns resulting from a groundwater sample collected from MW-9 on April 3, 2007 which showed elevated levels of xylene at 827 ppb**.** The NYSDEC had concerns that an area of soil contamination

remained in the area of MW-9 and MW-2A (formerly RW-2). To address NYSDEC concerns, two test pits were excavated in the vicinity of these wells to determine if a source of soil contamination remains. In order to complete the test pit activities, two (2) monitoring wells (MW-8 and MW-9) were removed.

During the test pit activities, an odor was noted at a depth of approximately 6.5 to eight (8) feet below ground surface (bgs). Headspace samples were taken throughout excavation of both test pits with results ranging from 0.0 ppm to 258 ppm. Overburden soils were staged on poly adjacent to the excavation, screened with the PID, and re-used as backfill upon confirmation of non-detectable PID screen readings and concurrence with the DEC. Excavated soils were loaded into five (5) lined rolloff boxes positioned next to the excavation. TP1 and TP2 were delineated with poly and backfilled with clean backfill and overburden soil from TP1. The location of the test pits are shown on Figure 1.

Due to continued concerns about the elevated xylene concentrations, MW-9 was proposed to be reinstalled along with the completion of four (4) soil borings as outlined in a letter to the NYSDEC dated October 5, 2007. It was agreed to by the NYSDEC that since MW-8 was no longer being utilized for sampling or elevation data reinstallation was not necessary. Since groundwater elevations had been recorded on a monthly basis from MW-9, its reinstallation was deemed appropriate. Responding to comments from the NYSDEC, Envirospec proposed a modified scope of the work on October 24, 2007 which was approved by the NYSDEC on October 24, 2007.

Objectives
The purpose of the field activities was to reinstall MW-9 and to further investigate soil conditions in the vicinity of MW-9.

Project Team
Envirospec Engineering, PLLC provided project management and field oversight. Abscope Environmental, Inc completed the site work. The NYSDEC provided regulatory oversight of the investigation activities and monitoring well replacement

Summary of Work
Field work was completed from November 19 to 20, 2007. A photographic log and field notes documenting the project tasks are attached to this letter report.

Monitoring Well Installation
Monitoring well installation began at approximately 10:05 AM on November 19. The well was installed in the same general location from which it was previously removed. A six (6) inch hollow stem auger was used to drill the well to a depth of approximately 17.33 feet. A six (6) inch PVC riser was installed at the well bottom followed by ten (10) feet of Schedule 40 PVC screen. The annular space in the screened interval was sand packed with a No. 2 filter sand pack to one (1) foot above the top of the screen. The annular space above the screened interval was then sealed with a layer of bentonite to provide a seal above the sand pack. The surface completion consisted of a stick-up protective steel casing fitted with a lockable cap.

When staff returned to the site the next morning, the backfilled area from the July 2007 work settled creating a “sink hole” effect which caused the metal casing of MW-9 to slip out of place and the fill appeared to have sloughed off from around the casing. The sink hole was most likely the result of backfill settling under the hard pan. During the previous test pit activities, much of the material was

removed laterally from under the hard pan creating a void. This combined with the removal of most of the hard pan layer in the area of the July 2007 activities led to a structurally weaker soil material. To correct the sink hole, additional backfill material was added to the area in front of the well on November 23, 2007 along with an additional layer of bentonite chips around the well casing. The well was allowed to develop overnight. Another sinkhole area was observed in December 2007 by site maintenance personnel, but it was at a far enough distance from the newly installed well that it did not affect the well.

The well was sampled on January 2, 2008. Three (3) well volumes were purged prior to sampling. The well was gauged for depth-to-water and total depth from the top of casing to determine the elevation of groundwater and volume of water in the well. The field record from the sampling activity is attached. The well was sampled using a dedicated disposable bailer. A sample was collected in laboratory provided sample jars and placed on ice for shipping or delivery under chain-of-custody protocols. The sample was analyzed for xylene via EPA Method 8260. The sample results showed a xylene concentration of 11 ppb. The laboratory results are attached to this letter report.

Soil Borings

To further investigate soil conditions in the area of work, SMC installed four (4) soil borings outside the area of site activities from July 25, 2007. Locations are shown on Figure 1.

Soil boring activities began at approximately 12:30 PM on November 19. SB-1 began approximately four (4) feet below ground surface (bgs). Hard pan was encountered at approximately 6.4 feet bgs and continued until approximately twelve (12) feet bgs. Only a few split spoon samples could be collected in this range due to the hard pan. The soil boring was advanced to refusal encountered at approximately twenty (20) feet bgs. The final interval, eighteen (18) to twenty (20) feet bgs, showed the highest headspace reading of 18.7 ppm and a grab sample was collected for laboratory analysis. Envirospec and the DEC discussed the headspace readings in the area above the hard pan and the DEC concurred to drilling straight through the pan and sampling below this region for the remaining soil borings. SB-4 began at approximately 3:30 PM on November 19. Split spoon sampling began at approximately thirteen (13) feet bgs. The soil boring was advanced to refusal encountered at 18.3 feet bgs. The final interval, seventeen (17) to 18.3 feet bgs, showed the highest headspace reading of 35.6 ppm and a grab sample was collected for laboratory analysis.

Soil boring work continued at 9:30 AM on November 20. While beginning SB-3, the original drill rig broke at approximately ten (10) feet bgs. A new rig arrived on site at approximately 12:00 PM. SB-3 continued at approximately 12:10 PM. Split spoon samples were started at approximately thirteen (13) feet bgs. The soil boring was advanced to refusal encountered at 16.5 feet bgs. The final interval, fifteen (15) to 16.5 feet bgs, showed the highest headspace reading of 39.4 ppm and a grab sample was collected for laboratory analysis. SB-2 began at approximately 12:50 PM on November 20. Split spoon sampling began at approximately ten (10) feet bgs. The soil boring was advanced to refusal encountered at 15.5 feet bgs. SMC and the NYSDEC had to collect grab samples from two (2) different intervals due to low recovery in each. The NYSDEC collected their sample from the final interval, fifteen (15) to 15.5 feet bgs, which showed the highest headspace reading. SMC collected their sample from the thirteen (13) to fifteen (15) feet bgs interval which showed the highest PID screen at 0.4 ppm. A summary of headspace readings is presented below in Table 1.

Table 1 – Bore Screen/Headspace Results

Soil Boring	Depth/Interval (ft)	PID Screen (ppm)	Headspace (ppm)
SB-1	4 - 6	0.0	0.0
SB-1	6 - 6.4	0.0	0.0
SB-1	6.4 - 8	-	-
SB-1	8 - 8.3	0.0	0.0
SB-1	8.3 - 10	-	-
SB-1	10- 10.3	0.0	0.0
SB-1	10.3 - 12	-	-
SB-1	12 - 14	0.0	4.2
SB-1	14 - 14.5	5.8	8.9
SB-1	14.5 - 16	-	-
SB-1	16 - 18	9.0	14.2
SB-1	**18 - 20**	**5.2**	**18.7**
SB-2	10 - 10.5	0.0	1.0
SB-2	10.5 - 12	-	-
SB-2	12 - 12.2	0.0	1.1
SB-2	**13 - 15**	**0.4**	**1.7**
SB-2*	***15 - 15.5***	***0.0***	***2.4***
SB-3	13 - 15	0.0	2.3
SB-3	**15 - 16.5**	**10.8**	**39.4**
SB-4	13 - 15	0.0	1.6
SB-4	15 - 17	0.0	0.5
SB-4	**17 - 18.3**	**25.0**	**35.6**

* NYSDEC sample interval
(-) Interval not screened due to poor recovery and/or hard pan

The bolded intervals in Table 1 show the intervals that were jarred and sent to the laboratory. Samples were analyzed for xylene via EPA Method 8620. A summary of sampling results is listed in Table 2 below. A copy of the laboratory results are attached to this report. Results obtained by NYSDEC are not attached to this report.

Table 2 – Bore Sample Results

Soil Boring	Xylene Concentration (ppb)	Depth (feet)
SMC Samples		
SB-1	4400	18 – 20
SB-2	<150	13 – 15
SB-3	810	15 – 16.5
SB-4	540	18 – 18.3
NYSDEC Samples		
SB-1	26	18 – 20
SB-2	<10	15 - 15.5
SB-3	62	15 – 16.5
SB-4	69	18 – 18.3

As previously discussed, DEC split samples were collected from each soil boring. DEC grab samples were collected from the same interval as SMC samples if the split-spoon recovered enough material for two samples. Due to low recovery at SB-2, the SMC sample had to be collected from the higher interval. The DEC sample results show there to be low level xylene contamination but at concentrations lower than those observed in SMC samples. The results showed one sample with levels of xylene above SCGs (1200 ppm).

Waste Management

Since MW-9 was in an area known to contain clean fill material from the backfill activities in August 2007, soil cuttings from the installation of the new well were reused as backfill material around the well. Soil cuttings removed from the soil borings were placed back in the boreholes. Solid materials generated (gloves, plastic bags) were removed from the site and properly disposed. No additional waste was generated during the field work.

Summary and Recommendations

Envirospec recommends no further action for soils at the site. In addition, SMC is requesting to shut down the groundwater recovery system and the addition of RW-8 to quarterly sampling. The Maestri groundwater recovery wells are currently monitored monthly for elevation and sampled quarterly. One monitoring well, MW-2A, which was formerly a recovery well (RW-2) until April 2006 when it was overdrilled and converted to a monitoring well, is sampled. Following the test pit and soil boring activities, the first quarterly sampling event for 2008 occurred on January 8, 2008. The results are summarized in Table 3 below.

Table 3 – January 8, 2008 Sampling Event

Well	Total Xylene (ppb)
MW-2A (RW-2)	3
RW-3	<3.0
RW-5	14
RW-6	52
RW-7	<3.0

The results followed the general trend of previous sampling results from the past three (3) years as shown in Table 4 below.

Table 4 – Total Xylene Concentrations (µg/L) for Recovery Wells

Sample Date	MW-2A (RW-2)	RW-3	RW-5	RW-6	RW-7	RW-8
4-Jan-05	3400	<3.0	7.9	147	7.8	<3.0
1-Feb-05	3844	<3.0	5.8	25	175	<3.0
1-Mar-05	4190	<3.0	7.9	<3.0	39	<3.0
4-Apr-05	4160	<3.0	10	25	<3.0	<3.0
3-May-05	4647	<3.0	6.5	20	<3.0	<3.0
7-Jun-05	902	<7.5	<3.0	<3.0	110	<3.0
5-Jul-05	460	<3.0	<3.0	<3.0	146	<3.0
2-Aug-05	2222	<3.0	<3.0	<3.0	110	<3.0
5-Sep-05	2055	<3.0	<3.0	35	<15	<3.0
4-Oct-05	750	<3.0	<3.0	5.5	180	<3.0
1-Nov-05	2850	3.1	<3.0	<3.0	38	<3.0
6-Dec-05	4757	79	7.8	25	<15	<3.0

Sample Date	MW-2A (RW-2)	RW-3	RW-5	RW-6	RW-7	RW-8
3-Jan-06	4640	<3.0	<3.0	45	<3.0	<3.0
9-Feb-06	3890	<3.0	8.4	70	INC	<3.0
7-Mar-06	6250	<3.0	<3.0	3.2	129	<3.0
4-Apr-06[1]	2070	<3.0	<3.0	142	<30	<3.0
2-May-06	2400	<3.0	<3.0	58	<30	<3.0
6-Jun-06[2]	NS	<3.0	<3.0	9	102	<3.0
4-Jul-06	665	<3.0	<3.0	34	130	NS
1-Aug-06	NS	5	<3.0	63	90	<3.0
3-Oct-06	<3.0	3.3	<3.0	3	55	NS
2-Jan-07	<3.0	<3.0	<3.0	29	40	NS
3-Apr-07	6.4	25	<3.0	145	3.7	NS
3-Jul-07	410	<3.0	<3.0	<3.0	<3.0	NS
2-Oct-07	1025	<3.0	<3.0	30	6	NS
8-Jan-08	3.0	<3.0	14	52	<3.0	NS

[1]RW-2 replaced with MW-2A on April 24-28 2006
[2]RW-8 sampling ceased as per NYSDEC letter dated June, 6, 2006

The groundwater treatment system has been operating since 1996. Quarterly sampling results currently serve as the basis for evaluating the effectiveness of groundwater remedial activities at the site. As stipulated in the ROD, the onsite groundwater treatment system is to be operated and evaluated annually until "concentrations of site contaminants can no longer be effectively removed or cleanup objectives are met." The levels of contaminants remaining in groundwater are low and the system is no longer effective as shown by the consistency of the results. The groundwater treatment system has achieved the goals of the ROD and SMC is therefore requesting to shut down the system.

Upon shutdown of the recovery system, it is proposed to sample perimeter wells monthly for three (3) months to ensure the plume does not migrate. The wells to be sampled include the current quarterly wells with the addition of PZ-4 and RW-8. Groundwater elevations will be collected from all onsite wells immediately prior to sampling. As shown in the site plan, the sampled wells show an ample cross section of the property and monitoring of those wells would indicate if the plume begins to migrate after pumping is ceased. A table of the wells and piezometers at the site is attached to this Report. The table indicates the screened interval of each of the wells or piezometer. The proposed sampling locations represent a similar screened interval to RW-6.

During the first three (3) months of sampling, monthly reports will be submitted to the NYSDEC. Groundwater elevations of current recovery and monitoring wells as well as piezometers will continue to be collected monthly and included in the monthly reports. Expedited sample results will be requested of the lab in an effort to obtain sample results within no more than five (5) days of sample collection. After three (3) months of sampling, SMC will propose an alternate sampling schedule based on results. If results indicate plume migration, next steps will be discussed with the NYSDEC. If after shutdown of the system flooding is observed in adjacent properties to the site, sampling of the surface water will be completed to determine if there is xylene contamination. The number of samples to be collected will depend on the extent of the flooding and will be discussed with the NYSDEC prior to sampling. If xylene results from the sampling are above SCGs, the system will be turned back on and next steps will be discussed with the NYSDEC. The system will be maintained for one (1) year after shutdown in case reactivation due to flooding or plume migration is necessary. Following the one (1) year shutdown, SMC will propose permanent demobilization of the treatment system in a subsequent proposal.

The site will continue to be monitored on a monthly basis during regular site work conducted each month while the treatment system remains active (i.e. groundwater elevations collected on a monthly basis). The area will be inspected weekly for three (3) months after the treatment system is shutdown to provide a proactive approach to monitor for potential sink hole development and site flooding.

The area of the previously observed sink hole was backfilled and graded on April 16, 2008. Additional site maintenance was conducted on April 16 and 17, 2008. Stone was added to the northwest corner of the site to mitigate site runoff to down gradient residences. Silt fence and hay bales were repaired for the same area. Additional silt fence and hay bales were installed along the southern perimeter. Disturbed areas of the site are scheduled be graded and re-seeded the week of May 19th.

SMC is proposing to shut down the system upon approval of this report by the NYSDEC. Should you have any questions regarding the project, please do not hesitate to contact me at (518) 453-2203.

Sincerely,

Gianna Aiezza

Gianna Aiezza, PE
Principal Engineer
Envirospec Engineering, PLLC

Enc

cc: B. Shay/P. Ekoniak – SMC
J. Abraham – SMC
L. Mona/M. Newman – Envirospec

APPENDIX L

Orders on Consent #A7-0139-88-01 and #A7-0226-90-03

Execution completed 10/4/88

760500 Order on Consent

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of an Interim Remedial Measure Program at 904 State Fair Boulevard, pursuant to Article 27, Title 13, of the Environmental Conservation Law of the State of New York (the "ECL") by

INTERIM ORDER ON CONSENT

INDEX # A7-0139-88-01
SITE # 7-34-025

STAUFFER MANAGEMENT COMPANY
Respondent.

WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13, of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites".

2. Stauffer Management Company ("Respondent"), is a corporation organized and existing under the laws of the State of Delaware, is doing business in the State of New York and is the parent of a wholly owned subsidiary which is the corporate successor in interest to Stauffer Chemical Company ("SCC").

3. Bert Maestri, residing at 129 Pleasant Beach Road, Syracuse, New York, owns a parcel of property located at 904 State Fair Boulevard, Solvay, New York (the "Site"). A map of the Site is attached to this order as Appendix A.

4. The Department alleges that beginning approximately in 1974 and continuing approximately until 1976, SCC, generated certain hazardous wastes which were disposed of at the Site.

5. Respondent alleges that Mr. John Maestri, and Mr. Robert Valerino, were at all relevant times partners in Westlake Construction Company, and transported and disposed of SCC's wastes at the Site.

6. The Site is an inactive hazardous waste disposal site, as that term is defined in ECL Section 27-1301(2), and has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 7-34-025.

7. The Department has identified and classified the site pursuant to ECL Section 27-1305, under classification 2, a "significant threat to the public health or environment - action required".

8. Pursuant to ECL Section 27-1313(3)(a), whenever the Commissioner of Environmental Conservation ("Commissioner") finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the Environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department, at such site, and (ii) to implement such program within reasonable time limits specified in the order."

9. The Department and Respondent acknowledge that the goal of this Order shall be the expeditious development of an Interim Remedial Measure Program ("IRM Program") for the Site which shall include provision for the implementation of any Interim Remedial Measures ("IRMs") that may be needed. The Department and Respondent further acknowledge that Respondent has developed a plan ("the Work Plan") for a field investigation designed to generate sufficient data from which it will be possible to identify impacts that may require IRMs and to develop a plan for implementing appropriate IRMs and to implement appropriate IRMs, as needed, at the Site. The Work Plan has been approved by the Department and is incorporated into this Order as Appendix B.

10. While Respondent does not admit that it is responsible under law for the disposal of hazardous wastes at the Site, Respondent has agreed, subject to the terms and conditions of this Order,to fund and perform the work set forth in the Work Plan, incorporated as Appendix B, as a means of developing the IRM Program.

11. Respondent, having waived whatever right it may have to a hearing, to which it would otherwise be entitled before the Commissioner issues an Order pursuant to ECL § 27-1313(4) and having consented to the issuance and entry of this Order, agrees to be bound by the terms hereof.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. All investigations, proposals, reports, plans, remedial programs, and supplements and revisions thereto required by this Order shall address, as outlined in the Work Plan, both on-Site and off-Site contamination and impacts caused by the disposal of hazardous wastes at the Site, and shall be prepared, designed and executed in accordance with generally accepted engineering and technical practices, and shall be in compliance with all applicable federal, state and local laws and regulations.

II. As used herein, "hazardous wastes" shall mean hazardous wastes, as defined at 6 NYCRR 375.2.

III. A. All submittals made by Respondent pursuant to this Order shall be subject to Departmental review.

B. If the Department approves a submittal, Respondent shall perform the specified work or continue with Respondent's obligations under the Order in accordance with the terms of the approval and under the Department's supervision. The submittal once approved by the Department shall be appended to and made a part of this Order.

IV. Respondent shall undertake a site investigation and development and implementation of IRM Program in accordance with the Work Plan incorporated as Appendix B.

V. Respondent shall immediately commence performance of the work outlined in the Work Plan incorporated as

Appendix B, in accordance with the schedule specified therein.

VI. Pursuant to the time schedule set forth in the Work Plan, Respondent shall submit to the Department a report containing interim data from the initial phases of the site investigations and also containing a proposal which outlines any appropriate IRMs (the "Initial Report and Proposal").

VII. Within fourteen (14) days after receipt of the Initial Report and Proposal, the Department shall provide written notification to the Respondent of its approval or disapproval of the Initial Report and Proposal.

If the Department approves the Initial Report and Proposal, the Respondent shall promptly perform the specified work and begin implementation of the IRM(s) proposed in the Initial Report and Proposal in accordance with the terms of the approval and under the Department's supervision and also continue Respondent's obligations under the Work Plan and Order.

If the Department disapproves the Initial Report and Proposal, the Department shall notify the Respondent in writing of the Department's objections and the basis thereof. Within fourteen (14) days after its receipt of the notice of disapproval, Respondent shall prepare and submit a revised Initial Report and Proposal to the Department which addresses the Department's objections (the "Revised Initial Report and Proposal").

Within fourteen (14) days after receipt of the Revised Initial Report and Proposal, the Department shall provide written notice to the Respondent of its approval or disapproval of the Revised Initial Report and Proposal. If the Department approves the revised submittal, Respondent shall promptly perform the specified work and begin implementation of the IRM(s) proposed therein in accordance with the terms of the approval and under the Department's supervision and also continue with Respondent's obligations under the Work Plan and this Order.

If, after re-submission as provided above, the Department disapproves the Revised Initial Report and Proposal, the parties shall confer together in good faith to resolve their differences.

If after conferring in good faith, there is still a dispute concerning the terms of the submittal, the matter shall be settled in accordance with the dispute resolution procedures set forth in Paragraph X below.

VIII. Pursuant to the time schedule set forth in the Work Plan, incorporated as Appendix B, Respondent shall submit to the Department a report containing all data from the complete site investigation conducted as provided herein and also containing a proposal for the implementation of any appropriate IRMs, not previously proposed or conducted (the "Final Report and Proposal").

IX. Within twenty-one (21) days after receipt of the Final Report and Proposal, the Department shall provide

written notification to the Respondent of its approval or disapproval of the Final Report and Proposal.

If the Department approves the Report and Proposal, the Respondent shall promptly perform the specified work and begin implementation of all IRMs set forth in the Final Report and Proposal in accordance with the terms of the approval and under the Department's supervision and also continue with Respondent's obligations under the Order .

If the Department disapproves the Final Report and Proposal, the Department shall notify the Respondent in writing of the Department's objections and the basis thereof. Within fourteen (~~14~~ 21) days after its receipt of the notice of disapproval, Respondent shall prepare and submit a revised Final Report and Proposal to the Department which addresses the Department's objections (the "Revised Final Report and Proposal").

Within fourteen (14) days after receipt of the Revised Final Report and Proposal, the Department shall provide written notice to the Respondent of its approval or disapproval of the Revised Final Report and Proposal. If the Department approves the revised submittal, Respondent shall perform the specified work and begin implementation of the IRM(s) proposed therein in accordance with the terms of the approval and under the Department's supervision and also continue with its obligations under this Order.

If, after re-submission as provided above, the Department disapproves the Revised Final Report and

Proposal, the parties shall confer together in good faith to resolve their differences.

If after conferring in good faith there is still a dispute concerning the terms of the submittal, the matter shall be settled in accordance with the dispute resolution procedures set forth in Paragraph X below.

X. If after conferring in good faith, there is still a dispute between Respondent and the Department concerning matters related to paragraphs VI, VII, VIII, IX, XVIII and XXVI, such matters shall be settled in accordance with the following procedures:

Either party, upon written notice to the other, may request the Commissioner of Environmental Conservation to appoint an Administrative Law Judge ("ALJ"). Upon receipt of such request the Commissioner shall appoint an ALJ who shall convene a hearing to settle the dispute. If the ALJ deems it necessary to convene an evidentiary hearing, the taking of evidence shall be concluded within fifteen (15) working days (unless further extended for good cause) of the receipt of the written request to appoint an ALJ. If the ALJ deems it unnecessary to convene an evidentiary hearing, he shall within fifteen (15) working days (unless further extended for good cause) of the notice of request to appoint an ALJ, nevertheless convene a conference at which the issues may be presented and a record made.

In all proceedings hereunder:

1. The parties shall be Respondent and the Department.

2. The burden of going forward shall be on the Respondent.

3. The ALJ shall have all powers conferred by 6 NYCRR §622.12.

4. All proceedings conducted pursuant to this Paragraph shall be stenographically recorded. The Respondent shall arrange for an expedited stenographic transcript to be made within three (3) working days after conclusion of the proceeding, and for the original and two copies of the transcript to be delivered to the ALJ at the expense of the Respondent.

5. The ALJ shall prepare, no later than thirty (30) working days after receipt of the transcript of the proceeding, a written summary of the documentation and testimony received during the proceeding and a recommended decision. The summary and recommendation shall be hand-delivered to the Department's representative and sent by certified mail, return receipt requested, and another copy by Express Mail, to Respondent.

6. The ALJ's recommended decision shall become the final determination of the Commissioner unless, within five (5) working days from receipt of the recommended decision, either Respondent or the Department objects in writing. Any objections shall be submitted in writing to

the ALJ with a copy by express mail, telecopier or hand-delivery to the other party, which shall serve and file its response, if any, within two (2) working days of receipt of the objection by express mail, telecopier or hand-delivery. Upon receipt of the objections and any response, the ALJ shall refer the matter to the Commissioner for final determination.

7. The final determination of the Commissioner shall be made within fifteen (15) working days, or as soon as practicable, after receipt of the referral by the ALJ.

8. With respect to the final determination of the Commissioner, Respondent shall have those rights granted pursuant to Article 78 of the Civil Practice Law and Rules (CPLR) of New York, provided however that the period of four (4) months for petitioning thereunder shall be limited to one (1) month.

XI. Respondent shall submit a health & safety plan for each component of the site investigation described in this Order. Such plans are to be prepared and certified by a qualified industrial hygienist.

XII. The Department shall have the right to obtain "split samples" for the purpose of comparative analysis of all substances and materials sampled by Respondent pursuant to this Order.

XIII. Respondent shall provide notice to the Department of any excavating, drilling or sampling to be conducted

pursuant to the terms of this Order at least five (5) working days in advance of such proposed activities. The parties shall make every effort to mutually arrange the timing and schedule of such activity in a manner which will enable Department personnel to conduct, when it desires, on-site field oversight.

XIV. Respondent shall use its best efforts to obtain whatever authorizations, including permits, approvals, easements, rights of way and rights of entry are necessary in order to perform its obligations under this Order. Respondent shall promptly notify the Department in the event of Respondent's inability to obtain such authorizations on a timely basis. In the event Respondent is unable to obtain the necessary authorizations required to implement the Remedial Site Investigation, the Department shall, consistent with its legal authority, assist in obtaining such authorizations Respondent was unable to obtain. If Respondent cannot obtain such authorization, Respondent shall, pursuant to paragraph XXVI, request that this Order be appropriately modified.

XV. Insofar as it may be legally empowered to do so, Respondent shall permit any duly designated officer, employee, consultant, contractor or agent of the Department to enter upon the Site or areas in the vicinity of the Site which may be under the control of Respondent, and any areas necessary to gain access thereto, for purposes of inspection and of making or causing to be made such sampling and tests

as the Department deems necessary, and for assurance of Respondent's compliance with the terms of this Order.

XVI. Respondent shall retain a third-party professional engineering consultant and a Department certified laboratory to perform the technical, engineering and analytical obligations required by this Order. Respondent's third-party engineering consultant must be an engineering firm authorized to offer engineering services in the State of New York.

XVII. All decisions of the Department pursuant to this Order, including approvals, disapprovals, grants or denials of requests for extensions of time and requests for modifications of reports, work plans, specifications, schedules, or other work outputs shall be communicated in writing to Respondent by the Department, in accordance with the provisions of paragraph XXVII below.

XVIII. Respondent shall not suffer any penalty under any of the terms of this Order, or be subject to any proceeding or actions for any remedy or relief if it cannot comply with any requirements hereof including the time deadlines in schedules set forth in this Order or in the Work Plan, if caused by any of the following: (i) an act of God, (ii) unanticipated dangerous conditions at the Site about which timely notice has been given to the Department, (iii) any delays which result from failure to obtain access to the Site after Respondent has exhausted all efforts to obtain site access pursuant to its obligations as set forth in

paragraph XIV, (iv) any delay caused by the Department's failure to complete its review of plans and reports within the time period specified in this Order (v) any delays resulting from invocation of the dispute resolution procedures set forth in paragraph X or (vi) other condition as to which negligence or willful misconduct on the part of Respondent was not a proximate cause, provided however, that Respondent shall immediately notify the Department in writing when it obtains knowledge of any such condition, and shall identify with specificity the cause or causes of such delay and the estimated duration of the delay, and request an extension or modification of the terms of this Order. Respondent agrees to use its best efforts to minimize any delay which may result.

XIX. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting:

A. any legal or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against anyone other than Respondent, its directors, officers, employees, servants, agents, successors and assigns;

B. the Department's right to enforce at law or in equity the terms and conditions of this Order against Respondent, its directors, officers, employees, servants, agents, successors and assigns in the event that Respondent shall fail to satisfy any of the terms hereof;

C. the Department's right to bring any action at law or in equity to which the Department may be entitled against Respondent, its directors, officers, employees, servants, agents, successors and assigns with respect to areas or resources that may have been affected or contaminated as a result of the release or migration of hazardous or industrial wastes at or from the Site or to or from areas in the vicinity of the Site; and

D. the Department's right to bring any action or proceeding to which the Department may be entitled in connection with, relating to, or arising out of Respondent's alleged disposal of hazardous wastes at the Site.

XX. Respondent's sponsoring, developing and performing the IRM Program, does not constitute an admission by Respondent of liability for the conditions present on the site. Nor shall any studies, reports or other submissions developed pursuant to the terms of this Order be deemed evidence of an admission of liability for conditions present at the site.

XXI. The parties agree that the IRM Program is being conducted and funded by the Respondent to carry out the goals expressed in this Order. Respondent's signing of this Order, and its agreement to sponsor, fund and perform the work and activities outlined herein shall not constitute or be construed as a commitment or agreement, either express or implied to undertake any further activities, at the Site

other than those necessary to perform the activities set forth in the Work Plan in accordance with this Order.

XXII. The terms of this Order shall not be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers, either at common law or as granted pursuant to statute or regulation.

XXIII. Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of the terms of this Order by Respondent, its directors, officers, employees, servants, agents, successors or assigns.

XXIV. Payment by Respondent in furtherance of any of the activities identified in the Work Plan or in furtherance of this Order shall not be deemed a waiver of, and shall not preclude Respondent from pursuing any actions or proceedings against any other potentially responsible party, with respect to the amounts paid in undertaking the work outlined in the Work Plan attached hereto as Appendix B.

XXV. The effective date of this Order shall be the date it is signed by the Commissioner.

XXVI. If Respondent desires that any terms of this Order be changed, including the terms of or time schedules set forth in the Work Plan attached hereto as Appendix B,

Respondent shall make timely written application to the Commissioner, setting forth reasonable grounds for the relief sought. The parties agree to confer in good faith in response to any such request for modification.

XXVII. All communication required by this Order to be made between the Department and Respondent shall be made in writing and transmitted by United States Postal Service Return Receipt Requested, express mail or hand delivered to the address listed below.

A. Communication to be made from Respondent to the Department shall be made as follows:

1. Two copies to the Division of Hazardous Waste Remediation, Room 212, 50 Wolf Road, Albany, New York 12233. Attention: Michael J. O'Toole, P.E., Director.

2. Two copies to the Division of Environmental Enforcement, Room 415, 50 Wolf Road, Albany, New York 12233. Attention: David Markell, Esq., Director.

3. Two copies to the NYS Department of Environmental Conservation, Region 7, 615 Erie Boulevard West, Syracuse, New York 13204 Attention: Regional Director.

4. Two copies to the NYS Department of Health, 667 South Salina Street, Syracuse, New York 13202 Attention: Ronald Heerkens.

B. Communication to be made from the Department to Respondent shall be made as follows:

1. Two copies to Stauffer Management Company, Law Department, Concord Pike & Murphy Road, Wilmington, Delaware 19897. Attention: Melford F. Tietze, Esq.

2. Two copies to Stauffer Management Company, Central Engineering Department, Concord Pike & Murphy Road, Wilmington, Delaware 19897. Attention: S.A. LaRocca.

3. Two copies to Environmental Resources Management, Inc., 855 Springdale Drive, Exton, Pennsylvania 19341. Attention: Alan MacGregor

C. The Department and Respondent respectively reserve the right to designate other or different addresses on notice to the other.

XXVIII. The terms of this Order shall be deemed to bind Respondent, its officers, directors, agents, servants, employees, successors and assigns.

XXIX. Nothing herein shall be construed to bind any entity not specifically bound by the terms of this Order.

XXX. The terms hereof shall constitute the complete and entire Order between Respondent and the Department concerning the Site. No terms, conditions, understandings or agreements purporting to modify or vary the terms hereof shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestions or comments by the Department regarding reports, proposals, plans, specifications, schedules or any other

writing submitted by Respondent shall be construed as relieving Respondent of its obligations to obtain such formal approvals as may be required by this Order.

DATED: October 4, Albany, New York
, 1988

THOMAS C. JORLING
Commissioner
New York State Department of
Environmental Conservation

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives its right to a hearing herein as provided by law, and agrees to be bound by the provisions, terms and conditions contained in this Order.

By: A.C. Perrino

Title: Vice President - Technology & Strategy

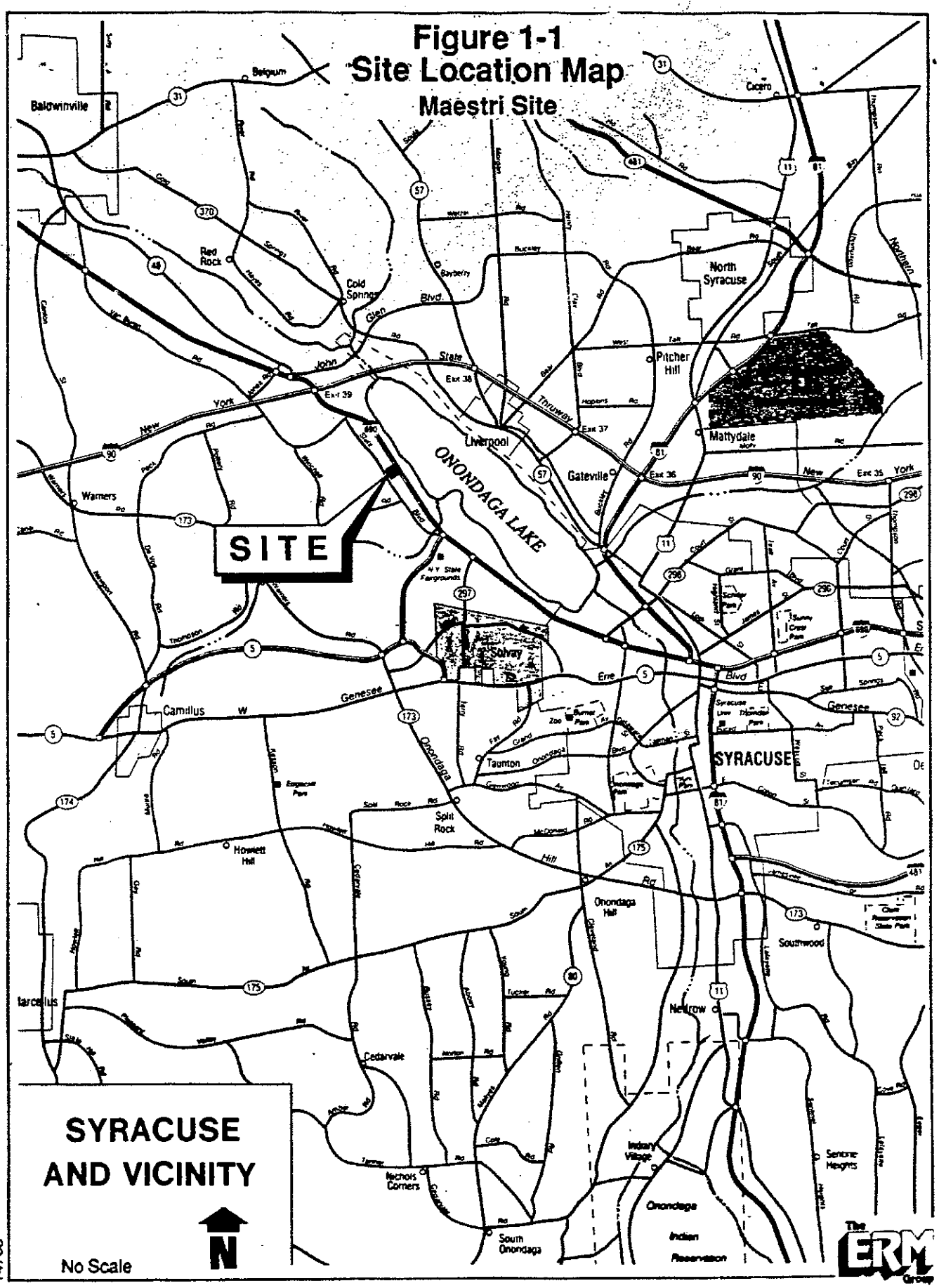
Date: August 31, 1988

STATE OF DELAWARE)
) s.s.:
COUNTY OF NEW CASTLE)

On this 31st day of August, 1988, before me personally came A.C. Perrino, to me known, who being duly sworn, did depose and say that he resides in Wilmington, Delaware; that he is the Vice President - Technology & Strategy of the Stauffer Management corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

Joanne C. Stella
Notary Public

Figure 1-1
Site Location Map
Maestri Site



APPENDIX A

3

STATE OF NEW YORK:
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Implementation of an Interim Remedial Measure at an Inactive Hazardous Waste Disposal Site by:

STAUFFER MANAGEMENT COMPANY,
Respondent.

Modification of
Order on Consent
Index # A7-0226-90-03
Site #7-34-025

WHEREAS:

1. The New York State Department of Environmental Conservation ("Department") is responsible for the enforcement of Article 27, Title 13, of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites".

2. Stauffer Management Company ("Respondent"), is a corporation organized and existing under the laws of the State of Delaware and is doing business in the State of New York. Stauffer Management Company is an indirect successor to certain liabilities of Stauffer Chemical Company ("SCC"), a corporation which operated a manufacturing plant in Skaneateles Falls, New York from 1967 to 1981.

3. Bert Maestri, residing at 129 Pleasant Beach Road, Syracuse, New York, owns a parcel of property located at 904 State Fair Boulevard, Solvay, New York (the "Site"). A map of the Site is attached to this Order as Appendix A.

4. The Department alleges, without admission on Respondent's part, that beginning approximately in 1974 and continuing approximately until 1976, SCC, generated certain hazardous wastes which were disposed of at the Site.

5. The Site is an inactive hazardous waste disposal site, as that term is defined in ECL § 27-1301(2), and has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 7-34-025.

6. The Department has identified and classified the Site pursuant to ECL § 27-1305, under classification 2, a "significant threat to the public health or environment - action required."

7. Pursuant to ECL § 27-1313(3)(a), whenever the Commissioner of Environmental Conservation ("Commissioner") finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the Department, at such site, and (ii) to implement such program within reasonable time limits specified in the Order."

8. On December 16, 1992 the Department entered into an Order on Consent (Index # A7-0226-90-03) with Respondent that requires a Remedial Investigation/ Feasibility Study for the Site and, if Respondent agrees to implement the remedy set forth in the Record of Decision, the development and implementation of a remedial design (RD) and remedial action (RA).

9. The Department and Respondent acknowledge that the goal of this Modification of Order on Consent #A7-0226-90-03 is that Respondent shall develop and implement an interim remedial measure ("IRM") at the Site. If the Department and Respondent agree that further IRMs are appropriate, Respondent shall submit

subsequent IRM Work Plans for the Department's review and approval prior to implementation pursuant to this Modification of Order on Consent.

10. For purposes of this Modification of Order on Consent an Interim Remedial Measure is defined as a remedial measure that reduces the threat of harm to the public health and/or the environment which are taken prior to the issuance of a Record of Decision by the Department.

11. The Department and Respondent agree that relevant information generated during Respondent's implementation of the approved interim remedial measures under this Modification of Order on Consent #A7-0226-90-03 will be included as an addendum to the Remedial Investigation.

12. While Respondent does not admit that it is responsible under law for the disposal of hazardous wastes at the Site, Respondent has agreed to fund and perform the work required in accordance with this Modification of Order on Consent #A7-0226-90-03 reserving its rights to seek contribution from any and/or all parties having any responsibility in connection therewith.

13. Respondent, having waived its right to a hearing herein, to which it is entitled before the Commissioner issues an Order pursuant to ECL 27-1313.4 and having consented to the issuance and entry of this Modification of Order on Consent #A7-0226-90-03, without any admission or denial of liability, agrees to be bound by the terms hereof.

NOW, THEREFORE, having considered this matter and being duly advised, it is ORDERED that:

I. Except where specifically modified or amended herein the terms, conditions, obligations and rights reserved under Order on Consent #A7-0226-90-03 shall remain unchanged and in full force and effect.

II. A new paragraph is to be added to the Order on Consent #A7-0226-90-03. The Order on Consent #A7-0226-90-03 is hereby amended and modified to read as follows:

> XXXV. Within 30 days after the effective date of this Modification Respondent shall submit to the Department, for the Department's review and approval, a detailed work plan describing the methods and procedures to be implemented in performing an interim remedial measure ("IRM") at the Site ("IRM Work Plan"). Within 60 days of receipt of the Department's approval of the IRM Work Plan Respondent shall begin implementation of the Approved IRM Work Plan in accordance with the terms and schedule contained in the Approved IRM Work Plan. Within 60 days after completion of the IRM Respondent shall submit a final engineering report ("Final Report") and a certification that the activities were completed in accordance with the Approved IRM Work Plan, by an engineer licensed to practice by the State of New York. The Department reserves the right to require a clarification, modification,

and/or amplification and expansion of the Final Report by Respondent if the Department determines, as a result of reviewing data generated by the Approved IRM Work Plan and Final Report, or as a result of reviewing any other data or facts, that further information is required. After receipt of the Final Report and certification, the Department shall notify Respondent in writing whether it is satisfied with the quality and completeness of the IRM as being protective of human health and the environment. If the Department and Respondent agree that additional IRMs are appropriate then Respondent shall submit additional IRM Work Plans and implement such approved IRM Work Plans in accordance with procedures to be agreed upon at that time.

III. The effective date of the Modification of Order on Consent #A7-0226-90-03 shall be the date it is signed by the Commissioner or his designated representative.

DATED: November 15, 1993
Albany, New York

Ann DeBarbieri
Deputy Commissioner
New York State Department of
Environmental Conservation

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Modification to Order on Consent #A7-0226-90-03 and agrees to be bound by the provisions, terms and conditions contained in this Modification to Order on Consent #A7-0226-90-03.

STAUFFER MANAGEMENT COMPANY

By: Brian A. Spilles

Title: President

Date: Oct 20, 1993

STATE OF Delaware)
) s.s.:
COUNTY OF New Castle)

On this 20th day of October, 1993, before me personally came Brian A. Spilles, to me known, who being duly sworn, did depose and say that he resides in _____; that he is the President of the Stauffer Mgmt Co. corporation, the corporation described herein and that he executed the foregoing instrument on behalf of said corporation, that he represents that he has the authorization to bind the corporation to this Order and that he has signed his name hereto.

Joanne C. Stella
Notary Public

(MAESTIRM.60293NP)