FINAL REMEDIATION REPORT

34 Freeman's Bridge Road Site
Site # 4-47-028
Soil Remediation Project

November 2006 – October 2007

Prepared for:

STATE SUPERFUND STANDBY PROGRAM
New York State
Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7015

Prepared by:

Earth Tech Northeast, Inc.
40 British American Boulevard
Latham, New York 12110

March 2008

FINAL REMEDIATION REPORT

34 FREEMAN'S BRIDGE ROAD SITE
Site # 4-47-028

Soil Remediation Project

November 2006 – October 2007

Work Assignment No. D004445-3

Prepared for:

State Superfund Standby Program
New York State
Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7015

Submitted By:

Earth Tech Northeast, Inc.
40 British American Boulevard
Latham, New York 12110

March 2008

TABLE OF CONTENTS

Chapter **Page**

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION

This Final Remediation Report for the 34 Freeman's Bridge Road Site ("Site"), Site Number 4-47-028, Town of Glenville, Schenectady County, New York, was prepared by Earth Tech Northeast, Inc. (Earth Tech) for the New York State Department of Environmental Conservation (NYSDEC). It documents construction activities for the Soil Remediation Contract and provides certification that the construction, excavation, treatment, disposal, and backfill activities associated with the soil remediation at the Site were performed in substantial conformance with the contract documents.

The remediation was performed pursuant to the NYSDEC Record of Decision (ROD) for the 34 Freeman's Bridge Site, dated March 31, 2004. The basis of the ROD is the Remedial Investigation (RI) Report dated January, 2004, and the Feasibility Study Report (FS) dated February, 2004, both prepared by Earth Tech. This report was prepared by Earth Tech for the NYSDEC under the State Superfund Standby Program (Work Assignment D004445-3).

Section 1.0 of this report presents a brief site description and history and a list of project-related documents. The body of the report includes a description of the installation of remedial components and the scope of the work performed. Where applicable, descriptions of variations, alterations, and changes from the design set forth in the Contract documents are included. A summary of the design modifications is provided at the end of this report as a list of Change Orders. The report concludes with a brief description of "Lessons Learned" and a Construction Certification statement.

The Final Remediation Report includes as-built drawings prepared by the Contractor, as well as transporter and disposal manifests for waste removed, analytical data, copies of daily field reports and photographs, and other detailed information.

No treatment systems or other facilities were left in place at the completion of the project, and the Site is left as an open, grass-covered field, with a gravel access roadway.

1.1 Site Description

The Site is located in a commercial and light industrial area in the southeast part of the Town of Glenville, northeast of the Village of Scotia. The Site is on the northeast side of Freeman's Bridge Road approximately 1,000 feet northwest of the reconstructed Freeman's Bridge over the Mohawk River. Across the river lies an industrial and highly urbanized section of the City of Schenectady (Figure 1). Lyon's Ventures, Inc., currently owns the Site. Current Town zoning for the Site is B-3, General Business, and General Industrial. The parcels directly abutting Freeman's Bridge Road are zoned General Business. The parts of the Site farther from the road are zoned General Industrial.

The Lyon's Ventures, Inc. property comprises approximately 13 acres, however, the Site occupies approximately 7.5 acres, as determined by the estimated limits of impacted fill on the

property and adjacent properties. The Site was occupied by a single-story, commercial, concrete-block building located along Freeman's Bridge Road, and a parking area and open fields with varying amounts of vegetation. With the exception of the building and its associated paved and unpaved parking areas, most of the Site was lightly vegetated with grasses, shrubs and small trees. The size of the Site was determined to be the extent of fill that covers Lyon's property south of Warner Creek, the adjacent National Grid (formerly Niagara Mohawk) right of way, and portions of property belonging to adjacent landowners to the west.

The Site is bordered on the east by Canadian Pacific Railway property, and Mohawk Asphalt Emulsions, Inc.; on the north by Warner Creek, designated as a Class C tributary to the Mohawk River (Class A); on the west by private properties and Freeman's Bridge Road; and on the south by private property. Residential and commercial properties exist to the north and west of the Site, with the nearest residential dwelling located approximately 450 feet west. The Mohawk River is approximately 500 feet east of the main part of the Site. This information is presented on the Site pre-excavation topographic map, (Figure 2).

1.2 Site History

The Freeman's Bridge Road property was used as a drum recycling facility as far back as the late 1950's when the Kitchton Company occupied the Site, taking in used 55-gallon drums, emptying residuals into pits and on the ground surface, cleaning the drums, and painting and recycling them for reuse. The property was later purchased in 1978 by Lyon's Ventures, Inc. who also stored drummed waste on-site, and received fill and construction and demolition (C&D) debris that were spread on most of the 7.5 acre parcel south of Warner Creek. The depth of the fill and C&D was determined during the remediation project to range between six and ten feet. Large pieces of concrete and asphalt were visible at the fill boundary along the power utility right of way. Nearly all areas where residual materials were disposed of by the Kitchton Company were buried beneath the six to ten foot layer of C&D disposed of on-site by Lyon's Ventures, Inc. At the onset of the remediation project, the Site had been used as a surplus and salvage business dealing mostly with used office furniture, which was stored in the on-site building.

Intentional or incidental release of residual wastes from drum recycling and fill disposal activities at this Site had contaminated soil and shallow groundwater with significant levels of various solvents and polychlorinated biphenyls (PCBs) exceeding applicable standard and guidance values. Several investigations were conducted over the past twenty years prior to the remediation project, with NYSDEC participation, and revealed, to some extent, the contamination at the Site.

- In 1984 and 1985 the Site was first listed on the Registry of Inactive Hazardous Waste Sites as a Class 5 site due to the presence of drummed wastes. An emergency removal of twelve 55-gallon drums was conducted after an April 1989 inspection of the property revealed some eighty 55-gallon drums of waste. The Site was then taken back off the registry.

- In 1996, the property was considered for a voluntary clean-up program. Subsequent investigation work, including digging 30 test pits, by Touhey Associates and their consultant, The Environmental Design Partnership, revealed contamination present on four acres of the 7.5 acre parcel, including PCBs in the sub-surface soils in excess of 100 parts per million (ppm).

- In 1996, NYSDOH sampled four residential wells and one commercial drinking well for volatile contamination. Results were non-detectable for the volatile compounds analyzed.

- In May 1999, NYSDEC observed three soil borings being drilled during construction activities for a new sewer line project. Borings encountered gravel to approximately five feet followed by clay to a depth of thirteen feet. Samples taken from borings in front of the Site reported PCB levels less than 5 ppm and benzene, toluene, ethylbenzene, xylene (BTEX) constituents.

- In June, 1996, NYSDEC issued an Immediate Investigation Work Assignment (IIWA) that revealed surface and subsurface soil PCB concentrations at levels up to 33 ppm and 980 ppm respectively. Parsons Engineering Science, Inc., contractor to NYSDEC, installed 7 monitoring wells and numerous soil gas monitoring points as part of their investigation. Twenty-five surface and twenty-five sub-surface soil samples were collected and analyzed. Soil samples reported benzene (53 ppm), toluene (6,300 ppm), ethylbenzene (2,500 ppm), xylene (16,000 ppm), and phenol (330 ppm). Groundwater at the Site was found to contain significant levels of dichloroethylene, benzene (150 ppb), toluene (1200 ppb), ethylbenzene (400 ppb), xylene (2000 ppb), phenol (12,000 ppb), and semi-volatile compounds. PCBs in groundwater were reported at levels up to 280 parts per billion (ppb). Free product was reported in one monitoring well (MW-4, 4 inches of non aqueous phase liquid (NAPL). The investigation identified two areas with PCB surface soil levels greater than 1 ppm: 0.25 acres north of MW-6 and 0.33 acres east of MW-5.

- In December 1996, the Site was re-listed as a Class 2 Inactive Hazardous Waste Site by NYSDEC. Disposal of wastes on-site as a result of previous activities are documented in the registry as benzene (D018), xylene (F003), toluene (F005), phenol (U188), ethylbenzene (F003), and PCBs.

- In 1997, the NYSDEC Division of Environmental Enforcement completed a Potentially Responsible Party (PRP) search, which identified Lyon's Ventures, Inc, and 'all those associated' as the PRP's for the Freeman's Bridge Site.

At the conclusion of the Remedial Investigation it was apparent that on-site activities and lack of record keeping resulted in the possibility that the following potentially hazardous substances (and
potential sources/uses) may have been stored, used, and disposed of on the property at various times.

- Petroleum derived fuels and oils (lubricants, generators, equipment operations, stored drummed waste, and drum recycling operations).

- Chlorinated solvents (cleaning agents, painting operations, stored drummed waste, drum recycling operations).

- PCBs (hydraulic oils, roadway oils and debris, stored drummed waste, drum recycling operations).

- Phenols (stored drum waste, drum recycling operations).

1.3 Project Related Documents

The following is a summary of project related documents prepared by Earth Tech prior to preparing the Contract Documents for the 34 Freeman's Bridge Road Site Soil Remediation Project Contract:

- Remedial Investigation Report (RI), 34 Freeman's Bridge Road Site, (Earth Tech, January, 2004)
- Feasibility Study Report (FS), 34 Freeman's Bridge Road Site, (Earth Tech, 2004)
- Pre-Design Investigation Report (PDI), 34 Freeman's Bridge Road Site, (Earth Tech, October 2005)

Additionally, the NYSDEC prepared the Record of Decision (ROD) in March 2004.

2.0 PROJECT AUTHORIZATIONS

2.1 Remedial Construction Oversight

The project design and remedial construction oversight services for the soil Remediation Project were conducted for the NYSDEC by Earth Tech under Work Assignment No. D003821-39 and D004445-3 under Work Elements III and IV of the Superfund Standby Contract dated April 13, 2006, between the NYSDEC and Earth Tech. The following tasks were performed by Earth Tech relative to the Work Assignment:

Task 1 - Preparation of Remedial Action Oversight Work Plan
Task 2 - Attendance at Project Meetings
Task 3 - Review of Contractor's Submittals
Task 4 - Remedial Construction Inspection
Task 5 - Review and Preparation of Field Orders and Change Orders
Task 6 - Construction Record Keeping and Reporting
Task 7 - Project Administration
Task 8 - Preparation of Final Remediation Report
Task 9 - Preparation of Site Management Plan
Task 10 - Support of Information Requests, Assistance with Claims Evaluation

Activities to be performed by Earth Tech that are anticipated to extend beyond the completion of this Remediation Report are:

1) Preparation of a Site Management Plan and supporting field work, and
2) Support of information requests and final payment agreements.

During this segment of the work, as part of the remedial construction oversight services, Earth Tech provided a Resident Engineer and Quality Assurance inspectors. Earth Tech contracted with the following firm to assist in providing resident engineering services:

Iyer Environmental Group, PLLC	Orchard Park, NY	Resident Engineer

2.2 Construction Contract

Construction Plans and Specifications for the 34 Freeman's Bridge Site Soil Remediation Project prepared by Earth Tech were based on the NYSDEC approved Pre-Design Investigation Report (October 2005) and were let out to bid in April 2006. The following documents became the basis of the Contract and describe the work that was to be performed during the soil remediation project:

- 34 Freeman's Bridge Road Site Soil Remediation Project Contract Drawings (Sheets 1-7)

Prepared by: Earth Tech Northeast, Inc.
Prepared for: NYSDEC
Dated: April 2006

- Information for Bidders, Agreement & Technical Specifications:
  Contract Documents, Contract No. D005813 for the 34 Freeman's Bridge Road Site Soil Remediation Project.
  Prepared by: Earth Tech Northeast, Inc.
  Prepared for: NYSDEC
  Dated: April 2006

- Addendum Number 1 for Contract Documents D005813
  Modifications and Additional Information to Existing Contract Documents
  Prepared by: NYSDEC
  Prepared for: NYSDEC
  Dated: April 5, 2006

- Addendum Number 2 for Contract Documents D005813
  Modifications and Additional Information to Existing Contract Documents
  Prepared by: Earth Tech Northeast, Inc
  Prepared for: NYSDEC
  Dated: April 7, 2006

- Addendum Number 3 for Contract Documents D005813
  Modifications and Responses to Significant Comments Relative to Contract Documents
  Prepared by: Earth Tech Northeast, Inc.
  Prepared for: NYSDEC
  Dated: May 3, 2006

- Addendum Number 4 for Contract Documents D005813
  Modifications and Responses to Significant Comments Relative to Contract Documents
  Prepared by: NYSDEC
  Prepared for: NYSDEC
  Dated: May 10, 2006

The scope of the remedial construction work, under the terms of the Contract, included the following tasks:

1. Pre-construction, construction concurrent and post construction ("As-Built") survey
2. Pre-construction soil sampling
3. Municipal utility identification and protection
4. Establishment of Site security
5. Establishment of traffic control system

6. Construction of access road(s) and treatment facility staging areas (pads)
7. Installation of Field Offices and Decontamination trailers
8. Installation of temporary on-site utilities
9. Installation of temporary truck scale
10. Installation and maintenance of erosion controls
11. Site wide clearing and grubbing
12. Existing monitoring well decommissioning
13. Existing building demolition
14. Contaminated soil excavation, transportation, staging and handling activities
15. Oversize debris segregation and off-site disposal
16. Low Temperature Thermal Desorption (LTTD) treatment of contaminated soil
17. Construction water management
18. Employee health and safety oversight
19. Community air monitoring
20. Confirmatory soil sampling
21. Backfilling, grading and shaping
22. Post-construction soil sampling
23. Final Site restoration
24. Demobilization of the Site

Construction activities occurred between October 2006 and October 2007.

The construction contract (Contract No. D005813) was awarded to D. A. Collins Environmental Services, Inc. (DAC), of Mechanicville, New York. The contracted amount was $16,835,015.

In their proposal, DAC identified Environmental Soil Management, Inc. of New York (ESMI), Fort Edward, New York and TD*X Associates, LP (TD*X), Beaumont Texas as subcontracted thermal treatment service providers. ESMI was designated to provide direct thermal treatment of non-TSCA contaminated soil (< 50 parts per million PCBs) and TD*X was designated to provide indirect thermal treatment of TSCA contaminated soil (≥ 50 parts per million PCBs). Three additional main subcontractors were designated by DAC in their proposal:

- Clark Engineering and Survey, P.C. (Clark), New Lebanon, NY; project surveyors,
- Adirondack Environmental Services, Inc. (AES), Albany, NY; soil and water testing,
- Con-Test Analytical Laboratory (Con-Test), East Longmeadow, MA; air testing.

The 'Notice to Proceed' was issued by NYSDEC on November 27, 2006. The Contract established a project duration to substantial completion of 315 consecutive calendar days (CCD) from the 'Notice to Proceed' establishing a completion date for the project of October 7, 2007.

DAC mobilized on October 3, 2006 and achieved substantial completion on October 8, 2007.

The Freeman's Bridge Road Site Soil Remediation Contract was conducted in accordance with the following NYSDEC approved/reviewed documents prepared by DAC:

- Work Plan, October 30, 2006,
- Contractors Construction Quality Control Plan, December 7, 2006,
- Sampling Plan, December 7, 2006,
- Demolition Plan, August 14, 2006,
- Health and Safety Plan (HASP), August 10, 2006,
- Preprocessing Area Respiratory Upgrade (Addendum No. 2 to HASP), February 2, 2007,
- Vapor Phase Carbon Monitor and Change Out for TDUs in PCB Service (Addendum No. 3 to HASP), March 11, 2007
- Dewatering Plan (02240.08) submitted by D.A. Collins

In addition to those documents, ESMI and TD*X provided the following NYSDEC approved document:

- LTTD Work Plan, October 23, 2006

The work was also conducted in accordance with the following permits, certifications or authorizations:

- Demolition Permit issued by the Town of Glenville.
- Wet Tap Permit issued by the Town of Glenville.

3.0 SITE LAYOUT

In preparation for the soil removal, treatment and disposal operations, the following activities were performed by the remediation Contractor, DAC, with oversight by Earth Tech:

1. Clearing and grubbing of the entire Site (Section 3.1)
2. Pre-construction Site survey and stake out (Section 3.2).
3. Collection of pre-construction soil samples (Section 3.3).
4. Installation of temporary construction trailers and associated utilities (Section 3.4).
5. Installation of temporary gas, water, electric, telephone, internet and sanitary utilities (Section 3.4).
6. Installation of bermed, geomembrane-lined, and concrete-capped areas for Low Temperature Thermal Desorption (LTTD) soil treatment equipment, waste water treatment plant (WWTP) equipment, and excavated contaminated material stockpiles (Section 3.5).
7. Mobilization of excavation equipment to perform soil removal from designated areas and service soil treatment plants (Section 3.6).
8. Construction of direct fired LTTD plant (ESMI) and indirect fired LTTD plant (TD*X) (Section 3.7).
9. Construction of waste water treatment plant (WWTP) (Section 3.7).
10. Establishment of Site security, maintained on-site 7 days/week, 24 hours/day for the duration of the project (Section 3.8).
11. Existing Building Demolition (Section 3.9).

Approximately three (3) acres of the project Site were occupied by the soil treatment plants, soil staging areas, and WWTP, which were located at the northern-most project limit. The Site access road, parking areas, and office trailers were located along the eastern boundary of the project area. Figure 3 details the Site layout.

All construction and Site activities were documented in daily reports by DAC and Earth Tech. These reports included daily photograph logs documenting Site activity. The Earth Tech Daily Reports and photo logs are presented in **Appendix A**.

3.1 Clearing, Grubbing and Leveling

DAC mobilized to initiate clearing activities on October 3, 2006. Clearing was performed using traditional methods for cutting and stockpiling trees and brush. D.A. Collins chipped trees and brush within the project limits. Stumps unearthed during grubbing were staged on poly sheeting for management (i.e., chipping). On October 20, 2006 a horizontal wood shredder was mobilized to the Site to shred and chip the stumps and to eliminate the large pieces of wood collected during the clearing process. All wood chips were used as ground cover within the Site limits.

Initial background air monitoring was conducted during this time period, from October 13, 2006 to October 15, 2006.

3.2 Pre-Construction Survey and Site Stake Out

Per contract requirements, following the completion of clearing and grubbing operations, a planimetric and topographic survey of the entire Site was conducted by Clark Engineering and Survey, P.C. (Clark) under contract to DAC. During the survey, Clark installed wooden grade stakes within the project work area to establish a fifty-foot by fifty-foot grid system to guide the excavation process. Grid node points (stake locations) were labeled with an alpha (west to east) numeric (south to north) notation identifying the adjacent excavation "cells" consistent with the project design specifications. The topographic survey established the pre-construction (post clearing) ground surface elevations, and served as the basis for excavation quantity measurements for payment.

Pre-construction topography showing the grid pattern is shown on Figure 4.

3.3 Pre-Construction Soil Sampling

Baseline pre-construction soil sampling was performed to later evaluate whether construction activities impacted Site soils. In addition, the pre-construction soil sampling was conducted to establish the condition of the upper two feet of overburden (designated as Potentially Clean Overburden or PCO) within the soil remediation areas, and which remained uncharacterized at the initiation of the remediation project. The sampling was conducted by DAC and verified by Earth Tech in accordance with the Contract specifications.

Soil sampling was accomplished by collecting one surface grab sample per 2500 square feet (i.e. one per "cell"). Sampling locations were established using the design excavation grid system (discussed above) within the excavation project area. For the purposes of the pre-construction soil sampling, the excavation grid was also extended throughout the portion of the Site where no excavation was planned, but where project related activities were planned to occur (e.g., access roads and parking areas, treatment pad and treated soil stockpiling areas, WWTP area, etc.). Pre-construction soil samples were analyzed for full suite soil parameters per project contract requirements. Results of the pre-construction soil analysis are presented in Table 1 and the locations are presented on Figure 5.

3.4 Temporary Construction Trailers and Utilities

DAC installed an office trailer with temporary utilities for joint use by Earth Tech and the NYSDEC on the east side of excavation project area. The office trailer for DAC was located adjacent Earth Tech/NYSDEC trailer. Per the Contract, DAC connected the trailers to the public water, electric and telephone/internet systems via underground piping and conduits. Both trailers were connected to a temporary septic tank for sanitary waste disposal. The septic tank was regularly maintained by a septic service contracted to DAC.

DAC installed a personnel decontamination trailer with temporary utilities for use by on-site staff entering and exiting the project work area. The "decon trailer" was staged at the entrance point

to the Site Exclusion Zone (EZ) near the office trailers on the eastern border of the project and oriented such that entrance into and exit from the EZ could only be accomplished by passing through this trailer. The decon trailer was equipped with two showers with hot and cold water and a sink for washing of hands and face. Personal protective equipment (PPE) was stored in this trailer for use by the on-site personnel. The supply of PPE was continually replenished by DAC throughout the project.

Gas and electric utilities were provided for the LTTD soil treatment plants and WWTP by National Grid via main supply lines located on Maple Avenue near the north end of the Site. Water utilities were provided to these facilities by the Town of Glenville, also from mains located on Maple Avenue. These utilities were conveyed onto the Site through pipe lines and conduits constructed by DAC from utility owned and installed meters on Lyon's Ventures, Inc. property located along Maple Avenue north of Warner Creek. The utility conduits crossed Warner Creek on a temporary bridge constructed by DAC near the WWTP.

3.5 LTTD and WWTP (Treatment) and Soil Management Pads

Following the pre-construction soil sampling, DAC constructed a bermed, geomembrane-lined, reinforced concrete pad (treatment pad) in the northern portion of the Site for staging of the two LTTD plants and the WWTP. Figure 3 presents the location and layout of the treatment pad. In addition to the area designated for the three plants, the pad was constructed large enough to create six in-bound soil staging bins (2 TSCA bins, 4 non-TSCA bins) located on the western edge of the pad. The in-bound bins were constructed of concrete blocks stacked high and wide enough such that each bin could hold and segregate approximately one thousand cubic yards of soil prepared for treatment. To prevent the need for extensive decontamination of the concrete blocks at the conclusion of the project, DAC covered the sides and tops of the in-bound bin walls with two layers of truck liner material. The floors were left uncovered since any liner material used there would quickly be destroyed during loading and unloading of the bins.

Five out-bound soil bins were constructed with unlined concrete blocks on un-capped soil adjacent to the eastern edge of the treatment pad. The location and orientation of the five out-bound bins were such that they could be reached by the two radial stackers associated with the LTTD plants (see Figure 3). Out-bound bins were constructed such that they created storage for five segregated, one thousand cubic yard stock piles of treated soil.

DAC also constructed a geomembrane-lined reinforced asphalt-capped "soil management" pad immediately south of the eastern half of the treatment pad (see Figure 3). This pad was constructed to facilitate lime amending and screening of contaminated soil, and crushing of oversized debris screened out of the contaminated soil. A small, roofed, lime storage bin was constructed on this pad from concrete blocks and corrugated metal, and a lime silo was staged immediately adjacent to the bin. Two large stock pile bins intended for storage of lime amended soil were constructed from concrete blocks on un-capped soil adjacent to the western edge of the soil management pad.

3.6 Mobilization of Excavation Equipment

The following heavy equipment was mobilized to the Site by DAC to facilitate support of the excavation work:

- CAT D6M Dozer
- CAT 930G Loader (2)
- Kawasaki 702V Loader
- CAT-325C Excavator
- CAT 320C Excavator
- Kobelco SK 250 Excavator
- Komatsu 5K815 Skidsteer
- Bobcat S185 Skidsteer
- Volvo A30C Articulated Dump Truck (2)
- Erin F5165 Portable Fingerscreener
- Telsmith 3036 Portable Crusher
- Dual Drum Roller
- Genie S-80 Man Lift
- Paver
- 4000 gallon Water Truck
- Pickup Trucks
- Backup Generators (as needed)
- Light Plants (as needed)
- Frac Tank (s)
- Temporary waste water treatment components

3.7 Site Systems

ESMI mobilized their mobile direct heated Thermal Desorption Unit (TDU) to perform the soil treatment of non-TSCA regulated soils. This unit employed a direct heated rotary dryer to heat the contaminated soil. The organic chemical contaminants were removed from the soil in the primary treatment unit (PTU). The organic chemicals were transferred with the hot gas from the PTU to a gas treatment system where they were filtered by a cyclone and then oxidized in a secondary treatment unit (STU), quenched and cooled, then finally filtered with a baghouse prior to discharge to the atmosphere. Soils discharging from the PTU were placed into a treated soil pile in the out-bound bins.

TD*X utilized their Model 6042 Indirect Thermal Desorption Unit (TDU) to perform the TSCA regulated soil treatment. This unit employed an indirect heated dryer to heat the contaminated soil in an inert nitrogen atmosphere. The organic chemical contaminants were removed from the soil in the indirect dryer. The organic chemicals were transferred with the nitrogen carrier gas to a gas treatment system, where they were condensed and recovered, along with water that was present as soil moisture. The organic condensate was containerized for incineration at an off-site

TSCA permitted incinerator. Soils discharging from the indirect drier were placed into a treated soil pile in an out-bound bin.

Process Flow Diagrams, Simplified General Arrangements and Process Instrumentation Diagrams for both systems are presented in **Appendix B**.

3.7.1 ESMI Direct Thermal Desorption Unit (TDU)

The ESMI TDU is a direct fired low temperature thermal desorption system. It consists of a dryer designed to separate organic contaminants from solid matrices at relatively low temperatures. The separated contaminants are then oxidized in a direct fired oxidation chamber. No TSCA regulated materials were processed through the EMSI TDU. NYSDEC permit Equivalency was obtained in order to operate the unit.

The primary components of the ESMI system were delivered to the Site on November 27, 2006. Components were delivered on semi-tractors and consisted of six pieces. Other equipment was also shipped on flatbed trailers for field erection at the project work Site for a total of approximately fifteen loads. One of the loads was the control room. The power distribution center was contained within the baghouse trailer load. The system required a 460 Volt, three-phase power-source, water supply and gas supply.

The ESMI TDU consisted of seven principal components: a feed system, a thermal desorption unit (dryer), soil cooling and discharge conveyors, dual cyclone, oxidizer, evaporative cooling chamber, and baghouse. Contaminated solids were heated at a relatively low temperature (up to 950° Fahrenheit) in the thermal desorption unit, which is a rotary dryer. The dryer was directly heated using natural gas. The dryer consisted of a long steel cylinder that rotates with a 42 mBTU/hr (million British thermal units per hour) burner located at the feed end of the dryer. Contaminated soil was fed into the cylinder, where it was exposed to the heat generated by the burner.

The products of combustion combined with the contaminants released from the soil during heating were introduced into the air stream. The induced draft fan continuously moved the air stream through the unit. In the gas treatment system, larger particles entrained in the air were removed in the dual cyclones. Volatilized contaminants continued to the oxidizer and were reduced to carbon dioxide (CO_2) and water (H_2O) and trace amounts of Hydrochloric Acid (HCL) The air stream was then cooled in the evaporative cooling chamber (ECC) and fine particulate matter were removed in the baghouse. The induced draft fan then exhausted the controlled air stream to the atmosphere.

The dryer produced solids containing very low levels of residual contaminants. These solids contained little or no detectible organic chemicals. These solids were sampled and analyzed for Site specific contaminants to ensure that they met the Site cleanup goals (SCGs) and were then returned to the excavation for use as backfill.`

The ESMI direct TDU is capable of routinely producing treated solids at temperatures up to 950°F. However, since the rate of treatment is higher when lower treatment temperatures are used, efforts were made during the ESMI TDU Proof of Performance Test (POP, see Section

4.5.1) to determine the minimum temperature necessary to ensure meeting the project SCGs in treating non-TSCA soil.

Residual waste disposed off-site from the ESMI direct TDU operation included municipal trash and contaminated trash (PPE). Municipal and contaminated trash volumes disposed off-site totaled less than 50 cubic yards.

3.7.2 TD*X Indirect Thermal Desorption Unit (TDU)

The TD*X Model 6042 Indirect Thermal Desorption Unit (TDU) is not an incinerator for hazardous waste destruction. It is a dryer designed to separate organic contaminants from solid matrices at relatively low temperatures. The separated contaminants are then condensed, producing an organic liquid that can be disposed of at an appropriately permitted off-site TSDF (Treatment Storage Disposal Facility), such as at a TSCA approved incinerator.

The main components of the TD*X system were mobilized to the Site on two flatbed trailers and several skids on December 4, 2006. Other connecting components of the system were also mobilized to the Site on flatbed trailers at the same time. One of the skids housed the control room and power distribution system. The system required a 460 Volt, three-phase power-source, nitrogen supply and gas fuel supply.

The TD*X TDU consisted of two principal parts: a thermal separation unit (dryer) and a gas treatment unit. The process flow diagram (**Appendix B**) for the TD*X TDU shows the interaction of these two components. Contaminated solids are heated at relatively low temperatures in the thermal separation unit, which was a totally enclosed rotary dryer. The dryer was indirectly heated using natural gas. The dryer consists of a long steel cylinder that rotates inside of a heated furnace. The contaminated soil was fed into the cylinder, where it was heated by conduction from the external furnace.

The products of combustion are separated from the waste within the dryer. An inert gas (nitrogen) carries the volatilized organic contaminants and other naturally occurring chemicals in the soil from the dryer to the gas treatment system. In the gas system, the carrier gas was cooled to condense and recover the organic chemicals. The treated carrier gas was then returned to the dryer in a closed loop. A small amount of gas, consisting primarily of non-condensable gases like oxygen and nitrogen, was continuously purged from the system to maintain the desired oxygen concentration and control the pressure in the dryer. The purge stream (process vent) passed through a filter prior to either discharge to the atmosphere, or injection to the furnace for odor control. Fresh nitrogen was introduced to control the oxygen concentration within the system.

The dryer was equipped with lapped mechanical bellows seals capable of sealing against internal pressures ranging from -2.0 to +2.0 inches of water column (WC). Normally, the discharge end seal of the dryer is maintained at a slight negative pressure (-2.00 to -0.50 inches WC). Due to the tumbling action of the solids within the dryer, slight periodic pressure swings may be

observed. These pressure swings sometimes go positive but do not exceed 2.0 inches WC. The operating pressure range remains within the seal's specifications and precludes the leakage of any hazardous material out of the dryer.

The dryer produced solids containing very low levels of residual contaminants. These solids contained little or no detectible organic chemicals. These solids were sampled and analyzed for Site specific contaminants to ensure they met the SCGs, and then returned to the excavation for use as backfill. Water recovered from the condensers was recycled for cooling of the TDU. The oils (condensed contaminants) removed from the contaminated feed were containerized and shipped to a TSCA approved off-site disposal facility.

The TD*X Model 6042 Indirect TDU is capable of routinely producing treated solids at temperatures up to 1,000°F. However, since the rate of treatment is higher at lower treatment temperatures, efforts were made during the TD*X TDU Proof of Performance Test (POP, see Section 4.5.1) to determine the minimum temperature necessary to ensure meeting the project SCGs in treating TSCA regulated soil.

Residual waste disposed off-site for the project from Indirect TDU operations included municipal trash, contaminated trash (PPE) and solid decontamination waste, and TSCA regulated condensed oil. Municipal and contaminated trash volumes generated during the project were less than 50 cubic yards. Solid waste (TSCA regulated) generated after the completion of treatment from decontamination of the TDU was less than 20 cubic yards. The TSCA-regulated oil generated by TSCA soil treatment was packaged for off-site disposal during the project at a NYSDEC approved TSDF facility used for TSCA-regulated disposal of TSCA-regulated oil. All waste was transported by confirmed authorized hazardous waste transporters under appropriate waste manifesting.

3.7.3 Waste Water Treatment Plant (WWTP) System

During the week of December 4-8, 2006, DAC mobilized the components of a portable waste water treatment plant (WWTP) to the Site for the management of construction related waste water and decontamination fluids as required by the project contract documents. The plant was composed of three 40,000 gallon fractionation tanks (Baker™ tanks), two sand packed filter tanks, two organo-clay packed filter tanks, and two activated carbon filter tanks. The WWTP was capable of treating water at a rate of 200 gallons per minute. For much of the project (especially in Fall, Winter and Spring) the plant operated 24 hours a day, 7 days per week in order to address
groundwater infiltration into the excavation areas and weather related surface runoff. By the conclusion of the project, DAC treated and discharged 9,595,000 gallons of Site related water.

The WWTP system was set up to introduce water from the Site into the primary settling tank through an 18" diameter corrugated pipe lined with chemical flocculation blocks. The primary tank was divided into two equal volume segments by a vertically suspended filter membrane that separated the influent side (flocculation) from the effluent side to facilitate gross removal of

flocculated sediments. Once initial settling was achieved, the waste water was transferred to a second tank for holding and additional settling prior to treatment. The filtration was accomplished through two parallel systems which passed the water first through a sand pack filter followed by organo-clay and finally activated carbon. The parallel systems were connected such to facilitate continual water treatment during times of system maintenance (i.e., filter back flush and filter media change out). Once treated, the water was pumped into the final Baker tank for holding prior to metering and regulated discharge to Warner Creek under the Dewatering Plan included in the project design package.

Prior to initial discharge to Warner Creek, DAC conducted a system performance analysis of the WWTP consistent with the requirements detailed in the project contract. As part of the performance test a series of treated water samples were collected from a sampling port located between the final treatment tank (carbon) and the treated water holding tank and analyzed for Site specific contaminants of concern, as well as other physical parameters specified in the Site Dewatering Plan. Once the system was demonstrated to adequately treat Site water, discharge to Warner Creek was allowed.

Weekly testing of the WWTP discharge was performed throughout the project. In the event that any weekly water quality parameter was detected above the maximum allowable discharge limit presented in the Site Dewatering Plan, DAC was immediately ordered to discontinue discharging and take corrective measures to rectify the situation. Results of WWTP sample analyses are in **Appendix C.** All category A and B analytical data packages for the Site analysis for both water and soil are included in **Appendix D.**

3.8 Security

In accordance with the Contract, 8-foot high perimeter fencing was installed around accessible portions of the Site (along Freeman's Bridge Road and Gorman Road) to control access and egress. Additionally, the Site Exclusion Zone was delineated with orange snow fence to limit access and egress to controlled portions of the Site.

Security guards were established and maintained on-site during periods when there was no construction activity. Therefore, Site security was ensured 7 days/week, 24 hours/day for the duration of the project in accordance with the Contract.

3.9 Existing Building Demolition

Per the project design requirements, a pre-existing corrugated metal building formerly occupied by Lyon's Ventures, Inc., and located in the southwest corner of the property (adjacent to

Freeman's Bridge road) was demolished by DAC to allow contaminated soil excavation within the footprint of that building. The Demolition project commenced on during the week of December 3, 2006, and concluded the week of December 15, 2006.

In anticipation of the demolition project, an asbestos building survey was conducted by Earth Tech during the pre-design phase of the project (October 9, 2005) to satisfy state and federal asbestos control regulatory requirements. Results of the survey were reported in the Limited Site Data portion of the project design documents. No asbestos containing material was identified during the survey, therefore no pre-demolition asbestos abatement was required.

Prior to the commencement of the demolition work DAC obtained a demolition permit from the Town of Glenville, which included the requirement to identify and isolate all underground utilities associated with the building. Potable water supply to the facility was shut off by the Town of Glenville at the main valve located directly across Freeman's Bridge Road from the building. No underground gas line was associated with the building. Underground electrical utilities were isolated and de-energized by National Grid/Stilsing Electric.

The demolition work was performed using the heavy equipment mobilized to the Site in association with the soil remediation project. All debris generated by the demolition project was disposed of off-site as non-hazardous waste at the Hakes Landfill, Painted Post, New York.

During the demolition of the building a previously unidentified 1,000 gallon underground storage tank was discovered lying under the building floor slab. The tank was found to contain approximately 450 gallons of solvent contaminated water. The contents of the tank were pumped out with a vacuum truck and containerized in 55 gallon drums. Subsequently the containerized aqueous waste was transported off-site for treatment by the Veolia ES Technical Solutions, LLC., Marlboro, MA (Veolia). Once the tank was empty, it was excavated when cell B1 was excavated, cleaned and cut up for scrap.

4.0 CONTAMINATED SOIL EXCAVATION, TREATMENT AND DISPOSAL

The contaminated soil excavation and treatment occurred during the period from December 2006 through August 2007. The targeted PCB and other organic chemical-contaminated soil was removed as identified in the Remedial Investigation and Pre-Design Investigation Reports and

delineated in the Contract Drawings. Additional contaminated soil was encountered and field changes were made as discussed in the sections below.

4.1 Work Areas

Work areas within the Site were designated to minimize redistribution of contaminated soil as a result of excavation and hauling of the soil and to control the progression of remediation project. Five general work areas were designated:

1. Exclusion Zone (EZ) / Excavation Area,
2. Soil Management Pad,
3. Treatment Pad,
4. Treated Soil Temporary Storage, and
5. Site Trailers, Parking and Access/Haul Road Area.

4.2 Contaminant Control

Prior to the commencement of contaminated soil excavation, DAC established a traffic control plan to minimize the potential for redistribution of Site related contamination into un-impacted areas. In this plan, specific excavation and hauling equipment were designated for "clean" or "dirty" work, and were restricted for use in the appropriate portions of the Site. Clean areas included the Treated Soil Storage Area and the Trailer/Parking/Access Road Area. Contaminated ("dirty") work areas included the Excavation Area, Soil Management Pad, and Treatment Pad. In general the "clean" or "dirty" designation assigned to a specific piece of equipment remained in place throughout the duration of the project.

Certain equipment such as the water truck (used for dust control) and tire mounted man lifts were routinely used in both clean and dirty portions of the Site. Additionally, due to project schedule and logistics constraints, equipment designated for dirty work had to occasionally be used in a clean work area. In these cases the oversight engineer team was notified of the situation prior to the transfer of the equipment from the dirty area to the clean area, or from TSCA areas to non-TSCA areas. Then the equipment underwent decontamination (steam cleaning) of the wheels or tracks, and inspection by the oversight engineer team prior to release into a clean/cleaner area. All water used in the decontamination process was collected and processed through the WWTP.

During the course of the project the necessity arose for a clean haul road to be established south to north across contaminated areas to facilitate placement of treated backfill soil into excavated cells that had met the Site cleanup goals. This haul road was constructed by placement of clean imported crushed stone onto geotextile laid out on the contaminated ground surface. Traffic on

this road was restricted to clean equipment only. In the event that a vehicle working in the contaminated area of the Site needed to cross the clean haul road, a sheet of 9 mil plastic was temporarily placed on the road to prevent contaminant migration onto the road. As the excavation project progressed from the southern portion of the Site toward the Treatment Pad the

on-site clean haul road was excavated along with the underlying uncontaminated PCO and stockpiled in clean areas to be used as backfill.

Additionally, as the project progressed, vehicles working in contaminated areas were required to cross excavated and clean backfilled areas to reach isolated contaminated cells to complete work there. In these cases temporary "roads" were prepared by rolling out long sheets of 9 mil plastic between the two contaminated areas. In all cases where plastic sheeting was used to create temporary roads, the contaminated plastic was rolled up and disposed of as non-hazardous waste unless it came in contact with TSCA contaminated soils, in which case it was disposed of as TSCA contaminated waste.

4.3 Contaminated Soil Excavation and Management

Technically the Site Exclusion Zone (EZ) incorporated all areas of the Site that were identified by the RI and PDI reports as containing contaminated soil and construction debris designated for excavation and treatment, as well as any area where contaminated soil may be conveyed during the excavation and treatment processes (i.e., Soil Management Pad and Treatment Pad). For purposes of controlling access and egress to the EZ, the entire area was demarked by orange snow fence, and access to this area was restricted to appropriately trained (HAZWOPER) and equipped (PPE designated by HASP) personnel.

4.3.1 Soil Excavation

Since the remediation project was driven by the presence of PCBs at the Site, the project design documents required soil excavation to proceed following the characterized soil PCB levels. Soils were characterized in 2 foot intervals for each cell from 2 feet below ground surface to a depth of 6 feet below ground surface. Each 2-foot interval was designated as either non-TSCA (<50 ppm PCBs) or TSCA (≥ 50 ppm PCBs) based on the RI and PDI data. The 0 to 2 foot interval was referred to as Potentially Clean Overburden (PCO) in the design, since this portion of the Site had not been completely characterized, and was suspected to be composed of mostly clean fill imported by previous owners of the Site. To confirm the condition of the 0 to 2 foot overburden interval, pre-construction (pre-excavation) soil sampling was conducted by DAC as required by the project design documents and described in Section 3.3 of this report. Pre-construction soil sampling data are summarized in Table 1. The category B analytical data packages are included in **Appendix D**.

The initial phase of excavation consisted of stripping uncontaminated PCO (as determined by pre-excavation soil sampling) off of a large portion of the southern end of the Site. The clean soil was stockpiled on clean soil in an area near the north end of the Site. This stockpiled PCO was eventually used for back fill material. Initial contaminated soil excavation efforts

concentrated on removal of various cell intervals around the Site identified during the RI and PDI as containing either PCB concentrations near to, but below 50 ppm (non-TSCA) as well as those cell intervals exhibiting the highest PCB concentrations detected during previous investigations. These two categories of soil were excavated, managed and stockpiled at the

Treatment Pad to be used for the Proof of Performance (POP) testing of the ESMI and TD*X TDU systems, respectively (see Section 4.5.1). Pre-treatment sampling of soil initially stockpiled for the POP tests indicated that the portion expected to be non-TSCA in PCB concentration actually exhibited PCB concentrations greater than 50 ppm. Therefore, some additional startup excavations needed to be conducted to isolate contaminated soil appropriate for the ESMI POP test.

To ensure that soil excavated following this discovery was correctly characterized prior to treatment, the NYSDEC and Earth Tech directed DAC to institute pre-treatment soil sampling ("pre-batch" samples), and later pre-excavation test pitting ("test pit" samples). Eventually on the advice of the USEPA, DAC was directed by the NYSDEC to discontinue pre-treatment and test pit soil sampling, and to rely solely on the RI and PDI Site characterization data as presented in the project design documents to determine the appropriate treatment facility to be used for each particular cell interval.

Once the POP test soil had been stockpiled and the performance tests for the treatment units were under way, DAC began excavation of the Site in a more orderly fashion generally progressing from south to north toward the treatment pad. The excavation equipment was decontaminated following procedures detailed in the approved Work Plan each time excavation efforts switched from contaminated soil to clean soil handling or from TSCA to non-TSCA soil handling. In general, soil was excavated directly into haul trucks and transported directly to the soil management pad to be prepared for treatment. Similarly, PCO was excavated and placed into cells awaiting backfill. However, occasionally logistical constraints made it impossible to move soil to the management pad, and at these times excavated soil was stockpiled on contaminated cell intervals within the excavation area. Care was taken to select appropriate contaminant levels for stockpiling (i.e., TSCA on TSCA, non-TSCA on non-TSCA and Clean on Clean). To organize the excavation process and minimize the possibility of cross-contamination of the variously designated soils, DAC prepared weekly excavation plans specifically targeting cell intervals containing either non-TSCA or TSCA soil. In this way excavation could progress for several days without the need to frequently decontaminate the equipment when moving from areas of higher contamination to areas of lower contamination.

In each cell excavation progressed until the design elevation was reached at a minimum, or until no visual sign of contamination was present. All excavated cells were inspected by the oversight engineers prior to approval for verification sampling. Excavated cells were held open (i.e., no back fill), and ground water infiltration was controlled until analytical data from the verification samples could be reviewed by the oversight engineers. In the event that the verification samples indicated the presence of Site contaminants above the SCGs, additional excavation was directed by the engineer.

In general, vertical over-excavation due to failed excavation floor verification samples was conducted in 6 inch to 12 inch lifts to minimize the quantity of soil requiring treatment beyond the contract design quantity. In cases where a side wall verification sample failed, horizontal over-excavation was generally directed to be one excavator bucket width beyond the current

excavation face, since the large quantity of debris in the soil tended to make the vertical cell walls somewhat unstable. Several attempts to make thin slice removals from these vertical walls resulted in irregularly shaped and sloped excavation walls due to cave-ins, which would have made excavation quantity tracking by survey difficult, costly and time consuming.

4.3.2 Excavated Soil Management

Preparation of contaminated soil for treatment was conducted in the soil management area and consisted of lime amendment for moisture control, screening and oversize debris crushing.

Since contaminant reduction efficiencies exhibited by the thermal treatment units were significantly affected by the presence of high levels of soil moisture, it was necessary to adjust soil moistures by blending wet soil with dryer soil and/or amendment with lime. Lime was introduced into stockpiles of soil through mechanical means with excavators and loaders, and the piles were left to stand in bins adjacent to the soil management pad for 1 to 3 days to allow the lime to react. At the request of ESMI and TD*X a soil moisture of 19% was targeted for the soil liming operation. Project records indicate that lime addition quantities averaged approximately 5% of the total excavated soil quantity by weight. In general lime was purchased in the form of lime kiln dust from a local cement factory. However, on two occasions DAC employed (with Earth Tech's approval) quick lime since certain stockpiles had reached saturated conditions.

Once the soil moisture had been adjusted as necessary, the soil was passed through an Erin F5165 Portable Fingerscreener to remove debris greater than 2 inches in diameter. Screened soil was either moved directly into inbound bins to await treatment or was temporarily stockpiled on the soil management pad to be blended with crushed oversized debris.

At the start of the project oversize debris crushing was accomplished with a Telsmith 3036 Portable Crusher. However, owing to winter weather conditions combined with the Site soil characteristics and the very high debris content of the Site soils, oversize debris crushing was eventually discontinued. The contaminated soil exhibited very high clay content, and during the winter months residue clay adhering to the oversize debris would begin to build up inside the crusher and freeze there. On several occasions DAC had to suspend crushing, dismantle the crusher and clean out the frozen clay with blow torches and picks. These efforts would typically take 2 to 3 days to complete. When this occurred the excessive amount of oversize material being screened out of the contaminated soil would choke the soil management area and disrupt the flow of prepared soil to the treatment units. DAC petitioned the NYSDEC for relief from the oversize crushing requirement citing project delay and budget concerns at the March 12, 2007 progress meeting and it was subsequently granted. From that point forward oversized debris was stockpiled temporarily at the soil management area until it could be transported off-site for disposal at an appropriately regulated landfill.

4.3.3 Out of Scope Excavation

At the direction of the NYSDEC project manager, contaminated soil excavation progressed in each cell until the design depth was reached at a minimum, or until no visual sign of contamination was present as determined by the oversight engineer. Early in the project it was

determined that in most cells that had been excavated there was a groundwater interface with oily NAPL mixed with soil and construction and demolition waste at a depth of approximately 6 feet below ground surface. Since the Site cleanup goals included maximum concentrations for carcinogenic semi-volatile compounds frequently associated with petroleum, the NYSDEC and Earth Tech decided that it would be environmentally proactive to continue excavating until no visual indication of the NAPL/oil was remaining as determined by the oversight engineers. At the conclusion of the project the majority of cells required excavation beyond the design depth, and in several occasions beyond the design horizontal limits, resulting in a total excavation quantity of 13,366 cubic yards beyond the contract quantity of 69,000 cubic yards. On four occasions the oversight engineer suspended excavation in cells that continued to exhibit visual signs of contamination due to the fact that there was a risk of penetrating the confining clay layer lying over the Schenectady aquifer, thereby threatening possible impacts to the ground water. These were cells G3, G17, H4 and J13. In three of the four cases subsequent verification testing indicated that the Site cleanup goals had been reached. Cell J13 failed the subsequent verification testing.

4.4 Verification Testing and Survey

The project excavation quality and quantity was tracked by verification soil sampling and by post excavation survey on a cell by cell basis. This section describes the procedures used for these two tasks.

4.4.1 Verification Testing

Post excavation verification soil sampling was conducted by DAC per the requirements of the project design documents. The results of all verification soil sampling are presented in Table 2. The surveyed location of verification samples is presented on Figure 6.

Once each excavation cell had been completed as described above in Section 4.3, a single grab sample was collected near the center point (visually determined) of the floor of the cell. In addition to floor samples, sidewall grab samples were collected along the outer perimeter of the excavation at a frequency of one per 100 feet of sidewall and at a point approximately 1/3 of the height of the excavation up from the floor.

Verification grab samples were collected from 0 to 6 inches below the floor or wall surface with a hand auger and placed into a labeled plastic bag for transport to the sample preparation station located outside of the excavation zone. Verification sampling locations were marked with a survey stake at the time of sampling to facilitate surveying. All verification samples were transferred into appropriately labeled clean glass jars provided by the analytical laboratory and

transported to the laboratory under chain-of-custody on the day of collection for full suite soil analysis. The analysis for verification testing included Pesticide/PCBs, Volatile Organic Compounds, Semi-volatile Organic Compounds, and Metals by USEPA methodology, per the project design documents. Verification sample analysis was conducted on a 24 hour turn around time basis to facilitate the flow of the excavation process. In the event that a verification sample

exhibited Site contaminants at or above the SCGs, additional excavation was ordered, and the cell was re-sampled to verify the completion of the excavation.

At the conclusion of the project all cells produced verification floor samples exhibiting analyte concentrations below the SCGs except two cells. Cell J13 was above SCGs for total VOCs. Cell D17, which was at the limit for carcinogenic SVOCs, was cleared by the resident engineer due to groundwater intrusion into the cell. J13 was excavated to an approximate depth of 12 feet. Due to water intrusion and contact with the confining clay layer, no further excavation was deemed appropriate. Cell I11 was inadvertently not sampled for a verification floor sample. However, most cells adjacent to this cell were excavated to similar depths and exhibited final floor concentrations below the SCGs. therefore it was concluded that the cell I11 floor was also below the SCGs.

All final sidewall verification samples exhibited results below the SCGs except A3, D11, D17, E2, E13, and I3. Additional horizontal excavation was not ordered by the oversight engineers in these locations since the excavation had reached the physical limits of the Site or physical limits of structures (i.e. proximity of the power lines to cell I3). In those cases the side wall of the cell was draped with 9 mil plastic sheeting to demark the location of the contaminated sidewall prior to backfill.

One sidewall sample (F18) that exhibited concentrations of lead over the SCGs, but concentrations of all other Site contaminants below the SCGs, was re-analyzed for lead by toxic characteristic leachate procedure (TCLP). This out of scope analysis was conducted to determine the appropriate type of off-site disposal to apply to this soil (e.g., RCRA or non-RCRA), since the thermal treatment plants were not capable of addressing metals contamination. This sample came back as non-RCRA, therefore, the soils were shipped off-site as non-hazardous debris.

Any verification sample failures that could not be further excavated are presented in Table 8. This table summarizes the samples that failed, what compound determined the failure, and why further excavation was not possible.

4.4.2 Post Excavation Survey

Following the receipt of acceptable verification soil sample results, each completed excavation cell was surveyed by DAC to track the excavation quantity for incremental payment throughout the project. Each excavation cell was surveyed for location and elevation at the four floor corners and near the center of the cell. In addition the location of the verification floor and/or wall samples were surveyed at the same time. In some cases additional survey data was collected to capture the contour of the excavation floor caused by localized over digging to remove visual

stains. Only the final verification sample locations were surveyed. Intermediate sample locations (ie. failing tests) were not surveyed.

Post excavation survey data collected by DAC was transferred to Clark Engineering to be compared to the pre-construction survey to obtain excavated soil quantities. The final excavation bottom contours are presented on Figure 7.

4.5 Contaminated Soil Treatment

The following Sections describe the soil treatment process for this project.

4.5.1 Proof of Performance Tests

Prior to the start of full scale soil treatment, both the ESMI and TD*X TDUs were required by the contract documents to undergo Proof of Performance (POP) testing. The intent of the POP test was to demonstrate that each individual treatment unit was capable of meeting the Site soil treatment goals, and to establish specific operating parameters for each TDU that ensured that they did not release excessive air contaminants while meeting the project required soil treatment rates. The POP test for ESMI was conducted on February 7 – 9, 2007 with visible emissions testing completed on March 14, 2007, and the POP test for TD*X was conducted on March 14 and 15, 2007. These tests were overseen by the NYSDEC, USEPA and Earth Tech. Results of the POP tests are presented in TDU system specific reports attached in Appendix E.

Both treatment units met the project required soil treatment and air pollution prevention goals during their respective POP tests. The operational parameters established for each of the TDUs were as follows:

The NYSDEC approved operating envelope for the ESMI direct heated TDU:

- Feed Rate of 40 ton/hr maximum, computed with a 5 minute rolling average, with a 10-minute time delay.
- Dryer Discharged Soil – 775° F minimum, computed with a 60-minute rolling average with a 10 minute delay.
- Dryer Draft – 0.1 inches water column (in. WC) draft minimum, computed with a 1-minute rolling average, with a 1-minute delay.
- Secondary Treatment Unit (STU) exhaust Gas Temperature - 1625° F minimum, with a 2-minute time delay.
- Baghouse Differential Pressure (dP) - 2.5 in. WC minimum, computed with a 5-minute rolling average (no delay).
- CO in stack, adjusted to 7% 0_2 - 30 ppm computed with a 5-minute rolling average, with a 30 minute time delay.

The recommended operating envelope for TD*X indirect heated TDU were as follows:

- Feed Rate of 14.4 ton/hr maximum, computed with a 10 minute rolling average and a 30-minute time delay.
- Dryer Discharged Soil – 709° F minimum, computed with a 30-minute rolling average (no delay).
- Dryer Draft – "Negative Draft" or zero, with a 1-minute delay.
- Gas System Differential Pressure, Maximum – 15 dP in. WC.
- Gas Condenser Outlet Temperature, Maximum - 79° F.
- Oxygen Concentration in Vent, Maximum - 7% 0_2

The TD*X operating envelope was not approved by the NYSDEC due to circumstances explained in Section 4.5.2.

4.5.2 Soil Treatment

The design and operation of the ESMI and TD*X TDUs are described in Sections 3.7.1 and 3.7.2, respectively.

Following the completion of system shakedown after the POP test and once the ESMI POP test results were received and approved, the direct heated treatment unit began production scale treatment of soil. However, shortly after the TD*X POP test was completed, but before the POP test results had been received, TD*X experienced a system failure and subsequent shut down after treating only a small amount of soil

Analysis of the situation by all parties revealed that certain areas of the Site contained a significant quantity of solid phase organic chemicals in the form of asphalt and roofing material. Some of this solid phase organic chemical had vaporized when introduced into the TD*X dryer drum, and then re-condensed into a tar like semi-solid within the contaminant recovery portion of the system. Since the TD*X design was intended to address soil contaminated with organic compounds that are liquids at room temperature, the semi-solid tar acted to restrict and eventually completely stop the flow of gasses and liquids through portions of the system.

Following the system shut down, TD*X staff spent approximately 5 days mechanically cleaning the tar out of the TDU pipe work. During that time and for several weeks afterwards the TD*X management staff worked to assess this situation and eventually proposed making design and operational changes to the TDU that they believed would ensure that the possibility of additional system shutdowns would be significantly reduced or even eliminated. However, since those design and operational changes would have to be based on an estimated feed rate of solid phase organic material to the TDU, which could not be verified or controlled, and since the changes would have significantly increased the treatment costs for TSCA material while significantly reducing the treatment rate for that material, the NYSDEC decided to forgo on-site treatment of TSCA soil. In response to this decision DAC requested that TD*X demobilize their equipment from the Site, which they did in a period of approximately one week. Additionally, DAC

prepared a Request for Change Order to address off-site disposal of TSCA contaminated soils at an approved landfill (see Section 6).

4.5.3 Post Treatment Soil Testing

Post thermal treatment soil sampling ("post batch") was conducted by DAC as required by the project design documents. Results of the post batch sample analysis are presented in Table 4.

Per the project work plan, DAC collected hourly grab samples off the TDU soil effluent outfeed belt for the period required to treat 1,000 tons of soil (i.e., 1 treatment batch) and then combined the grab samples into a single composite sample representing the treatment batch. Since treatment was conducted 24 hours per day, night time grab sampling was conducted by the safety personnel sub-contracted to DAC. Post batch samples were submitted to the analytical laboratory for full suite, site-specific analysis with 48 hour turn around time. Each 1,000 ton post treatment soil batch was retained in an outbound bin until the results of the associated post batch sample were received and reviewed by the on-site engineer.

Due to the frequency and continual nature of the post batch sampling, Earth Tech was unable to be witness to every hourly grab sampling event. Instead, the oversight engineer would periodically inspect the cooler where the grab samples were being stored prior to compositing for shipment to the laboratory. On one occasion the engineer noted that the compositing container was empty 4 hours after a new treatment batch had been started at the ESMI facility. Since there should have been soil from at least four grab samples in the container, the engineer questioned the DAC Site manager about how and why the sampling had fallen behind schedule. The manager explained that due to the recent increase in day time truck traffic associated with TSCA off-site waste hauling, they had from time to time experienced a man-power shortage and failed to meet the hourly requirement for grab sampling.

It was reported by DAC that this deviation from the project sampling requirements had only been occurring since the TSCA trucks started coming to the Site (approximately 1 week), and it had not happened with every post batch sample collected in that period. They explained that when it occurred as many as 4 hourly daytime sampling events in a single post batch period may have been missed. In all cases treatment batches required at least 24 hours to complete, and night time sampling was conducted hourly by the safety sub-contractor without failure. Based on the information provided by DAC it was determined that 3 to 4 of the 74 post batch samples collected during the project were composited from 20 sub-samples rather than 24 sub-samples.

Once the situation was discovered, Earth Tech directed that DAC take corrective action to ensure that enough manpower was available to meet the sampling requirements for the project. In addition to assigning additional staff to the sampling effort, a grab sampling log was instituted by DAC in response to this request. This log was kept with the post batch sample, and allowed the oversight engineer to review the sampling progress without having to be present for every grab sample. No further incident occurred with the post batch sampling for the remainder of the project.

Once post batch analytical data was received by DAC it was reviewed by their on-site manager and presented to the oversight engineer for their approval. Once approved, the post treatment batch was released for use as backfill. By the conclusion of the project 9 of the 74 post batch samples exhibited results for Site specific contaminants failing the SCGs; 8 of the batches failed for total chromium, 1 batch failed for PCBs.

The treatment batch that failed for PCBs (post batch 66, 1.04 ppm total PCBs) exhibited concentrations only slightly higher than the 1.0 ppm clean up goal. Since this concentration was well below the NYSDEC cleanup goal for sub-surface PCB contamination and it was very close to the project SCG for PCBs, the NYSDEC directed that this treatment batch be placed as backfill in the bottom of 4 cells which had been excavated to a depth of approximately 8 feet. Two of the 4 batches that exceeded the 50 ppm SCG for chromium were trucked off Site for disposal at a regulated landfill. The remaining four treatment batches that failed for chromium exhibited chromium concentrations between 71.3 and 105 parts per million. The NYSDEC allowed this treated soil to be used as back fill in various low lying locations in the excavation, citing NYCRR 375 2.7 (4) as justification for that direction.

4.6 Excavation Backfill

Post treatment soil batches associated with post batch samples that met all SCGs were trucked to the excavation in clean trucks to be used as backfill. The project design required placement of back fill in the excavation in 1 foot lifts, followed by mechanical compaction of each lift to achieve 90% of the original compaction, as demonstrated by field testing. However, owing to extreme moisture content in lower elevations of the Site, NYSDEC granted relief to DAC for compaction testing in the initial 3 feet of back fill. Per the relief agreement, DAC was allowed to place a 3 foot "bridge lift" in each cell prior to initiating compaction efforts, then the remaining backfill was placed in 1 foot lifts with compaction and testing between each subsequent lift. The fill material was rolled with a vibratory compacter to achieve proper compaction. Compaction testing was performed per contract requirements. Field compaction testing data are presented in **Appendix F**.

Near the conclusion of the project DAC requested permission to use the concrete treatment pad and sub-base stone as back fill since the project lost some of the expected backfill quantity to off-site disposal of oversize debris and TSCA contaminated soil. The NYSDEC agreed to allow the use of these materials once appropriate testing had been conducted to verify that it met the Site cleanup goals.

DAC complied with the treatment pad testing requirement by collecting full thickness core samples of the pad in locations most expected to have been impacted (i.e., at the TSCA in bound bin, near the former TD*X treatment pad and water collection sumps). The core samples were crushed to a powder and submitted for PCB analysis per NYSDEC request. All core samples

exhibited PCB concentrations well below the project SCGs. Once the core sample data had been reviewed and approved by the oversight engineer, DAC broke the concrete pad into small 3 foot by 3 foot pieces and laid them in the excavation in areas where they would remain greater than 4 feet below the final surface elevation. Once the pad had been removed, DAC collected full

thickness composite samples of the sub-base stone for PCB analysis. Three sampling locations were randomly selected in each cell within the pad area. Each location was sampled through the full thickness of the sub-base material, and then the three samples were composited together to create a single sample for each cell. Two of the cells exhibited elevated PCB results in the sub-base material. Per the engineer's direction, DAC removed approximately 6 inches of the material
for off-site disposal as non-hazardous debris and re-sampled as before. DAC continued to remove sub-base material and re-sample as necessary until all remaining material met the SCGs. Following this the sub-base material was removed and used for backfill as needed. Results of the core samples and sub-base sampling are presented in Table 5.

4.7 Water Treatment

Per contract documents, construction water management was designed by DAC to aid the excavation and backfilling progress. Site water was transferred to the WWTP through electric and gas pumps and 3" hoses. In cases where the transfer could not be continual due to distance, water was temporarily deposited into contaminated cells and/or the established Site sump cell (D11) for holding until it could be transferred to the WWTP. The Site water was treated as discussed in Section 3.7.3 and discharged into Warner Creek.

Total Treated Water Discharged to Warner Creek = 9,595,000 gallons of water.

Weekly testing of the WWTP discharge was performed throughout the project. In the event that any weekly water quality parameter failed to fall below the maximum allowable discharge limit as stated in the Site Dewatering Plan, DAC was immediately ordered to discontinue discharge and take corrective measures (ie. make modifications to the treatment plant) to rectify the situation. The water was resampled to confirm quality prior to continuation of discharge. Results of WWTP sample analyses are presented in **Appendix C**.

4.8 Dust Control

Per contract requirements, DAC was responsible to prevent off-site migration of Site related contaminants and nuisance dust arising from airborne particulates. The oversight engineer team maintained awareness of dust levels and informed DAC when visible levels of dust threatened to migrate off-site. In response to those conditions DAC employed corrective measures such as application of water to haul roads and use of less aggressive soil and lime handling techniques by the equipment operators. In addition, a dust screen barrier was added to the area around the liming and soil screening area to mitigate community health and safety concerns and Site personnel exposure to fugitive dust. Overall very few instances of visible levels of airborne dust resulted in potential off-site migration, and those few events only lasted for a few minutes prior to mitigation.

4.9 Community Air Monitoring

Per the project design requirements, DAC conducted real time and laboratory sample perimeter air monitoring to document any potential off-site migration of Site specific contaminants. To

accomplish this, four temporary air monitoring stations were established at the four cardinal directions (north, south, east and west) around the Site, as well as a weather monitoring station located at the DAC Site office trailer. Each station was prepared to sample site specific analytes of concern consistent with the NYSDEC approved Work Plan and the design requirements. Pre-excavation background monitoring was conducted between October 13, 2006 and October 15, 2006. Once disturbance of contaminated soil began, air samples were collected weekly and submitted to Con-Test for analysis. Results of air monitoring were reviewed monthly by Jane Whitehouse, CIH, who, under subcontract to DAC, prepared a monthly report of the results in comparison to the background data. Results of air monitoring are presented in Table 6. The monthly CIH reports are presented in **Appendix G**.

4.10 Transport and Disposal

As stated in previous sections, various soils and debris had to transported off-site due to the changed on-site circumstances. Soil and debris where transported off-site by permitted hazardous waste haulers, and each load was manifested. Any treated soil that failed to meet SCGs was transported off-site for disposal at the Chemung County Landfill. Non-Hazardous debris was transported to either the Chemung County Landfill or Seneca Meadows Landfill. TSCA soils, TSCA debris, TSCA liquids and TSCA/RCRA soils were transported to Model City Landfill. All C&D debris was transported to the Hakes Landfill. Manifests for each of these shipments is presented in **Appendix H**. The total soils quantities transported off-site are presented as follows:

Waste Stream Destination	Waste Type	Weight from Landfill Scales In tons
Hakes C&D Landfill	Building Demolition Waste	147.96
Model City Landfill	TSCA Debris	3,428.06
Model City Landfill	TSCA Soil	29,448.13
Model City Landfill	TSCA/RCRA Soil	1,297.86
Seneca Meadows Landfill	Non-TSCA Debris	19,633.80
Chemung County Landfill	Non-TSCA Debris	725.58
Chemung County Landfill	Post Treatment Soil	1,080.46
Total		55,761.85

5.0 SITE RESTORATION

The following section describes the steps taken to restore the property at the conclusion of the project.

5.1 Post-Operation Soil Sampling

Once the LTD equipment and pads were removed from the Site, DAC performed post-construction soil sampling at the locations previously sampled during pre-construction soil sampling (see Section 3.3). Post-construction soil samples were analyzed for all Site specific contaminants of concern and followed the same sampling grid as the pre-construction sampling locations. All results were consistent with the pre-construction activities, except for cells 23 and 58 (see Table 7). Since the post-construction sampling involved collecting a single grab sample from each cell, the two cells that exhibited impacts were re-sampled using a composite of multiple grab samples from each cell. The re-sampling indicated that the average concentration of these cells was consistent with pre-construction conditions, and therefore no additional excavation was required by the NYSDEC. Post construction soil sample locations are presented in Figure 8.

5.2 Grading, Top Soil and Seeding

Owing to the loss of backfill material due to the quantity of oversize debris and TSCA soil that was trucked off-site for disposal, the Site could not be restored to an elevation that approached the pre-project elevation. Therefore, the final Site grading plan had to be changed to include a gentle swale that passed through the center of the Site from south to north, which ensures proper drainage of the Site to Warner Creek. No grading fill material was imported to the Site.

Once the Site was backfilled and graded to meet the revised grading plan, DAC covered the treated soil and any other disturbed areas of the Site with approximately 6 inches of imported clean topsoil. Thickness testing of the topsoil layer was conducted by DAC with oversight by the on-site engineer. The topsoil was seeded with a NYSDEC approved mix of grass seed by hydroseed technique. To maintain moisture on the seed and prevent erosion prior to grass growth, DAC also spread straw across the Site with a power mulch blower. Per NYSDEC's request the Site gravel access road and parking areas were left in place for future monitoring access.

5.3 Additional Tasks

In addition to the topsoil and seeding operation, the following other tasks were conducted by DAC to close the project:

- Installation of two fire hydrants supplied by the Town of Glenville; one located adjacent to Freeman's Bridge Road at the southern end of the project Site, and one located adjacent to Maple Avenue across Warner Creek from the Site. These hydrants were inspected and approved by the Town of Glenville.

- DAC subcontracted the installation of 6 foot high chain link fence along Gorman Road and Freeman's Bridge Road from the Adirondack Asphalt fence to the stockade fence at the Sunnyside Animal Hospital. A double wide lockable gate was install at the entrance to the Site access road and adjacent to the animal hospital.
- All office trailers and utilities were removed at demobilization. No utilities were left in place after demobilization. Eventually National Grid also removed gas metering equipment located across Warner Creek on the North parcel of Lyon's property.

Figure 9 presents the final As-Built topographic survey after Site restoration.

5.4 Asbestos Contaminated Soil Abatement

During the grading process, a pocket of transite asbestos corrugated siding was uncovered in an area outside of and adjacent to the excavation area. The transite containing area was cordoned off with snow fence and left undisturbed by DAC. NYSDEC contracted an emergency spill contractor, AZTEC Technologies, Inc., to conduct an asbestos abatement. Soil with asbestos was excavated following New York State Department of Labor (NYSDOL) asbestos control regulations and disposed of off-site at a licensed landfill. Following abatement, the contractor backfilled the excavation with clean fill, graded to meet adjacent grades, seeded and mulched the area. The Abatement Report is attached as **Appendix I**.

6.0 DESIGN MODIFICATIONS

The 34 Freeman's Bridge Road Soil Remediation was completed in substantial conformance with the design plans and specifications. As necessary, variations from the design were made to expedite the project. All proposed modifications were discussed at biweekly project meetings or conference calls organized specifically to address the proposed modification. These meetings or conference calls were attended by representatives of NYSDEC, the designer (Earth Tech), and Contractor (DAC), as appropriate. Biweekly project meeting minutes (see **Appendix J**) document the discussion, development, and timing of these changes. No design changes were ordered without the approval of NYSDEC and Earth Tech.

The technical aspects of the design changes are discussed in Section 3, 4 and 5. Below is a summary of the change orders processed as part of the Contract implementation. Both Change Order #1 and Change Order #2 are presented in **Appendix K**.

CHANGE ORDER #1:

Item 1, Bid Item UP-4A -LTTD Treatment of TSCA Soils. UP-5D- Off-site disposal of TSCA soils and unit LS-5 – TDX indirect thermal treatment cleanout and handling.

An adjustment to the Unit 4A quantity – 12,500 CY (scheduled) minus 540.13 (actual treated) = (11,959.87 CY) at a unit price of $153.91 per CY. Item UP-5D was added to accommodate off-Site disposal of remaining TSCA soils, not treated through LTTD including 11,959.87 cy (scheduled quantity) plus 2,040.13 cy (in-situ soils re-characterized as TSCA soils) = total of 14,000 cy at a unit price of $224.00/cy. The addition of item LS-5 TDX – indirect LTTD unit clean-out due to Site conditions outlined in the Explanation of Significant Differences (ESD), at a Lump Sum price of $100,000.00. Resultant change: $1,395,390.31.

Item 2, Bid Item UP-5 – off-site disposal of metals (RCRA hazardous metals).

A revised quantity (reduce) for Bid Item UP-5 from 3,540 to 1,459 tons = (2,081 tons) at a unit price of $160.00 per ton. Resultant change: - $332,960.00.

Item 3, Bid Item UP—5A Off-Site Disposal of Non-RCRA / Non-TSCA Debris from 3,220 tons to 15, 000 tons. Item UP-14 surcharge to cover alternate disposal options for a limited quantity (1,714 tons) of UP-5A soils.

An increase in the quantity of Unit Price Item 5A based on increased percentage of oversized debris not amenable for LTTD Treatment at a unit price of $72.00 per ton. The addition of a new item, UP-14, to reimburse for a 7.00 surcharge on UP-5A ($72.00 to $79.00 per ton) for limited quantity of debris (1,713.88 tons) disposal at an alternate disposal facility (Chemung County) due to facility delays at the pre-approved facility (Seneca Meadow). Resultant change: $850,157.16.

Item 4a, Bid Item UP-5B - Off-Site Disposal of RCRA metals debris.

A revision of the quantity based on existing Site conditions from 3,220 tons to 0 tons at a unit price of $160 per ton. Resultant change: -$515,200.00.

Item 4b, Bid Item UP-5C - Off-Site Disposal of TSCA debris.

A quantity increase from 3,220 tons to 3,703 tons, at a unit price of $180.00 per ton, warranted due to existing Site conditions due to the presence of excessive debris not amenable for LTTD treatment. Resultant change: $86,940.00.

Item 5, Bid Item UP-8 and UP-8A Water Management.

This is part of a contract adjustment to continue effective dewatering measures and address existing Site conditions. The scheduled unit cost at 0.36/gallon applies up to additional 15% of the scheduled contract quantity (150,000 gallons). Unit price adjustment negotiated ($0.185 /gallon) applies to an additional 5,175,000 gallons. Resultant change: $1,011,375.00.

Item 6, Item UP-6 - Backfill with Treated Soil and PCO.

The decreased quantity for UP-6 is based on an additional 15,500 CY of TSCA soils/debris that will be transported off-Site for disposal and not available for backfill at a unit price of $9.90 per CY. Resultant change: -$153,450.00.

Item 7, Bid Item UP-12 - Clean Crushing & Processing.

The original contract required off-Site disposal of non-contaminated slab and foundation concrete from building demolition in accordance with Bid Item 5A. Provision of the impact crusher allows for on-Site processing and recycling of clean concrete at a unit price of $25.00 per CY. Part of contract adjustment to implement on-Site crushing and reduce overall volumes of waste shipped to off-Site TSDFs, and reduce associated waste disposal fees. Resultant change: $5,000.00.

Item 8, Item UP-13 - LTTD Treatment of Non-TSCA Soils (Crushing).

A revised quantity and price based on the implementation of on-Site crushing operation to reduce crushable debris (i.e. concrete, brick, rocks, and related) to suitable size for LTTD treatment, in lieu of off-Site disposal as waste debris at a unit price of $7.25 per CY. Resultant change: $93,394.50.

Item 9, Bid Item UP-15 - Disposal of Non-Hazardous Metals-Impacted Site Soils.

An additional item, UP-15, for disposal of non-hazardous metals impacted soils at a unit cost of $61.00 per ton. The original contract required off-Site disposal of RCRA hazardous metals soils. Due to existing conditions and post treatment characterization, these soils are characterized as

non-hazardous; however, the soils exceed Site-specific clean-up goals. Resultant change: $65,819.00.

Item 10, Bid Item UP-16 - Dust Screen Barrier.

Item UP-16 was added for the installation of a Dust Screen Barrier to mitigate community health and safety concerns and Site support exposure to fugitive dust from screening and liming operations at a unit cost of $80.00 per LF. This was part of contract adjustment to address community and Site health and safety exposure due to fugitive dust emissions. Resultant change: $24,000.00.

Item 11, Bid Item TM-01 - Removal Asbestos Containing Material (ACM) cabinets.

An additional item TM-01, added to reimburse time and materials for the removal and the handling of ACM cabinets. This covers time and materials for the removal of asbestos containing cabinets from the building clean-out prior to demolition. The ACM cabinets were not specifically identified on the debris listing provided as part of the bid documents. Costs: Equipment $163.97, Labor $343.80, Subs $1,743.77. Resultant change: $2,250.77.

Item 12, Item UP-9 – NAPL Off-Site disposal.

This item not required under existing Site conditions resulting in a change of 32,000 gallons to 0 gallons at a unit cost of $1.27 per gallon. Resultant change: -$40,640.00.

The net cost of Change Order #1 was $2,502,078.00, resulting in a revised Contract Price of $19,337,093.00. Change Order #1 did not extend the Contract Time.

CHANGE ORDER #2:

Item 1, Bid Item UP-3 - Excavation of Soil and Debris.

An increase in excavation quantity based on existing Site conditions resulting in a revised quantity and price based on the implementation of the Explanation of Significant Differences (ESD, NYSDEC May 2007). Adjusted the Unit 3 quantity – 69,000 CY (scheduled) plus 13,366 CY (actual excavated) = 82,366 CY at a unit cost of $8.75 per CY. Resultant change: $116,952.50.

Item 2, Bid Item UP-4 – LTTD Treatment of Non-TSCA Soils.

A decrease in UP-4 for quantities not used resulting in a revised quantity (decrease) for Bid Item 4 from 46,000 CY (Non-TSCA) to 45,386.25 CY = (613.75 CY) at a unit cost of $171.71 per CY. Resultant change: -$74,699.51.

Item 3, Bid Item UP-5A – off-site disposal of metals Non-RCRA/Non-TSCA debris.

Increase quantity of Unit Price Item 5A based on increased percentage of oversized debris not amenable for LTTD Treatment. Decrease UP-5 and UP-5C for quantities not used. Revised quantity (increase) for Bid Item UP-5A from 15,000 to 21,000 tons = 6,000 tons at a unit cost of $72.00 per ton. Revised quantity (decrease) for Bid Item 5 from 1,459 to 0 tons = (1,459) tons at a unit cost of $180.00 per ton. Revised quantity (decrease) for Bid Item 5C from 3,703 to 3,428 tons = (275) tons at a unit cost of $160.00 per ton. Resultant change: $149,060.00.

Item 4, Bid Item UP-5D, Off-site Disposal of TSCA Soil

This is part of the contract adjustment to implement off-site disposal of TSCA soils non-amenable for on-Site LTTD treatment. This resulted in an increased quantity of Unit Price Item 5D based on increased percentage of TSCA Soils not amenable for LTTD Treatment. Increase quantity for Bid Item UP-5D, Off-Site Disposal of TSCA Soil from 22,400 tons to 29,450 tons = 7,050 tons, at a unit cost of $140.00 per ton. Resultant change: $987,000.00.

Item 5, Bid Item UP-5E - Off-site Disposal of TSCA/RCRA soils.

A new item added for transportation and disposal of TSCA/RCRA soil volumes based on existing Site conditions, resulting in costs for transportation and disposal of 1,200 tons of TSCA/RCRA regulated soil, at a unit cost of $240.00 per ton. Resultant change: $312,480.00.

Item 6, Bid Item UP-7, Post Excavation soil sampling.

An increase in verification samples for cells based on existing Site conditions. The revised quantity is based on existing Site conditions and failures of several cells of acceptable bottom soil samples. The change quantity is from 150 samples to 173 samples = 23 additional samples, at a unit cost of $880.00 per sample. Resultant change: $20,240.00

Item 7, Bid Item UP-8A (Water Management – Phase II).

This is part of the contract adjustment to continue effective dewatering measures and address existing Site conditions. The increased quantity is from 5,175,000 gallons to 8,445,000 gallons = 3,270,000 gallons, at a unit cost of $0.185 per ton. Resultant change: $604,950.00.

Item 8, Bid Item UP-2 - Health and Safety.

An increased in the TSCA excavation volumes extended the health and safety schedule. The increase quantities of item UP-2 for additional health and safety days used during TSCA soil excavation from 210 days to 217 days = 7 days, at a unit cost of $4,200.00 per ton. Resultant change: $29,400.00.

Item 9, Bid Item TM-02 – Drum Handling.

A new task required for the handling, overpacking, characterization, transportation and disposal of buried drums and drum fragments. Lump Sum addition. Resultant change: $106,068.26.

Item 10, Bid Item TM-03 – Permanent Fence & Gates.

A new scope of work requested by NYSDEC to provide long-term Site security. This is a lump Sum addition. Resultant change: $23,031.75.

Item 11, Bid Item TM-17 – TSCA Upgrade Pile Handling.

These are additional costs incurred by unplanned upgrade of 5,000 tons of Non-TSCA soil to TSCA regulated status. Unplanned upgrades resulted in additional handling and stockpile management, and additional PCB sampling and analysis for 4,250 tons at a unit price of $3.00 per ton. Soil piles intended to Non-TSCA treatment were upgraded to TSCA status, requiring the soil piles to relocated, stored temporarily, and re-sampled for PCBs. Resultant change: $12,750.00

Item 12, Bid Item TM-04 Revised Grading Plan.

This is for additional costs incurred by unplanned change of grading plan requiring additional effort to shape Site to ensure proper draining. There was a revision of the grading plan caused by loss of approximately 26,000 cubic yards of material composed of oversize debris not amenable for treatment and TSCA soil removed for off-site disposal. Lump Sum addition. Resultant change: $20,000.00.

Item 13, UP-10 – Monitoring Well Decommissioning.

A revised quantity (decrease) for Bid Item 10 from 21 wells to 20 wells = (1 well). Decrease UP-10 for quantities not used. Resultant change: -$1,000.00.

The net cost of Change Order #2 was $2,306,233.00, resulting in a revised Contract Price of $21,643,326.00. Change Order #2 did not extend the Contract Time.

6.1 Contractor Disputes

At the completion of the project, there were no disputes between the Contractor and Earth Tech or the NYSDEC.

7.0 LESSONS LEARNED

The design and specifications package outlined a process capable of effectively excavating and treating the contaminated soil at this Site. This success can be attributed to the inclusion of sufficient detail, an allowance for construction flexibility, and reasonable performance objectives based on averaging techniques. In addition, the success of this project can also be credited to the cooperative teamwork between the Contractor, Oversight Engineer, and NYSDEC.

1. Application of Indirect LTTD Technology (TD*X) – Although the indirect TD*X thermal treatment technology proved capable of treating TSCA level PCB contaminated soil, as well as soil contaminated with other organic compounds in high concentrations, the presence of solid phase organic contaminants in the soils presented a significant obstacle to that technology. That obstacle proved impractical to overcome, resulting in the off Site disposal of over 30,000 tons of TSCA debris and soil rather than its on-site treatment. Review of the Remedial Investigation and Pre-Design Investigation reports indicates that the investigators were aware of the presence of solid phase organic contaminants; however, its potential adverse impact on the efficient performance of indirect LTTD technology was not fully appreciated. A lesson learned is the importance of identifying and quantifying the presence of solid phase organic material such as tar, roofing materials, and asphalt in subsurface investigations where thermal treatment technology is being considered. If significant solid phase organic contaminants exist, indirect thermal treatment technology is likely inappropriate.

2. Application of Direct LTTD Technology (ESMI) – The direct ESMI thermal treatment technology proved successful in treating non-TSCA level PCB contaminated soil at this Site. The presence of solid phase organic contaminants in the soils resulted in increased BTU content, requiring unforeseen short term shut downs to control carbon monoxide discharge levels. This decreased productivity to some extent. Nevertheless, the direct LTTD (ESMI) technology was successful in treating these soils to the design specifications.

3. Survey Data used for Soil Quantity Calculation – For the first time in New York State, excavated soil totals at a remediation-site were successfully calculated using elevation survey data as opposed to weight scales. This was completed by surveying the entire Site prior to excavation, then tracking the soil volumes by frequent surveys throughout the excavation process, using the established grid network for reference. This enabled accurate soil calculations without the complications of soil moisture which often accompany weight scale calculations. It is anticipated that this method of soil quantity calculation will be used at future remediation-sites requiring large volumes of soil to be excavated.

4. Groundwater Treatment Volumes – The project documents estimated that construction related water requiring treatment would total approximately one million gallons. This estimate was based on the groundwater elevations observed at the Site during the

remedial investigation field work and the design excavation depths. The estimate of water management quantities did not account for the possibility of significant over-excavation, which eventually occurred at most locations across the Site. At completion of the project, over 9 million gallons of construction related water was pumped and treated resulting in a significant increase in project costs. A lesson learned was the importance of preparing more realistic engineering estimates of expected water treatment quantities, and including contingency for over-excavation and other unforeseen conditions. In addition, greater emphasis should be given to measuring and evaluating hydraulic conductivity of water bearing strata during the investigation phase of remediation projects, and developing realistic groundwater models to estimate seepage quantities. An experienced engineer or hydrogeologist should be included in the project team at an early stage to insure that a reasonable groundwater model is developed for use in estimating groundwater seepage quantities. Alternatives for controlling groundwater inflow (e.g., cutoffs) should be considered, if cost effective.

8.0 CONSTRUCTION CERTIFICATION

Construction for the 34 Freeman's Bridge Road Site (Site # 4-47-028) Soil Remediation Project during the period of October 2006 and October 2007 was completed in substantial conformance with the Contract Documents and the approved Change Orders, as summarized in this Final Remediation Report.

PE Stamp

Signature: _____

Earth Tech Northeast, Inc.

Date: 3-13-2008

MAP REFERENCE:
U.S.G.S. 7.5 MINUTE SERIES, SCHENECTADY

0' 2000' 4000'

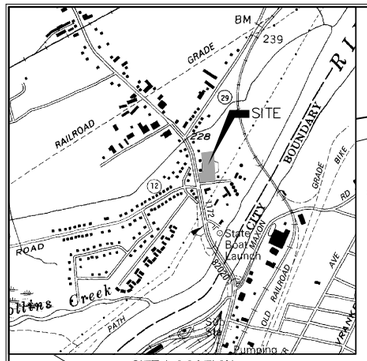
JUNE 2005 SCALE 83060

N

EarthTech
A tyco International Ltd. Company

Figure 1
SITE LOCATION MAP
New York State Department of Environmental Conservation
Freeman's Bridge Road Site
Scotia, New York

FILE NAME: \83060\CADD\DWG\FIGURES_PDF\site-location-map.dwg IMAGE: \38925\cadd\image\schenectady-quad.dwg



SITE LOCATION
NOT TO SCALE

FREEMANS BRIDGE ROAD

EDGE OF PAVEMENT

SINGLE STORY MASONRY BUILDING

GRAVEL DRIVEWAY AREA

TOP OF BANK

LANDS N/F
JOHN OLIVER HORNFECK
L. 1048, P. 543

LANDS N/F
ERWIN C. GRANT & JOAN H. GRANT
L. 1058, P. 520

LANDS N/F
FLORENCE E. NELSON
L. 1546, P. 630

LANDS N/F
DOMINICK MANGINO

LANDS N/F
PEARL ARMSTRON
L. 1346, P. 51

LA
HALL
L. 156

WOODS

STREAM

PROPERTY LINE

LANDS N/F
DAVID HICKOK
L. 1041, P. 655

GORHAM ROAD

EDGE OF GRAVEL

FIELD/BRUSH

LANDS N/F
LYONS VENTURES, INC.
L. 1021, P. 829

LANDS N/F
FREEMANS BRIDGE ASSOC., INC.
L. 1643, P. 424

BENCHMARK
NAHA ON HYD.
ELEV. = 228.82'
NAVD 88

LANDS N/F
J. H. BUHRMASTER CO., INC.
L. 583, P. 296

LANDS N/F
NIAGARA MOHAWK POWER CORP.
L. 798, P. 425

PRE-CONSTRUCTION TOPOGRAPHY

GRAVEL ROAD

RAILROAD TRACKS

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

LEGEND

FENCE
EDGE OF PAVEMENT
CONTOUR MINOR
CONTOUR MAJOR
PROPERTY LINE
BUILDING
EDGE OF GRAVEL
TREE LINE
STREAM
RAILROAD
FIRE HYDRANT

NOTES:

1. MAPPING PREPARED BY CLARK ENGINEERING & SURVEYING FROM A FIELD SURVEY COMPLETED MAY 2000 AND UPDATED OCTOBER 2006 AND ALSO JULY 2007.
2. NORTH REFERENCE AND COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 (1996) ALL PER THE CBN CONTROL POINT "SCHENPORT".
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE REFERENCED TO THE NAVD 88 DATUM PER THE CBN CONTROL POINT "SCHENPORT".
4. UNDERGROUND UTILTIES, IF ANY, ARE NOT SHOWN.
5. SUBJECT TO THE REVIEW OF A COMPLETE AND UP-TO-DATE ABSTRACT OF TITLE.
6. PARCEL SURVEYED IS FURTHER REFERENCED TO THE TOWN OF GLENVILLE, SCHENECTADY COUNTY, TAX MAP PARCEL ID NO. 30.19-1-26.1

MAP REFERENCES:

1. "LANDS OF LYONS VENTURES, INC. NYSDEC SITE 4-47-028", DATED JULY 2000 AS PREPARED BY CLARK ENGINEERING & SURVEYING.

CLARK ENGINEERING & SURVEYING, P.C.
20 SHAKER RD., BOX 730, NEW LEBANON, NY 12125
TEL. (518) 794-8613 FAX: (518) 766-3663
www.clarkpc.com

LANDS OF
LYONS VENTURES, INC.
L. 1021, P. 829
SCHENECTADY COUNTY, NEW YORK

REVISIONS:	No.	BY	DATE
UPDATED CONTOURS	1	LJB	11/10/07
UPDATED PLANIMETRIC FEATURES	2	LJB	10/4/07

SCALE: 1" = 40'
DATE: 01/23/2007
DRAFTED BY: LJB
CHECKED: EPG
APPROVED: EPG

TITLE: PRE-CONSTRUCTION TOPOGRAPHIC SURVEY MAP

PROJECT NO.
30610

DRAWING NAME
30610.DWG

DRAWING NO.
FIGURE 2

G:\Projects\30670\dwg\30670.dwg
February 07, 2008

LEGEND

EDGE OF PAVEMENT
FENCE
UNDERGROUND UTILITIES — UGE
GRAVEL ROAD
TRAILER
STORAGE BINS/TANKS
INFECTED AREA
DUST SCREEN
ASPHALT PAD
CONCRETE PAD
CONCRETE WALL
MONITORING WELL

FREEMANS BRIDGE ROAD

EDGE OF PAVEMENT

CHAINLINK FENCE

TSCA REGULATED SOIL REMOVAL AREA (PCB > 50PPM, < 1000PPM)

NON-HAZARDOUS CONTAMINATED SOIL REMOVAL AREA (PCB < 50PPM)

GORMAN ROAD

CONCRETE PAD

TEMPORARY UTILITES

UGE

WASTE WATER TREATMENT PLANT

IB1 IB2 IB3 IB4 IB5 IB6

TDX ESMI

OB1 OB2 OB3 OB4 OB5 OB 6 & 7

ASPHALT PAD

SCREEN

LTTD STAGING

MW-210

MW-18

MW-12

MW-16

BENCHMARK
NAHA ON HYD.
ELEV. = 228.82'
NAVD 88

STORAGE TRAILER

DECON TRAILER

BREAK TRAILER

DEC TRAILER

DAC/ESMI/TDX TRAILER

DEBRIS 1

DEBRIS 2

DUST SCREEN

PROPOSED GRAVEL ROAD

GRAVEL ROAD

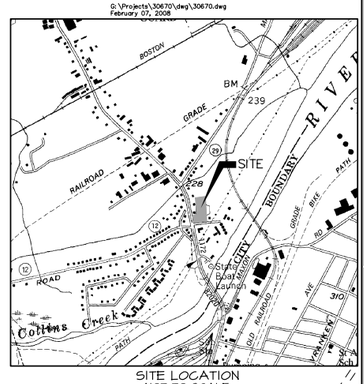
CHAINLINK FENCE

DECON PAD

TRUCK SCALE

RAILROAD TRACKS

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.



SITE LOCATION
NOT TO SCALE

NOTES:

1. MAPPING PREPARED BY CLARK ENGINEERING & SURVEYING FROM A SCHEMATIC DRAWING FROM EARTHTECH DATED APRIL 2006.
2. NORTH REFERENCE AND COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 (1996) ALL PER THE CBN CONTROL POINT "SCHENPORT".
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE REFERENCED TO THE NAVD 88 DATUM PER THE CBN CONTROL POINT "SCHENPORT".
3. UNDERGROUND UTILITIES, IF ANY, ARE NOT SHOWN.
4. SUBJECT TO THE REVIEW OF A COMPLETE AND UP-TO-DATE ABSTRACT OF TITLE.
5. PARCEL SURVEYED IS FURTHER REFERENCED TO THE TOWN OF GLENVILLE, SCHENECTADY COUNTY, TAX MAP PARCEL ID NO. 30.19-1-26.1

MAP REFERENCES:

1. "LANDS OF LYONS VENTURES, INC. NYSDEC SITE 4-47-028", DATED JULY 2000 AS PREPARED BY CLARK ENGINEERING & SURVEYING

CLARK ENGINEERING & SURVEYING, P.C.
20 SHAKER RD., BOX 730, NEW LEBANON, NY 12125
TEL: (518)794-8613 FAX: (518)766-6663
www.clarkpc.com

LANDS OF
LYONS VENTURES, INC.
L. 1021, P. 829
SCHENECTADY COUNTY, NEW YORK

REVISIONS:

No.	DATE	BY

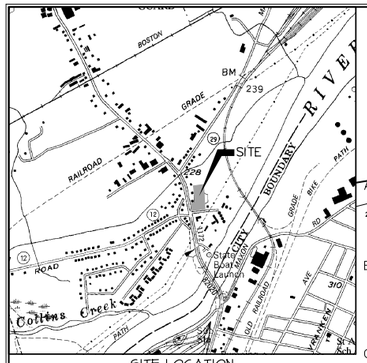
SCHEMATIC SITE LAYOUT

SCALE: 1" = 40'
DATE: 01/29/2008
DRAWN BY: LJB
CHECKED: EPG
APPROVED: EPG
TITLE

PROJECT NO.
30670

DRAWING NAME
30670.DWG

DRAWING NO.
FIGURE 3



SITE LOCATION
NOT TO SCALE

FREEMANS BRIDGE ROAD

LANDS N/F
JOHN OLIVER
HORNFECK
L. 1048, P. 543

LANDS N/F
ERWIN C. GRANT
& JOAN H. GRANT
L. 1058, P. 520

LANDS N/F
FLORENCE E. NELSON
L. 1546, P. 630

LANDS N/F
DOMINICK MANGINO

LANDS N/F
PEARL ARMSTR
L. 1346, P. 5

L
HALL
L. 1

LANDS N/F
DAVID HICKOK
L. 1041, P. 655

LANDS N/F
LYONS VENTURES, INC.
L. 1021, P. 829

LANDS N/F
4 FREEMANS BRIDGE ASSOC., INC.
L. 1643, P. 424

LANDS N/F
J. H. BUHRMASTER CO., INC.
L. 583, P. 296

LANDS N/F
NIAGARA MOHAWK POWER CORP.
L. 798, P. 425

PRE-EXCAVATION TOPOGRAPHY

EDGE OF PAVEMENT
CONSTRUCTION FENCE
GORMAN ROAD
PROPERTY LINE
GRADED AREA FOR EXCAVATION
BENCHMARK
NAHA ON HYD.
ELEV. = 228.82'
NAVD 88
GRAVEL ROAD
RAILROAD TRACKS

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NOTES:

1. MAPPING PREPARED BY CLARK ENGINEERING & SURVEYING FROM FIELD OBSERVATIONS APPENDED BY D.A. COLLINS IN JANUARY 2007 AND UPDATED JULY 2007 BY CLARK ENGINEERING & SURVEYING.
2. NORTH REFERENCE AND COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 (1996) ALL PER THE CBN CONTROL POINT "SCHENPORT".
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE REFERENCED TO THE NAVD 88 DATUM PER THE CBN CONTROL POINT "SCHENPORT".
4. UNDERGROUND UTILTIES, IF ANY, ARE NOT SHOWN.
5. SUBJECT TO THE REVIEW OF A COMPLETE AND UP-TO-DATE ABSTRACT OF TITLE.
6. PARCEL SURVEYED IS FURTHER REFERENCED TO THE TOWN OF GLENVILLE, SCHENECTADY COUNTY, TAX MAP PARCEL ID NO. 30.19-1-26.1

MAP REFERENCES:

1. "LANDS OF LYONS VENTURES, INC. NYSDEC SITE 4-47-028", DATED JULY 2000 AS PREPARED BY CLARK ENGINEERING & SURVEYING

CLARK ENGINEERING & SURVEYING, P.C.
20 SHAKER RD., BOX 730, NEW LEBANON, NY 12125
TEL. (518) 794-8613 FAX: (518) 766-3663
www.clarkpc.com

LANDS OF
LYONS VENTURES, INC.
L. 1021, P. 829
SCHENECTADY COUNTY, NEW YORK

REVISIONS:	No.	BY	DATE
UPDATED CONTOURS	1	LJB	8/15/07
UPDATED PLANIMETRICS	2	LJB	10/4/07

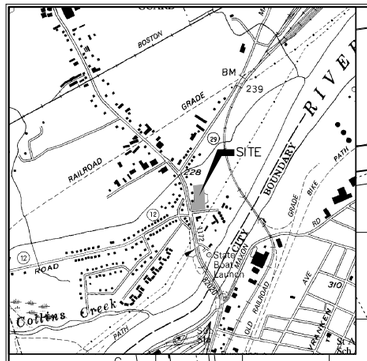
SCALE: 1" = 40'
DATE: 01/31/2007
DRAFTED BY: LJB
CHECKED: EPG
APPROVED: EPG

TITLE: PRE-EXCAVATION TOPOGRAPHIC SURVEY MAP

PROJECT NO.
30610

DRAWING NAME
30670.DWG

DRAWING NO.
FIGURE 4



SITE LOCATION
NOT TO SCALE

LANDS N/F
JOHN OLIVER
HORNFECK
L. 1048, P. 543

LANDS N/F
ERWIN C. GRANT
& JOAN H. GRANT
L. 1058, P. 520

LANDS N/F
FLORENCE E. NELSON
L. 1546, P. 630

LANDS N/F
DOMINICK MANGINO

LANDS N/F
PEARL ARMSTRONG
L. 1346, P. 51

HIGHWAY BOUNDARY

LANDS N/F
HALL CREEK, L.L.C.
L. 1560, P. 678

LANDS N/F
DEREK A. FOTI
L. 1509, P. 742

LANDS N/F
DAVID HICKOK
L. 1041, P. 655

GORHAM ROAD

GRADED AREA
FOR EXCAVATION

PROPERTY LINE

LANDS N/F
LYONS VENTURES, INC.
L. 1021, P. 829

BENCHMARK
NAHA ON HYD.
ELEV. = 228.82'
NAVD 88

MW-210
MW-18
MW-12

PRE-EXCAVATION TOPOGRAPHY

LANDS N/F
J. H. BUHRMASTER CO., INC.
L. 583, P. 296

LANDS N/F
NIAGARA MOHAWK POWER CORP.
L. 748, P. 425

GRADED AREA
FOR EXCAVATION

GRAVEL ROAD

RAILROAD TRACKS

G-17	38	G 46	53	60				
32	37	H 45	52	59	65			
31	36	I 44	51	58	64	68		
20	22	26	30	35	J 43	50	57	63	67
19	K-15	25	29	34	K 42	49	56	62	68
14 18	15 21	16 24	17 28	18 33	41	48	55	61	
16	17	23	27	39	40	47	54		

NOTES:

1. MAPPING PREPARED BY CLARK ENGINEERING & SURVEYING FROM A SKETCH PLAN PROVIDED BY D.A. COLLINS, JANUARY 2008.
2. NORTH REFERENCE AND COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 (1996) ALL PER THE CBN CONTROL POINT "SCHENPORT".
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE REFERENCED TO THE NAVD 88 DATUM PER THE CBN CONTROL POINT "SCHENPORT".
4. UNDERGROUND UTILTIES, IF ANY, ARE NOT SHOWN.
5. SUBJECT TO THE REVIEW OF A COMPLETE AND UP-TO-DATE ABSTRACT OF TITLE.
6. PARCEL SURVEYED IS FURTHER REFERENCED TO THE TOWN OF GLENVILLE, SCHENECTADY COUNTY, TAX MAP PARCEL ID NO. 30.19-1-26.1

MAP REFERENCES:

1. "LANDS OF LYONS VENTURES, INC. NYSDEC SITE 4-47-028", DATED JULY 2000 AS PREPARED BY CLARK ENGINEERING & SURVEYING

LEGEND

- FENCE
- EDGE OF PAVEMENT
- CONTOUR MINOR
- CONTOUR MAJOR
- PROPERTY LINE
- BUILDING
- EDGE OF GRAVEL
- STREAM
- TREE LINE
- STREAM
- RAILROAD
- FIRE HYDRANT
- SAMPLE LOCATION LABEL — 05

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

CLARK ENGINEERING & SURVEYING, P.C.
20 SHAKER RD., BOX 730, NEW LEBANON, NY 12125
TEL: (518) 794-8613 FAX: (518) 766-3663
www.clarkpc.com

LANDS OF
LYONS VENTURES, INC.
L. 1021, P. 829
SCHENECTADY COUNTY, NEW YORK

REVISIONS:

NO.	BY	DATE

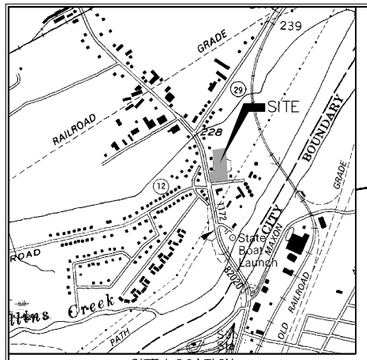
SCALE: 1" = 40'
DATE: 01/29/2008
DRAFTED BY: LJB
CHECKED: EMD
APPROVED: EMD

TITLE: PRE-CONSTRUCTION SOIL SAMPLE LOCATIONS

PROJECT NO.
30610

DRAWING NAME
30610.DWG

DRAWING NO.
FIGURE 5



SITE LOCATION
NOT TO SCALE

NOTES:

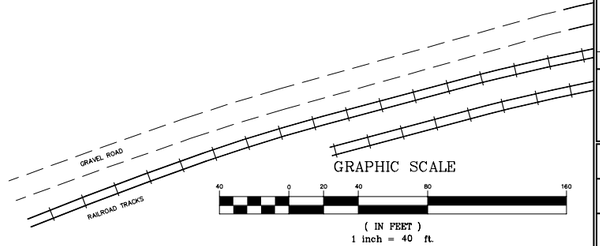
1. MAPPING PREPARED BY CLARK ENGINEERING & SURVEYING FROM FIELD OBSERVATIONS COMPLETED BY D.A. COLLINS IN JANUARY 2007 AND UPDATED TO SEPTEMBER 13 , 2007.
2. NORTH REFERENCE AND COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 (1996) ALL PER THE CBN CONTROL POINT "SCHENPORT".
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE REFERENCED TO THE NAVD 88 DATUM PER THE CBN CONTROL POINT "SCHENPORT".
4. UNDERGROUND UTILTIES, IF ANY, ARE NOT SHOWN.
5. SUBJECT TO THE REVIEW OF A COMPLETE AND UP-TO-DATE ABSTRACT OF TITLE.
6. PARCEL SURVEYED IS FURTHER REFERENCED TO THE TOWN OF GLENVILLE, SCHENECTADY COUNTY, TAX MAP PARCEL ID NO. 30.19-1-26.1

MAP REFERENCES:

1. "LANDS OF LYONS VENTURES, INC. NYSDEC SITE 4-47-028", DATED JULY 2000 AS PREPARED BY CLARK ENGINEERING AND SURVEYING.
2. "34 FREEMAN'S BRIDGE ROAD SITE NYSDEC SITE ID 4-47-028", DATED APRIL 2006 AS PREPARED BY EARTHTECH.

LEGEND

- BOTTOM SAMPLE
- SIDEWALL SAMPLE
- EXCAVATED AREA
- FENCE
- EDGE OF PAVEMENT
- RAILROAD
- FIRE HYDRANT
- SIDEWALL FAILURE
- BOTTOM FAILURE



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

CLARK ENGINEERING & SURVEYING, P.C.
20 SHAKER RD., BOX 730, NEW LEBANON, NY 12125
TEL: (518)794-8613 FAX: (518)766-6663
www.clarkpc.com

LANDS OF
LYONS VENTURES, INC.
L. 1021, P 829
SCHENECTADY COUNTY, NEW YORK

REVISIONS:

No.	DATE	BY	
1	7/18/07	LJB	UPDATED GRID SAMPLES
2	8/27/07	LJB	UPDATED GRID SAMPLES AND CHANGE PAGE NUMBER
3	8/30/07	LJB	UPDATED GRID SAMPLES

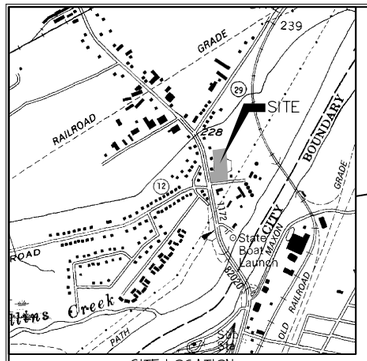
SCALE: 1" = 40'
DATE: 06/28/2007
DRAWN BY: LJB
CHECKED: ENG
APPROVED: ENG

TITLE: VERIFICATION SOIL SAMPLE LOCATIONS MAP

PROJECT NO.
30670

DRAWING NAME
30670.DWG

DRAWING NO.
FIGURE 6



SITE LOCATION
NOT TO SCALE

NOTES:

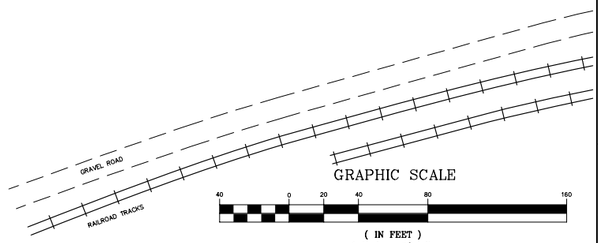
1. MAPPING PREPARED BY CLARK ENGINEERING & SURVEYING FROM FIELD OBSERVATIONS COMPLETED BY D.A. COLLINS IN JANUARY 2007 AND UPDATED TO SEPTEMBER 13, 2007.
2. NORTH REFERENCE AND COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 (1996) ALL PER THE CBN CONTROL POINT "SCHENPORT".
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE REFERENCED TO THE NAVD 88 DATUM PER THE CBN CONTROL POINT "SCHENPORT".
4. UNDERGROUND UTILTIES, IF ANY, ARE NOT SHOWN.
5. SUBJECT TO THE REVIEW OF A COMPLETE AND UP-TO-DATE ABSTRACT OF TITLE.
6. PARCEL SURVEYED IS FURTHER REFERENCED TO THE TOWN OF GLENVILLE, SCHENECTADY COUNTY, TAX MAP PARCEL ID NO. 30.19-1-26.1

MAP REFERENCES:

1. "LANDS OF LYONS VENTURES, INC. NYSDEC SITE 4-47-028", DATED JULY 2000 AS PREPARED BY CLARK ENGINEERING & SURVEYING.
2. "34 FREEMAN'S BRIDGE ROAD SITE NYSDEC SITE ID 4-47-028", DATED APRIL 2006 AS PREPARED BY EARTHTECH.

LEGEND

FENCE
EDGE OF PAVEMENT
CONTOUR MINOR
CONTOUR MAJOR
PROPERTY LINE
TREE LINE
RAILROAD
FIRE HYDRANT



GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

CLARK ENGINEERING & SURVEYING, P.C.
20 SHAKER RD., BOX 730, NEW LEBANON, NY 12125
TEL.(518)794-8915 FAX.(518)766-3663
www.clarkpc.com

LANDS OF
LYONS VENTURES, INC.
L. 1021, P. 829
SCHENECTADY COUNTY, NEW YORK

REVISIONS:	No.	BY	DATE
UPDATED CONTOURS	9	LJB	8/07/07
UPDATED CONTOURS	10	LJB	8/30/07
UPDATED CONTOURS	11	LJB	9/18/07
UPDATED PLANIMETRICS	12	LJB	10/4/07

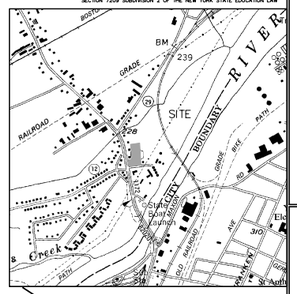
SCALE:	1" = 40'
DATE:	01/31/2007
DRAFTED BY:	LJB
CHECKED:	EPD
APPROVED:	EPD

FILE: EXCAVATION BOTTOM CONTOURS

PROJECT NO.
30610

DRAWING NAME
30610.DWG

DRAWING NO.
FIGURE 7



SITE LOCATION
NOT TO SCALE

CLARK
ENGINEERING &
SURVEYING, P.C.
20 SHAKER RD., BOX 720, NEW LEBANON, NY 12125
PH: (518) 794-8811 FAX: (518) 794-8822
www.clarkpc.com

LANDS OF
LYONS VENTURES, INC.
L. 1021, P. 829
SCHENECTADY COUNTY, NEW YORK

FREEMANS BRIDGE ROAD
EDGE OF PAVEMENT
GORHAM ROAD
PROPERTY LINE
HIGHWAY BOUNDARY
SCHENECTADY CO. ROUTE 29
AKA MARIE AVE
BENCHMARK

LANDS N/F
JOHN OLIVER
HORNFECK
L. 1048, P. 543

LANDS N/F
ERWIN C. GRANT
& JOAN H. GRANT
L. 1058, P. 520

LANDS N/F
FLORENCE E. NELSON
L. 1546, P. 630

LANDS N/F
DOMINICK MANGINO

LANDS N/F
PEARL ARMSTRONG
L. 1346, P. 51

LANDS N/F
HALL CREEK, L.L.C.
L. 1560, P. 618

LANDS N/F
DEREK A. FOTI
L. 1504, P. 742

LANDS N/F
LYONS VENTURES, INC.
L. 1021, P. 829

LANDS N/F
DAVID HICKOK
L. 1041, P. 655

LANDS N/F
LYONS VENTURES, INC.
L. 1021, P. 829

LANDS N/F
NIAGARA MOHAWK POWER CORP.
L. 1165, P. 425

LANDS N/F
J. H. BUHRMASTER CO., INC.
L. 583, P. 246

BENCHMARK
NAHA ON HYD.
ELEV. = 228.82'
NAVD 88

PC-01
PC-02
PC-03
PC-04
PC-05
PC-06
PC-07
PC-08
PC-09
PC-10
PC-11
PC-12
PC-15
PC-16
PC-17
PC-23
PC-27
TP-13
TP-14
TP-33
K-12

MW-210
MW-19
MW-12
MW-160
MW-15

GRAVEL ROAD
RAILROAD TRACKS

LEGEND
1' CONTOUR
5' CONTOUR
OVERHEAD ELECTRIC LINE
GUIDERAIL
EDGE OF PAVEMENT
FENCE LINE
APPROXIMATE PROPERTY LINE
PROPERTY LINE
STREAM
GRAVEL ROAD
STORM PIPE
TREELINE
FIRE HYDRANT
GAS VALVE
WATER VALVE
MONITORING WELLS
UTILITY POLE
SANITARY MANHOLE
POST CONSTRUCTION SAMPLE DATA THAT IS BELOW SITE CLEAN-UP GOALS(SCGs).
POST CONSTRUCTION TEST PITS TO DETERMINE THE SITE CLEAN-UP GOALS(SCGs).
SUB-SLAB SAMPLE DATA THAT IS BELOW SITE CLEAN-UP GOALS(SCGs).
SUB-SLAB SAMPLE DATA THAT HAS ABOVE SITE CLEAN-UP GOALS(SCGs) AND THE MATERIAL HAS SHIPPED FOR OFF SITE DISPOSAL.
EXCAVATED.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NOTES:

1. MAPPING PREPARED BY CLARK ENGINEERING & SURVEYING FROM FIELD OBSERVATIONS COMPLETED BY OCTOBER, 2007 AND SKETCH PLAN PROVIDED BY D.A. COLLINS JANUARY 2008.
2. NORTH REFERENCE AND COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 (1996) ALL PER THE CBN CONTROL POINT "SCHENPORT".
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE REFERENCED TO THE NAVD 88 DATUM PER THE CBN CONTROL POINT "SCHENPORT".
4. UNDERGROUND UTILITIES, IF ANY, ARE NOT SHOWN.
5. SUBJECT TO THE REVIEW OF A COMPLETE AND UP-TO-DATE ABSTRACT OF TITLE.
6. PARCEL SURVEYED IS FURTHER REFERENCED TO THE TOWN OF **GLENVILLE, SCHENECTADY COUNTY, TAX MAP PARCEL ID NO.** 30.19-1-26.1

MAP REFERENCES:

1. "LANDS OF LYONS VENTURES, INC. NYSDEC SITE 4-47-028", DATED JULY 2000 AS PREPARED BY CLARK ENGINEERING & SURVEYING.

REVISIONS:

No.	BY	DATE

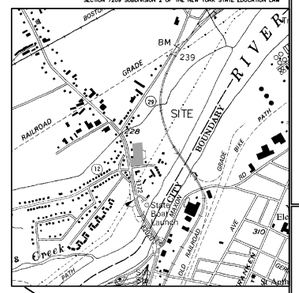
SCALE: 1" = 40'
DATE: 10/15/2007
DRAWN BY: LJB
CHECKED: ENG
APPROVED: ENG

TITLE: POST CONSTRUCTION SOIL SAMPLE LOCATIONS

PROJECT NO.
30610

DRAWING NAME
30610.DWG

DRAWING NO.
FIGURE 8



SITE LOCATION
NOT TO SCALE

CLARK
ENGINEERING & SURVEYING, P.C.
20 SHAKER RD., BOX 720, NEW LEBANON, NY 12125
PH: (518) 794-8613 FAX: (518) 794-8664
www.clarkpc.com

FREEMANS BRIDGE ROAD
EDGE OF PAVEMENT
ASPHALT SIDEWALK
CAPPED IRON ROD SET
CHAINLINK FENCE
GATE
WOOD FENCE
HIGHWAY BOUNDARY
SCHENECTADY CO. ROUTE 29
AKA MAPLE AVE
GERMAN ROAD
PROPERTY LINE
GRAVEL DRIVEWAY
GRAVEL ROAD
RAILROAD TRACKS
ASPHALT PARKING
INV = 222.07'
12" MAPLE
6" MAPLE
INV = 253.54'
MOSTLY SILTED
12" CIP
END NOT FOUND
BURIED
3"X3" POST
WITH TELEPHONE JUNCTIONS
UNKNOWN 4" PIPE
BENCHMARK
NAHA ON HYD.
ELEV. = 252.48'
NAD 88
BENCHMARK
NAHA ON HYD.
ELEV. = 228.82'
NAVD 88
MW-210
MW-19
MW-12
MW-160
MW-18
GRASS AREA 1
AREA = 10.82 ACRES±
GRASS AREA 2
AREA = 0.88 ACRES±
GRAVEL ROAD
AREA = 1.17 ACRES±

LANDS N/F
JOHN OLIVER
HORNFECK
L. 1048, P. 543

LANDS N/F
ERWIN C. GRANT
& JOAN H. GRANT
L. 1058, P. 520

LANDS N/F
FLORENCE E. NELSON
L. 1546, P. 630

LANDS N/F
DOMINICK MANGINO

LANDS N/F
PEARL ARMSTRONG
L. 1346, P. 51

LANDS N/F
HALL CREEK, L.L.C.
L. 1560, P. 678

LANDS N/F
DEREK A. FOTI
L. 1509, P. 742

LANDS N/F
LYONS VENTURES, INC.
L. 1021, P. 829

LANDS N/F
DAVID HICKOK
L. 1041, P. 655

LANDS N/F
LYONS VENTURES, INC.
L. 1021, P. 829

LANDS N/F
NIAGARA MOHAWK POWER CORP.
L. 748, P. 425

LANDS N/F
J. H. BUHRMASTER CO., INC.
L. 583, P. 296

LEGEND
1' CONTOUR
5' CONTOUR
OVERHEAD ELECTRIC LINE
GUIDERAIL
EDGE OF PAVEMENT
FENCE LINE
APPROXIMATE PROPERTY LINE
PROPERTY LINE
STREAM
GRAVEL ROAD
STORM PIPE
TREELINE
FIRE HYDRANT
GAS VALVE
WATER VALVE
MONITORING WELLS
UTILITY POLE
SANITARY MANHOLE

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NOTES:

1. MAPPING PREPARED BY CLARK ENGINEERING & SURVEYING FROM FIELD OBSERVATIONS COMPLETED BY OCTOBER, 2007.
2. NORTH REFERENCE AND COORDINATES SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83 (1996) ALL PER THE CBN CONTROL POINT "SCHENPORT".
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE REFERENCED TO THE NAVD 88 DATUM PER THE CBN CONTROL POINT "SCHENPORT".
4. UNDERGROUND UTILITIES, IF ANY, ARE NOT SHOWN.
5. SUBJECT TO THE REVIEW OF A COMPLETE AND UP-TO-DATE ABSTRACT OF TITLE.
6. PARCEL SURVEYED IS FURTHER REFERENCED TO THE TOWN OF **GLENVILLE, SCHENECTADY COUNTY, TAX MAP PARCEL ID NO.** 30.19-1-26.1

MAP REFERENCES:

1. "LANDS OF LYONS VENTURES, INC. NYSDEC SITE 4-47-028", DATED JULY 2000 AS PREPARED BY CLARK ENGINEERING & SURVEYING.

LANDS OF
LYONS VENTURES, INC.
L. 1021, P. 829
SCHENECTADY COUNTY, NEW YORK

REVISIONS:

No.	BY	DATE

SCALE:	1" = 40'
DATE:	11/14/2007
DRAWN BY:	LJB
CHECKED:	ERD
APPROVED:	ERD

TITLE: AS-BUILT TOPOGRAPHIC SURVEY MAP

PROJECT NO.
30610

DRAWING NAME
30610.DWG

DRAWING NO.
FIGURE 9

Table 1

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
PreConstruction Soil Sampling Results

	Site Specific Cleanup Criteria Established							TAGM 4046[1]							TAGM 4046[2]						
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	Mercury	Arsenic	Barium	Beryllium	Cobalt	Copper	Iron	Zinc	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Phenol
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2	7.5	300	0.16	30	25	2,000	20	224	61	1100	1100	400	14	30
Sample ID																					
PRECON Samples																					
FBPRECON-01-101206	0	430	210	0	37 U	37 U	0.094	1.25	25.7	***0.25***	5.7	10.9	***5140***	***55.4***	60	50	370 U	370 U	60	370 U	370 U
FBPRECON-02-101206	0	1230	550	0	36 U	36 U	0.072	0.64	21.8	***0.21***	5.1	9.74	***7920***	***38.6***	90	***90***	100	100	100	360 U	360 U
FBPRECON-03-101206	0	500	300	0	38 U	38 U	0.086	1.57	32.2	***0.29***	7	12.4	***9990***	***44.9***	50	50	50	50	60	380 U	380 U
FBPRECON-04-101206	0	1130	500	0	37 U	37 U	0.083	1.11 U	23.3	***0.18***	5	10.6	***7000***	***41.2***	90	***80***	90	70	100	370 U	370 U
FBPRECON-05-101206	0	1850	800	0	36 U	36 U	0.076	1.09 U	26.3	***0.21***	5.6	9.26	***8530***	***35.1***	100	***100***	200	100	200	360 U	360 U
FBPRECON-06-101206	0	2090	570	160	39 U	160	0.18	0.64	40.9	***0.34***	9.7	14.5	***15800***	***79.5***	100	***100***	100	100	100	390 U	390 U
FBPRECON-07-101206	0	1820	790	0	37 U	37 U	0.11	1.77	40.1	***0.34***	9.5	13.1	***14000***	***59.4***	100	***100***	200	100	200	370 U	370 U
FBPRECON-08-101206	0	1190	560	0	38 U	38 U	0.092	0.55	37.9	***0.36***	9.7	14	***13400***	***71.4***	100	***100***	100	100	100	380 U	380 U
FBPRECON-09-101206	0	2780	1300	***7400***	***3700***	***3700***	0.099	0.4	37.7	***0.33***	8.7	13.5	***12000***	***77.8***	200	***200***	300	200	200	360 U	360 U
FBPRECON-10-101206	0	610	330	0	37 U	37 U	0.089	1.12 U	12	0.03	3.7	3.89	***5860***	19.8	50	60	60	50	60	370 U	370 U
FBPRECON-11-101206	0	1050	510	0	180 U	180 U	0.2	2.79	47.8	***0.29***	8.7	13.6	***11000***	***89.5***	80	***90***	90	90	100	360 U	360 U
FBPRECON-12-101206	0	4390	2110	740	290	450	0.12	1.91	43.9	***0.29***	9.2	13.3	***12200***	***71.5***	***380***	***300***	480	300	380	***70***	360 U
FBPRECON-13-101206	0	8900	3320	***7400***	***4200***	***3200***	0.21	2.41	57.2	***0.4***	13.9	23.8	***16000***	***92***	***590***	***590***	530	540	***570***	***100***	***80***
FBPRECON-14-101206	0	1190	560	210	41 U	210	0.505	2.99	61.2	***0.39***	13.4	23.3	***17700***	***93.2***	100	***80***	100	100	100	410 U	410 U
FBPRECON-15-101206	0	1180	530	0	40 U	40 U	1.34	1.6	84.2	***0.3***	14.6	18.2	***15000***	***109***	100	***90***	90	90	100	400 U	400 U
FBPRECON-16-101206	0	1150	570	0	39 U	39 U	0.831	1.8	63.3	***0.34***	13.1	19.4	***15600***	***79.8***	100	***100***	100	90	100	390 U	390 U
FBPRECON-17-101206	0	1060	470	0	38 U	38 U	0.12	0.09	24.2	***0.22***	5.4	11.7	***8430***	***42.7***	80	***100***	80	60	90	380 U	380 U
FB PRECON 18 101606	0	2200	1200	0	73 U	73 U	0.2	2.14	65.4	***0.23***	11	15.8	***10200***	***76.6***	200	***200***	100	300	300	730 U	730 U
FB PRECON 19 101606	0	4650	2010	0	38 U	38 U	0.17	1.15 U	41.3	***0.23***	7.5	14.1	***9880***	***59***	***400***	***400***	300	300	***410***	380 U	380 U
FB PRECON 20 101606	0	1190	560	0	39 U	39 U	1.11	1.17 U	57.2	***0.2***	11	15.3	***12200***	***69.1***	100	100	100	100	100	390 U	390 U
FB PRECON 21 101606	0	2010	1000	0	34 U	34 U	0.11	0.54	50.3	***0.25***	10	14.1	***11500***	***76.8***	200	***200***	100	200	200	340 U	340 U
FB PRECON 22 101606	0	1550	900	100	38 U	100	0.3	2.93	43.8	***0.24***	8.4	14.1	***11100***	***61.1***	100	***200***	100	200	200	380 U	380 U
FB PRECON 23 101606	6	6610	2750	0	36 U	36 U	0.16	2.96	48.5	***0.26***	9.3	15.8	***11500***	***82.6***	***510***	***460***	380	490	***610***	360 U	360 U
FB PRECON 24 101606	6	2270	1050	0	37 U	37 U	0.21	2.98	81.8	***0.29***	13	21.1	***11900***	***108***	200	50	200	300	200	370 U	370 U
FB PRECON 25 101606	0	4270	2190	0	37 U	37 U	0.414	3.5	59	***0.34***	11.6	14.5	***13400***	***86.3***	***390***	***400***	300	380	***460***	***60***	370 U
FB PRECON 26 101606	0	1270	690	0	40 U	40 U	0.513	1.2	17.9	0.09	3.8	6.37	***5530***	***32***	100	***100***	100	100	200	400 U	400 U
FB PRECON-27-102406	0	1100	570	0	40 U	40 U	0.337	2.82	58.9	***0.33***	12	23.3	***14900***	***96.9***	100	***100***	100	100	100	400 U	400 U
FB PRECON-28-102406	0	4950	2030	0	39 U	39 U	1.15	0.76	60.3	***0.38***	13.2	***30.5***	***16200***	***91.8***	***390***	***300***	400	300	***400***	***40***	390 U
FB PRECON-29-102406	0	2100	1100	0	39 U	39 U	0.467	3.06	64.8	***0.3***	13.1	***31.5***	***15500***	***104***	200	***200***	200	200	200	390 U	390 U
FB PRECON-30-102406	0	5550	2500	0	85 U	85 U	1.7	1.37	142	***0.29***	18.8	***25.2***	***11900***	***147***	***500***	***400***	300	600	***500***	850 U	850 U
FB PRECON-31-102406	7	2060	1100	0	40 U	40 U	0.103	0.5	47.7	***0.3***	10	18.1	***13900***	***84.1***	200	***200***	200	200	200	400 U	400 U
FB PRECON-32-102406	6	90	0	0	37 U	37 U	0.001 U	1.11 U	58.1	***0.55***	***17***	24.7	***21700***	***85.5***	370 U	370 U	370 U	370 U	370 U	370 U	370 U
FB PRECON-33-102406	0	18380	5040	0	40 U	40 U	***10.1***	0.53	55.2	***0.35***	***13***	***40.2***	***22100***	***121***	***1100***	***830***	800	810	***1100***	400 U	***100***
FB PRECON-34-102406	0	7050	3300	0	39 U	39 U	1.94	***14.8***	***64.5***	0.4	14.5	***29.6***	***16300***	***97.3***	***600***	***550***	470	650	***660***	***100***	390 U
FB PRECON-35-102406	0	3780	1800	0	37 U	37 U	0.173	4.26	67.7	***0.46***	***17.3***	***34.6***	***21100***	***116***	***300***	***300***	300	300	***400***	370 U	370 U
FB PRECON-36-102406	6	4800	2190	0	37 U	37 U	0.25	2.17	57.8	***0.28***	***11.4 U***	***32.1***	***13400***	***93.2***	***450***	***300***	430	390	***420***	370 U	370 U
FB PRECON-37-102406	0	2680	1300	0	38 U	38 U	0.195	0.78	52.9	***0.39***	***12.5***	20.5	***17100***	***79.2***	200	***200***	300	200	200	380 U	380 U
FB PRECON-38-102406	0	3880	2360	0	42 U	42 U	0.108	0.39	54.7	***0.3***	***11***	21.3	***14500***	***105***	***300***	***400***	430	530	***400***	420 U	420 U
FB PRECON-39-102406	0	10200	4160	0	40 U	40 U	1.57	1.99	58.5	***0.46***	***13***	***25.2***	***18300***	***98.9***	***790***	***670***	490	900	***820***	***90***	400 U
FB PRECON-40-102506	0	2750	1090	170	<41	170	0.22	0.19	70.7	***0.5***	13.5	22.1	***15300***	***102***	200	***200***	200	200	200	<410	<410
FB PRECON-41-102506	0	3380	1400	0	<43	<43	0.671	1.44	45	***0.37***	9.1	19	***11600***	***66***	***300***	***200***	300	200	300	<430	<430
FB PRECON-42-102506	0	2390	1100	0	<39	<39	0.18	0.99	53.4	***0.5***	13	***27.9***	***16800***	***85.2***	200	***200***	200	200	200	<390	<390
FB PRECON-43-102506	0	5000	2320	0	<38	<38	0.324	2.57	58.4	***0.4***	11.4	***28.6***	***13600***	***111***	***440***	***400***	400	400	***430***	***50***	<380
FB PRECON-44-102506	0	7180	3530	68	<37	<37	0.367	1.76	58.7	***0.37***	11	***28.4***	***11300***	***93.7***	***640***	***560***	540	750	***650***	***90***	<370
FB PRECON-45-102506	0	15140	6900	0	<41	<41	0.289	0.79	60.5	***0.46***	13.5	***37.3***	***15500***	***120***	***1300***	***1200***	***1400***	1000	***1300***	<730	<730
FB PRECON-46-102506	17	9410	4110	220	<36	220	0.308	1.11	78.2	***0.41***	14	***33.5***	***14100***	***178***	***780***	***700***	830	600	***800***	<730	<730
FB PRECON-47-102606	0	7300	3800	260	<38	260	0.236	0.5	60.4	***0.42***	11	***22.1***	***12100***	***94.9***	***700***	***700***	700	600	***700***	<760	<760
FB PRECON-48-102606	0	6460	3500	660	330	<39	0.535	0.53	94.5	***0.5***	15.8	***32.4***	***15100***	***142***	***600***	***600***	600	600	***700***	<780	<780
FB PRECON-49-102606	0	4720	2400	0	<36	<36	0.313	1	66.5	***0.51***	14.3	***40.9***	***17900***	***115***	***400***	***400***	500	400	***500***	<730	<730
FB PRECON-50-102606	0	36390	***10490***	48	<37	<37	0.303	1.56	80.8	***0.5***	15.2	***34***	***16200***	***111***	***2100***	***1800***	***1800***	***1800***	***2000***	<740	<740

Table 1

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
PreConstruction Soil Sampling Results

	Site Specific Cleanup Criteria Established							TAGM 4046[1]							TAGM 4046[2]						
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	Mercury	Arsenic	Barium	Beryllium	Cobalt	Copper	Iron	Zinc	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Phenol
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/g-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2	7.5	300	0.16	30	25	2,000	20	224	61	1100	1100	400	14	30
Sample ID																					
PRECON Samples																					
FB PRECON-51-102606	0	36500	***11060***	77	<36	<36	0.21	1.76	123	***0.45***	18.2	***33.6***	***14400***	***141***	***2400***	***1800***	***1900***	***1700***	***2300***	<730	<730
FB PRECON-52-102606	0	26340	***12070***	150	<36	150	0.346	1.15	72.4	***0.44***	13.2	***29.2***	***13700***	***104***	***2600***	***2000***	***2000***	***2100***	***2500***	<730	<730
FB PRECON-53-102606	0	10390	4790	220	<38	220	0.824	0.98	117	***0.5***	18.7	***42.7***	***14300***	***169***	***960***	***800***	890	830	***910***	<750	<750
FB PRECON-54-102606	0	26400	9850	180	<42	180	0.359	1.62	***358***	***0.5***	***41.4***	23	***12300***	***485***	***1900***	***1600***	***2000***	***1400***	***1900***	***200***	<420
FB PRECON-55-102606	0	15610	8210	500	<38	500	0.959	1.61	184	***0.49***	23.6	***72.7***	***14000***	***245***	***1400***	***1400***	***1800***	***1400***	***1400***	<770	<770
FB PRECON-56-102606	0	21730	***11000***	230	<39	230	0.81	2.41	147	***0.45***	19.4	***65.6***	***11800***	***223***	***1900***	***1900***	***2000***	***2000***	***2000***	<790	<790
FB PRECON-57-102606	0	10590	4590	140	<37	140	0.283	2.03	95.9	***0.46***	16.1	***37.2***	***14900***	***132***	***920***	***780***	820	870	***900***	<730	<730
FB PRECON-58-102606	0	23430	***10830***	130	<35	130	0.269	0.54	90.1	***0.45***	15.2	***28.8***	***15200***	***120***	***2100***	***1900***	***2000***	***2000***	***2000***	<710	<710
FB PRECON-59-102606	0	27600	***11200***	210	<36	210	0.266	1.69	98.8	***0.42***	16.1	***31.2***	***13800***	***161***	***2300***	***1800***	***2300***	***1800***	***2000***	***300***	<720
FB PRECON-60-102606	0	26540	***11360***	97	<41	97	0.23	0.66	200	***0.52***	27.3	***25***	***16000***	***275***	***2300***	***2000***	***2000***	***1600***	***2300***	***200***	<820
FB PRECON-61-102606	0	10380	4610	170	<42	170	1.11	2.1	160	***0.4***	20.5	***62.8***	***11500***	***208***	***800***	***800***	800	800	***910***	<830	<830
FB PRECON-62-102606	0	10710	4710	84	<38	84	1.92	1.39	73.5	***0.49***	14.2	***33.8***	***17300***	***118***	***910***	***800***	840	790	***970***	<760	<760
FB PRECON-63-102606	0	5080	2600	100	<36	100	0.252	2.24	90	***0.47***	15.1	***33***	***14700***	***148***	***500***	***400***	400	500	***500***	<720	<720
FB PRECON-64-102606	0	11310	5510	84	<39	84	0.22	<1.2	77.2	***0.52***	14.7	***27.2***	***16500***	***123***	***1100***	***910***	950	950	***1100***	<790	<790
FB PRECON-65-102606	0	6890	3200	72	<36	72	0.15	2.64	68.3	***0.55***	16.2	***33.2***	***17300***	***109***	***700***	***500***	600	500	***700***	<720	<720
FB PRECON-66-102606	0	10140	5340	303	220	83	0.505	1.36	68.7	***0.38***	12	***36.6***	***12300***	***93.3***	***930***	***940***	990	890	***990***	<780	<780
FB PRECON-67-102606	0	7370	3400	0	<37	<37	0.2	1.66	116	***0.39***	17.4	***28.7***	***13000***	***119***	***700***	***600***	600	500	***700***	<740	<740
FB PRECON-68-102606	0	13920	5920	140	<38	140	0.309	0.67	92.3	***0.43***	15	18.4	***13700***	***115***	***1200***	***980***	***1100***	940	***1200***	<760	<760
Potentially Clean Overburden (PCO) Samples																					
FB PCO G17-102406	0	290	180	0	39 U	39 U	0.235 U	2.42	45.7	***0.44***	11.9	18.3	***16500***	***75.1***	390 U	50	50	40	40	390 U	390 U
PCO-K15-101606	22	1960	1100	30	37 U	37 U	0.17	1.13 U	59.2	***0.34***	11	16.7	***13500***	***76.4***	200	***200***	200	200	200	370 U	370 U
PCO-01-061207039-001A	0	1900	1000	0	<41	<41	0.159	0.19	67.5	***0.37***	11	***25***	***15400***	***94***	200	***200***	200	200	200	<410	<410
PCO-02-061207039-002A	0	0	0	0	<41	<41	0.025	0.48	53	***0.24***	11	15.2	***14400***	***44.6***	<410	***<410***	<410	<410	<410	<410	<410
PCO-03-061207039-003A	0	2050	1000	0	<41	<41	0.437	0.63	76.1	***0.26***	12	22.7	***14100***	***91.4***	200	***200***	200	200	200	<410	<410
PCO-04-061207039-004A	0	100	0	0	<38	<38	0.013	0.76	47.8	***0.27***	11	***25.3***	***16600***	***62.5***	<380	***<380***	<380	<380	<380	<380	<380
PCO-05-061207039-005A	0	400	0	0	<42	<42	0.061	1	40.4	***0.18***	8.1	21.1	***13500***	***77.4***	<420	***<420***	<420	<420	<420	<420	<420
PCO-06-061207039-006A	0	700	300	0	<42	<42	0.029	1	38.1	0.079	8.4	19.8	***10600***	***68.9***	100	***<420***	<420	100	100	<420	<420
PCO-07-061207039-007A	0	300	0	0	<40	<40	0.022	1.36	41.7	***0.27***	10	15.1	***13500***	***71***	<400	***<400***	<400	<400	<400	<400	<400
PCO-08-061207039-008A	0	900	400	52	52	<39	<0.048	2.1	40.3	***0.24***	12.5	22.2	***15200***	***67.2***	100	***<390***	100	100	100	<390	<390
PCO-09-061207039-009A	0	100	0	0	<38	<38	<0.046	1.34	56.4	***0.28***	11	18.1	***13500***	***57.7***	<380	***<380***	<380	<380	<380	<380	<380
PCO-10-061207039-010A	0	1700	600	0	<38	<38	<0.046	<1.16	38.8	***0.3***	12.4	18.2	***15900***	***61.8***	200	***200***	<380	<380	200	<380	<380
PCO-11-061207039-011A	0	300	0	0	<38	<38	<0.046	<1.14	34.7	***0.24***	9.3	15.8	***12500***	***63.1***	<380	***<380***	<380	<380	<380	<380	<380
PCO-12-061207039-012A	0	6000	2800	***2400***	***2400***	<840	0.123	***7.5***	66.2	***0.23***	12	***30.7***	***12500***	***129***	***570***	***470***	580	530	***550***	<420	<420
PCO-13-061207039-013A	42	79100	***29600***	220	220	<39	0.025	0.59	43.1	***0.22***	10	21.1	***16000***	***65.5***	***6400***	***4900***	***5300***	***4700***	***6200***	<1200	<1200
PCO-14-061207039-014A	0	3280	1700	0	<39	<39	<0.048	<1.19	32.2	***0.2***	10	15.1	***13200***	***60.9***	***300***	***300***	400	300	300	<390	<390

Notes:
1 Reported concentrations range within historical data. These analytes were screened out as contaminants of concern based on the the human health exposure assessment (Earth Tech, 2002)
2 TAGM exceedances for individual VOC and SVOC analytes. SCG based on total concentration as indicated in this table.
3 U- Undetected above laboratory reporting limits.
Bold/italicized text indicates exceedance of target analyte.
Sample numbers refer to the Pre Construction Sampling grid see the Pre Construction Sampling Drawing Figure 5.

Table 2

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Verification Soil Sampling Results

	Site Specific Cleanup Criteria Established										
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	**Mercury**	**Lead**	**Chromium**	**Pass/Fail**	**Corrective Action**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry		
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2.0	1200.0	50.0		
Sample ID											
VER A1/2 SW 021407	54	ND	ND	***4500***	***2700***	***1800***	0.067	112	33.5	Pass (Subsurface)	NA
VER A1B1 SW 021407	42	ND	ND	131	78	53	ND	7.61	17.2	Pass	NA
VER A2 021407	71	ND	ND	***1110***	580	530	ND	26.7	20.3	Pass (Subsurface)	NA
VER A3 071907	259	3570	ND	ND	ND	ND	ND	10.3	7.8	Pass	NA
VER A3 SW 071907	9070	49900	ND	***7300***	***7300***	ND	ND	55.6	16.2	**Fail**	**Further excavation not possible due to proximity of gas main.**
VER A4 071107	10	ND	ND	ND	ND	ND	ND	16.9	15	Pass	NA
VER A5 052507	14	ND	ND	ND	ND	ND	ND	14.4	13.8	Pass	NA
VER A5 SW 052507	16	ND	ND	65	65	ND	0.0843	11.8	11.5	Pass	NA
VER A6 052507	14	3468	1120	81	81	0	0.107	22.1	12.8	Pass	NA
VER B1/2A 031507	NA	NA	NA	ND	ND	ND	NA	NA	NA	Pass	NA
VER B2 021407	453	700	ND	***13800***	***5200***	***8600***	ND	123	29.8	**Fail**	**Additional 1' Removed; Resampled 3/15/07.**
VER B3 071707	314	1470	ND	36	36	ND	ND	7.62	8.67	Pass	NA
VER B4 071107	49.1	2300	ND	ND	ND	ND	ND	3.95	8.67	Pass	NA
VER B5 052507	12	4800	ND	ND	ND	ND	ND	9.39	10.2	Pass	NA
VER B6 052507	19	ND	ND	ND	ND	ND	ND	6.65	10.6	Pass	NA
VER B6 SW 052507	8.9	ND	ND	ND	ND	ND	0.0803	9.42	12.6	Pass	NA
VER C1/2A 031607	72	3300	ND	ND	ND	ND	0.11	9.35	13.6	Pass	NA
VER C3 061807	74	ND	ND	ND	ND	ND	ND	4.24	8.17	Pass	NA
VER C4 061807	640	ND	ND	ND	ND	ND	ND	3.16	6.2	Pass	NA
VER C5 053107	9	2000	400	ND	ND	ND	ND	6.81	10.5	Pass	NA
VER C6 022807	3444	13600	ND	***9100***	***9100***	ND	0.21	***2710***	***356***	**Fail**	**Additional 1' Removed; Resampled 3/13/07.**
VER C6A 031307	NA	NA	NA	ND	ND	ND	NA	11	11.9	Pass	NA
VER C6/7 SW 022807	38	100	ND	ND	ND	ND	0.092	22.9	14.6	Pass	NA
VER C7 022807	82	4900	1000	***1100***	ND	***1100***	0.3	290	***52.1***	**Fail**	**Additional 1' Removed; Resampled 3/13/07.**
VER C7A 031307	NA	NA	NA	ND	ND	ND	NA	NA	8.15	Pass	NA
VER C8 040607	200	ND	ND	ND	ND	ND	ND	8.83	4.2	Pass	NA
VER C8 SW 040607	ND	97	ND	ND	ND	ND	0.122	18.8	19.7	Pass	NA
VER C9 040607	16	110	ND	ND	ND	ND	ND	8.44	11	Pass	NA
VER C9 SW 040607	96	ND	ND	90	ND	90	ND	48.7	17.2	Pass	NA
VER D1/2A 031607	33	ND	ND	ND	ND	ND	ND	4.36	6.27	Pass	NA
VER D1 SW 021407	19	ND	ND	40	30	10	ND	17.2	15.9	Pass	NA
VER D3 060507	4150	18400	ND	270	ND	270	0.1	22.4	16.1	Pass	NA
VER D4 053107	201	200	ND	ND	ND	ND	ND	12.4	16.2	Pass	NA
VER D5 053107	135	300	300	ND	ND	ND	ND	6.93	9.87	Pass	NA
VER D6 022807	43	300	300	ND	ND	ND	0.11	25.5	19.7	Pass	NA
VER D7 022807	82	ND	ND	190	ND	190	0.442	25.1	16.8	Pass	NA
VER D8 060607	18	ND	ND	ND	ND	ND	ND	3.43	5.15	Pass	NA
VER D9 060507	19	300	300	ND	ND	ND	ND	8.75	12	Pass	NA
VER D10 040907	10	ND	ND	ND	ND	ND	ND	8.85	12	Pass	NA
VER D11 071307 (labeled incorrectly; sampled 081307)	ND	ND	ND	ND	ND	ND	ND	7.74	12.4	Pass	NA

Table 2

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Verification Soil Sampling Results

	Site Specific Cleanup Criteria Established										
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	**Mercury**	**Lead**	**Chromium**	**Pass/Fail**	**Corrective Action**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry		
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2.0	1200.0	50.0		
Sample ID											
VER D11SW 081307	31	157250	***53300***	***1090***	560	530	0.12	80.7	20.3	**Fail**	**Edge of site. Poly sidewall before backfill.**
VER D16 050407	20	4000	ND	ND	ND	ND	0.838	677	14.5	Pass	NA
VER D17 050407	17	20600	***10000***	ND	ND	ND	0.308	663	28.9	**Pass (Approved by RE)**	**Excavation terminated due to ground water interface.**
VER D17 SW 050407	10	22900	***10300***	ND	ND	ND	0.262	480	10.1	**Fail**	**Edge of site. Poly sidewall before backfill.**
VER E2 051707	13	ND	ND	ND	ND	ND	ND	7.8	8.55	Pass	NA
VER E2 SW 052507	30	46,810	***21,260***	480	140	340	0.28	72.1	16.7	**Fail**	**Further excavation not possible due to Proximity of Road.**
VER E3 051707	205.4	990	ND	2340	640	1700	ND	6.62	8.09	Pass	NA
VER E4 052907	11	ND	ND	ND	ND	ND	ND	0.76	1.57	Pass	NA
VER E5 060407	29	600	300	300	ND	300	ND	17	19.4	Pass	NA
VER E6 060407	32	500	300	ND	ND	ND	0.081	14.6	15.2	Pass	NA
VER E7 061107	18	ND	ND	ND	ND	ND	ND	13.1	14.6	Pass	NA
VER E8 061107	16	ND	ND	420	ND	ND	ND	8.87	11.2	Pass	NA
VER E9 042407	43	ND	ND	130	ND	130	0.0992	21	12.2	Pass	NA
VER E10 042407	38	200	ND	***1300***	***1300***	ND	ND	37.9	15.7	Pass (Subsurface)	NA
VER E11 042407	37	ND	ND	ND	ND	ND	ND	4.5	10.1	Pass	NA
VER E12 042307	365	200	ND	440	ND	140	0.15	12.5	13	Pass	NA
VER E13 042307	41	ND	ND	ND	ND	ND	0.146	12.2	19.5	Pass	NA
VER E13 SW 042307	ND	***546700***	***169000***	***8700***	***8700***	0	0.501	509	***75.5***	**Fail**	**Edge of site. Poly sidewall before backfill.**
VER E14 041007	62	15500	6300	930	930	ND	0.341	353	27.8	Pass	NA
VER E15 050807	24	***1641000***	***528000***	ND	ND	ND	0.156	1020	ND	**Fail**	**Additional 1' Removed; Resampled 5/9/07.**
VER E15A 050907	57	ND	ND	ND	ND	ND	ND	10.2	11.7	Pass	NA
VER E15 SW 050807	6	ND	ND	ND	ND	ND	0.128	167	7.37	Pass	NA
VER E16 050407	10	***619000***	***217000***	ND	ND	ND	0.21	504	27.7	**Fail**	**Additional 1.5' Removed; Resampled 5/8/07.**
VER E16A 050807	10	ND	ND	ND	ND	ND	ND	12.5	9.1	Pass	NA
VER E17 050407	20	ND	ND	ND	ND	ND	0.26	1010	8.23	Pass	NA
VER E17 SW NORTH 073107	ND	ND	ND	ND	ND	ND	ND	5.95	3.95	Pass	NA
VER F2 052107	12	ND	ND	ND	ND	ND	ND	4.64	7.87	Pass	NA
VER F2 SW 052107	33	ND	ND	ND	ND	ND	N	5.06	7.36	Pass	NA
VER F3 052207	***11279***	5920	230	***49000***	ND	ND	0.163	162	39.6	**Fail**	**Additional 1' Removed; Resampled 5/29/07.**
VER F3A 052907	8637	15870	130	***1600***	ND	ND	ND	3.97	6.64	Pass (Subsurface)	NA
VER F4 052207	42	ND	ND	ND	ND	ND	0.0786	9.34	11.1	Pass	NA
VER F5 022807	8.8	4300	900	***16000***	***16000***	ND	0.195	77.8	12.8	**Fail**	**Additional 1' Removed; Resampled 3/12/07.**
VER F5A 031207	NA	NA	NA	ND	ND	ND	NA	NA	NA	Pass	NA
VER F6 030307	82	74000	***15000***	***140000***	***140000***	ND	0.454	601	***70.8***	**Fail**	**Additional 1' Removed; Resampled 3/9/07.**
VER F6A 030907	28	1400	300	77	77	ND	ND	5.62	7.12	Pass	NA
VER F7 060707	23	1000	ND	***2100***	***2100***	ND	ND	7.77	8.83	Pass (Subsurface)	NA
VER F8 032207	41	ND	ND	***71000***	ND	***51000***	0.16	48.2	16.7	**Fail**	**Additional 1' Removed; Resampled 6/7/07.**
VER F8A 060707	32	ND	ND	ND	ND	ND	0.14	12.2	13.8	Pass	NA
VER F9 061407	31	ND	ND	ND	ND	ND	1.05	7.24	9.42	Pass	NA
VER F10 061807	20	ND	ND	ND	ND	ND	ND	7.42	11.5	Pass	NA
VER F11 042607	32	4650	ND	260	ND	260	0.11	15.6	14.3	Pass	NA

Table 2

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Verification Soil Sampling Results

	Site Specific Cleanup Criteria Established										
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	**Mercury**	**Lead**	**Chromium**	**Pass/Fail**	**Corrective Action**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry		
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2.0	1200.0	50.0		
Sample ID											
VER F12 042407	19	730	ND	460	160	300	0.1	14.7	10.9	Pass	NA
VER F13 083007	ND	ND	ND	ND	ND	ND	ND	1.41	6.05	Pass	NA
VER F14 SW 082307 (Sample mislabelled; not a sidewall)	14	174	174	ND	ND	ND	ND	4.71	6.72	Pass	NA
VER F15 050907	100	ND	ND	ND	ND	ND	ND	9.04	10.7	Pass	NA
VER F16 050407	10	ND	ND	ND	ND	ND	ND	104	8.27	Pass	NA
VER F17 073107	ND	7600	4600	ND	ND	ND	1.36	22.7	13.3	Pass	NA
VER F18 073107	ND	3000	1200	65	ND	65	0.18	457	14.1	Pass	NA
VER F18 SW 073107	ND	12700	5700	ND	ND	ND	0.08	***1220***	13.1	**Fail**	**Excavated soil will be disposed of as Non-TSCA/RCRA with the oversized Non-TSCA debris. Resampled 8/23/07.**
VER F18 SW 073107 TCLP update	ND	12700	5700	ND	ND	ND	0.08	ND	13.1	**Fail**	**Excavated soil will be disposed of as Non-TSCA/RCRA with the oversized Non-TSCA debris. Resampled 8/23/07.**
VER F18A SW 082307	19	ND	ND	ND	ND	ND	0.13	45.6	11.4	Pass	NA
VER G2 052107	***22720***	5160	ND	***15000***	ND	ND	ND	65.8	13.1	**Fail**	**Additional 2' Removed; Resampled 5/30/07.**
VER G2A 053007	276	12800	ND	ND	ND	ND	ND	8.61	9.17	Pass	NA
VER G2 SW 052507	21	ND	ND	ND	ND	ND	0.092	13.1	15.5	Pass	NA
VER G3 073007	30	3340	ND	***14000***	ND	ND	ND	8.3	8.24	**Fail**	**Excavated to water table interface. Resampled 8/08/07.**
VER G3A 080807	22	ND	ND	1200	ND	ND	ND	2.93	16.98	Pass	NA
VER G4 072507	22	200	ND	1900	ND	ND	ND	6.97	6.6	Pass	NA
VER G5 022807	39.9	17900	5200	***24000***	***24000***	ND	0.23	176	27.4	**Fail**	**Additional 1' Removed. Resampled 3/12/07**
VER G5A 031207	NA	NA	NA	***6200***	***6200***	ND	NA	NA	NA	Pass (Subsurface)	NA
VER G6 030107	218	218400	***50300***	***27000***	***27000***	ND	0.583	699	***155***	**Fail**	**Additional 1' Removed. Resampled 3/12/07**
VER G6A 031207	NA	ND	ND	ND	ND	ND	NA	NA	3.84	Pass	NA
VER G7 030807	ND	ND	ND	ND	ND	ND	ND	11	12.8	Pass	NA
VER G8 061207	28	ND	ND	ND	ND	ND	0.19	2.8	3.96	Pass	NA
VER G9 051407	19	ND	ND	ND	ND	ND	ND	8.32	12	Pass	NA
VER G10 061807	25	1240	ND	ND	ND	ND	ND	10.5	15.2	Pass	NA
VER G11 050107	39	6930	ND	ND	ND	ND	0.19	16.4	17.1	Pass	NA
VER G12 042707	140	700	400	290	ND	290	0.25	18.6	14.2	Pass	NA
VER G13 082207	ND	ND	ND	ND	ND	ND	ND	7.58	11.3	Pass	NA
VER G14 082207	ND	ND	ND	ND	ND	ND	ND	15	20	Pass	NA
VER G15 050907	156	ND	ND	970	280	690	ND	29.4	10.2	Pass	NA
VER G16 050907	134	ND	ND	ND	ND	ND	0.14	7.04	10.9	Pass	NA
VER G17 080107	6	332700	***144800***	***20000***	ND	***20000***	0.23	***1650***	12.6	**Fail**	**Additional 1' Removed from G17**
VER G17A 080807	59	3100	1200	***11000***	***11000***	ND	0.39	626	40.3	**Fail**	**Excavated to clay interface. Resampled 8/13/07.**
VER G17B 081307	30	ND	ND	ND	ND	ND	ND	5.06	8.78	Pass	NA
VER G17 SW 080107	22	ND	ND	***1870***	1000	870	0.1	73.5	10.4	**Fail**	**Additional bucket width removed width from North and East wall. Resampled 8/8/07.**
VER G17A SW 080807	40	26700	5600	160	160	ND	0.07	44.4	16.4	Pass	NA
VER H2 052107	522	880	ND	6800	ND	ND	ND	85.6	22.8	Pass	NA
VER H2 SW 052107	129	2500	ND	7000	ND	ND	ND	16.6	8.53	Pass	NA
VER H3 071607	448	500	ND	1400	1400	ND	ND	7.72	8.77	Pass	NA

Table 2

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Verification Soil Sampling Results

	Site Specific Cleanup Criteria Established										
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	**Mercury**	**Lead**	**Chromium**	**Pass/Fail**	**Corrective Action**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry		
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2.0	1200.0	50.0		
Sample ID											
VER H4 080807	13	1600	ND	***39000***	***39000***	ND	ND	5.48	8.99	**Fail**	**Excavated to water interface. Resampled 8/30/07 (sample labeled as I4).**
VER H-I4/5 SW 022007	30	ND	ND	ND	ND	ND	ND	18.1	9.58	Pass	NA
VER H5 022007	222	1140	ND	***29000***	***29000***	ND	ND	21.9	8.54	**Fail**	**Additional 3" Removed. Resampled 2/28/07.**
VER H5A 022807	45.2	90	ND	***2300***	***2300***	ND	ND	9.42	6.54	Pass (Subsurface)	NA
VER H6 022007	39	600	ND	***7800***	***7800***	ND	ND	17.5	5.45	**Fail**	**Additional 3" Removed. Resampled 2/28/07.**
VER H6A 022807	78.6	100	ND	***4700***	***4700***	ND	ND	10.6	6.52	Pass (Subsurface)	NA
VER H7 072507	79	ND	ND	ND	ND	ND	ND	9.11	8.31	Pass	NA
VER H8 051007	16	ND	ND	160	160	ND	ND	11.1	10.6	Pass	NA
VER H9 051407	35	390	ND	730	730	ND	ND	12.3	10.1	Pass	NA
VER H9 SW 051407	32	ND	ND	ND	ND	ND	0.132	24.2	9.71	Pass	NA
VER H10 051407	40	ND	ND	ND	ND	ND	ND	7.29	7.97	Pass	NA
VER H11 050107	22	1000	300	ND	ND	ND	0.17	17.5	17.3	Pass	NA
VER H12 050207	10	7400	2900	ND	ND	ND	0.077	13.3	16.7	Pass	NA
VER H13 071107	10	280	ND	ND	ND	ND	0.09	10.1	10.5	Pass	NA
VER H14 072507	11	ND	ND	ND	ND	ND	ND	6.55	9.23	Pass	NA
VER H15 072507	62	ND	ND	670	180	490	0.12	16.6	11.6	Pass	NA
VER H16 072507	103	16600	ND	2020	520	1500	0.13	61.4	10.7	Pass	NA
VER I2 052107	327	400	ND	***16000***	***16000***	ND	ND	15.3	8.2	**Fail**	**Additional 1' Removed. Resampled 6/01/07.**
VER I2A 060107	18	1800	ND	***3900***	***3900***	ND	ND	22.6	9.1	Pass (Subsurface)	NA
VER I2/3 SW 060107	28	ND	ND	***1400***	590	810	ND	6.83	8.44	Pass (Subsurface)	NA
VER I3 052107	56	ND	ND	***27000***	***27000***	ND	0.0748	36	11.1	**Fail**	**Additional 1' Removed. Resampled 6/01/07.**
VER I3A 060107	50	90	ND	880	880	ND	ND	7.49	6.57	Pass	NA
VER I3 SW 052107	12	1400	800	***1300***	***1300***	ND	0.461	136	10.3	**Fail**	**Additional Excavator bucket width removed from sidewall of I3. Resampled 8/30/07.**
VER I3A SW 083007	33	ND	ND	***1600***	ND	ND	ND	3.5	10.2	**Fail**	**Additional excavation not possible due to proximity of power poles.**
VER I4 (mislabeled should be H4A) 083007		ND	ND	1400	ND	ND	ND	6.36	8.13	Pass	NA
VER I5 022007	10	ND	ND	ND	ND	ND	ND	20.6	4.77	Pass	NA
VER I5/I6 SW 022007	21	ND	ND	ND	ND	ND	ND	18.2	8.61	Pass	NA
VER I6 022007	10	ND	ND	120	120	ND	ND	15.8	6.86	Pass	NA
VER I7 080107	15	1700	ND	***52000***	ND	***52000***	ND	6.83	6.9	**Fail**	**Additional 1' removed from I7 and disposed of offsite as TSCA soil.**
VER I7A 080907	7	ND	Nd	280	280	ND	ND	5.34	7.96	Pass	NA
VER I7 SW 080907	38	ND	ND	ND	ND	ND	ND	9.42	9	Pass	NA
VER I8 051007	13	ND	ND	130	130	ND	0.0673	35	8.83	Pass	NA
VER I8 SW 051007	59.4	1000	ND	***37000***	***37000***	ND	ND	7.54	10.8	**Fail**	**Additional 1' Removed from I9 south sidewall. Resampled 6/01/07.**
VER I8A SW 060107	57	2100	400	***6700***	***6700***	ND	0.16	140	11.5	Pass (Subsurface)	NA

Table 2

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Verification Soil Sampling Results

	Site Specific Cleanup Criteria Established										
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	**Mercury**	**Lead**	**Chromium**	**Pass/Fail**	**Corrective Action**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry		
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2.0	1200.0	50.0		
Sample ID											
VER I9/10A 070307	28	200	ND	2200	2200	ND	ND	15.8	11.2	Pass	NA
VER I11 061907	14	ND	ND	170	170	ND	ND	9.29	ND	Pass	NA
VER I11SW-062607	10	1800	ND	***11000***	***11000***	ND	0.11	267	8.98	Fail	**Additional Excavator bucket width removed from East sidewall of I11. Resampled 7/03/07.**
VER I11A SW 070307	ND	200	ND	90	90	ND	0.18	39.1	8.12	Pass	NA
VER I13 071107	7	ND	ND	360	360	ND	ND	2.82	3.11	Pass	NA
VER I14 080207	20	ND	ND	ND	ND	ND	0.05	10.7	6.96	Pass	NA
VER I14 SW 080207	9.8	900	ND	ND	ND	ND	0.06	27.6	7.03	Pass	NA
VER I15 072707	ND	ND	ND	ND	ND	ND	0.08	12.7	14.7	Pass	NA
VER I15 SW 080107	ND	ND	ND	***1300***	***1300***	ND	10.1	45.4	7.63	**Fail**	**Excavated additional bucket width from East wall of I15 and I16. Resampled 8/07/07.**
VER I15A SW 080708	25	3712	1460	94	ND	94	0.58	282	11.4	Pass	NA
VER I16 072707	14	ND	ND	ND	ND	ND	ND	8.33	8.29	Pass	NA
VER I16 SW 072707	8	3200	1000	***1170***	310	860	0.66	762	10.2	**Fail**	**Additional 2 Excavator bucket widths removed from North sidewall of I16 . Resampled 8/01/07**
VER I16A SW 080107	57	15300	5900	ND	ND	ND	0.53	440	8.86	Pass	NA
VER I16A SW High 080107	18	4800	2700	ND	ND	ND	0.13	11.2	6.57	Pass	NA
VER J12-062607	42	ND	ND	***32000***	***32000***	ND	ND	30.9	13.6	**Fail**	**Additional 1' Removed from J12. Resampled 7/03/07.**
VER J12A 070307	14	2290	ND	***13000***	***13000***	ND	0.07	16.3	12.4	**Fail**	**Additional 1.5' Removed from J12. Resampled 7/11/07.**
VER J12B 071107	81	940	ND	6500	6500	ND	ND	9.24	7.66	Pass	NA
VER J12 SW-062607	28	ND	ND	59	59	ND	ND	53.7	6.82	Pass	NA
VER J13 071107	***32800***	980	ND	ND	ND	ND	ND	5.54	10.8	**Fail**	**Additional 1' Removed from J13. Resampled 8/02/07.**
VER J13A 080207	***1144000***	4940	ND	ND	ND	ND	0.03	8.47	8.42	**Fail**	**Further excavation not possible due to water interface.**
VER J13 SW 080207	***54230***	2990	ND	220	ND	220	0.34	23.7	11.1	Fail	**Excavated additional bucket width from J13 North and East sidewall. Resampled 8/02/07.**
VER J13A SW 080707	23	175	89	410	ND	410	0.12	30.8	7.89	Pass	NA
VER K15 080807	74	1400	ND	290	290	ND	0.08	42.2	24	Pass	NA
VER K15 SW NorthWest 080807	12	ND	ND	30	ND	ND	0.07	16	13.6	Pass	NA
VER K15 SW SouthEast 080807	9	ND	ND	66	66	ND	ND	23.4	28.4	Pass	NA

Notes:
Bold/italicized text indicates exceedance of established Site Cleanup Goals (SCGs) =at final limit of excavation sample location exceeds SCG's
ND - Not Detected at the reporting limit.
NA - Not applicable
Samples are labelled VER xxx yy zzzzzz. xxx= cell location, yy= sidewall (SW), zzzzzz= sampling date.

Table 3

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Pre Treatment Soil Data

		Site Specific Cleanup Criteria Established									
Analyte		**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	Mercury	Lead	Chromium	**Approved For Treatment**
Units		µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry	
SCG		10,000	500,000	10,000	<50,000 ESMI; >50,000 TD*X	<50,000 ESMI; >50,000 TD*X		2.0	1200.0	50.0	
Sample ID											
Pre-Treatment Batch Samples											
Prior to ESMI PoP Testing	LTTD PRE NT BATCH 1-010607	6	***1034000***	***379000***	7900	7900	ND	0.371	83.4	16.8	Yes-ESMI
	LTTD PRE NT BATCH 2-010607	31	490000	***177000***	17000	17000	ND	ND	131	23.1	Yes-ESMI
	LTTD PRE NT BATCH 3-010807	46	232300	***83900***	43000	43000	ND	0.28	102	18.5	Yes-ESMI
	LTTD PRE NT BATCH 4-011107	37	203100	***68400***	14000	14000	ND	0.17	48.3	16.4	Yes-ESMI
	LTTD PRE NT BATCH 5-011107	55	167600	***51500***	21000	21000	ND	0.19	228	47.5	Yes-ESMI
	LTTD PRE NT BATCH 6-011707	***330000***	207300	***29500***	***370000***	***370000***	ND	1.16	***1300***	***190***	**TSCA - Off-Site Only**
	LTTD PRE NT BATCH 7-012307	1928	33150	5230	***110000***	ND	ND	0.21	466	43.2	**TSCA - Off-Site Only**
	LTTD PRE NT BATCH 8-012307	237	33120	***13960***	19000	ND	ND	0.33	111	22.1	Yes-ESMI
	LTTD PRE NT BATCH 9-012507	202	16007	5070	12000	12000	ND	0.119	175	***57.7***	Yes-ESMI
	LTTD PRE NT BATCH 10-013107	95	23850	6340	16100	8500	7600	ND	216	***54.9***	Yes-ESMI
	LTTD PRE NT BATCH 11-020207	104	16730	4360	9300	4400	4900	0.063	65.3	20.3	Yes-ESMI
	LTTD PRE NT BATCH 12-020507	8.8	6730	2340	4000	2500	1500	0.598	60.3	9.04	Yes-ESMI
	LTTD PRE NT BATCH 13-020707	147	3880	700	21000	ND	ND	0.21	57.2	19.1	Yes-ESMI
	LTTD PRE NT BATCH 14-020807	140.2	102400	***33100***	***210000***	ND	ND	0.409	212	27.4	**TSCA - Off-Site Only**
	LTTD PRE NT BATCH 15-021407	328	32700	8700	***67000***	***67000***	ND	0.704	163	27.3	**TSCA - Off-Site Only**
LTTD PRE NT BATCH 15A-022007		NA	NA	NA	***140000***	***140000***	ND	NA	NA	NA	**TSCA - Off-Site Only**
LTTD PRE NT BATCH 16-021607		NA	NA	NA	29000	29000	ND	NA	NA	NA	Yes-ESMI
LTTD PRE NT BATCH 17-022007		NA	NA	NA	***230000***	ND	ND	NA	NA	NA	**TSCA - Off-Site Only**
LTTD PRE NT BATCH 18-022107		NA	NA	NA	49000	49000	ND	NA	NA	NA	Yes-ESMI
LTTD PRE NT BATCH 19-022207		NA	NA	NA	36000	36000	ND	NA	NA	NA	Yes-ESMI
LTTD PRE NT BATCH 20		NA	NA	NA	NA	NA	NA	NA	NA	NA	Yes-ESMI (This Batch utilized material from Pre NT Batches 14-2, 15-2, and 17-1 after the Batches were quartered and resampled.)
LTTD PRE NT BATCH 21-022607		NA	NA	NA	22000	22000	ND	NA	NA	NA	Yes-ESMI
LTTD PRE NT BATCH 22-022807		NA	NA	NA	20000	20000	ND	NA	NA	NA	Yes-ESMI
LTTD PRE NT BATCH 23-030507		NA	NA	NA	36000	36000	ND	NA	NA	NA	Yes-ESMI
LTTD PRE NT BATCH 24-030707		NA	NA	NA	22000	22000	ND	NA	NA	NA	Yes-ESMI
LTTD PRE NT BATCH 26-030807		NA	NA	NA	22000	22000	ND	NA	NA	NA	Yes-ESMI

Table 3

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Pre Treatment Soil Data

	Site Specific Cleanup Criteria Established									
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	Mercury	Lead	Chromium	**Approved For Treatment**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry	
SCG	10,000	500,000	10,000	<50,000 ESMI; >50,000 TD*X	<50,000 ESMI; >50,000 TD*X		2.0	1200.0	50.0	
Sample ID										
TEST PIT SAMPLES										
PRE F8 (4'-6') - 030907	NA	NA	NA	***1500000***	***1500000***	ND	NA	NA	NA	**TSCA -Off-Site Only**
PRE G8 (4'-6') - 030907	NA	NA	NA	***860000***	***860000***	ND	NA	NA	NA	**TSCA - Off-Site Only**
PRE F7 (4'-6') - 030907	NA	NA	NA	***220000***	***220000***	ND	NA	NA	NA	**TSCA - Off-Site Only**
PRE D8 (4'-6') - 031207	NA	NA	NA	***310000***	***310000***	ND	NA	NA	NA	**TSCA - Off-Site Only**
PRE D9 (4'-6') - 031207	NA	NA	NA	***67000***	***67000***	ND	NA	NA	NA	**TSCA - Off-Site Only**
PRE D10 (4'-6') - 031207	NA	NA	NA	***73000***	***73000***	ND	NA	NA	NA	**TSCA - Off-Site Only**
PRE E9 COMP - 031207	NA	NA	NA	6400	6400	ND	NA	NA	NA	Yes-ESMI
PRE E10 COMP - 031207	NA	NA	NA	410	250	160	NA	NA	NA	Yes-ESMI
PRE E11 COMP - 031207	NA	NA	NA	2660	520	1300	NA	NA	NA	Yes-ESMI
PRE E12 COMP - 031207	NA	NA	NA	23000	23000	ND	NA	NA	NA	Yes-ESMI
PRE E13 COMP - 031207	NA	NA	NA	350	170	180	NA	NA	NA	Yes-ESMI
PRE F10 COMP - 031207	NA	NA	NA	4500	4500	ND	NA	NA	NA	Yes-ESMI
PRE F11 COMP - 031507	NA	NA	NA	12000	12000	ND	NA	NA	NA	Yes-ESMI
PRE F12 COMP - 031507	NA	NA	NA	23000	23000	ND	NA	NA	NA	Yes-ESMI
PRE G11 COMP - 031507	NA	NA	NA	67	67	ND	NA	NA	NA	Yes-ESMI
PRE G12 COMP - 031507	NA	NA	NA	ND	ND	ND	NA	NA	NA	Yes-ESMI
PRE H12 COMP - 031507	NA	NA	NA	1000	660	340	NA	NA	NA	Yes-ESMI
PRE C8 COMP - 031507	NA	NA	NA	22000	22000	ND	NA	NA	NA	Yes-ESMI
PRE C9 COMP - 031507	NA	NA	NA	160	160	ND	NA	NA	NA	Yes-ESMI
PRE E14 COMP - 040607	NA	NA	NA	170	170	ND	NA	NA	NA	Yes-ESMI
PRE I11 COMP - 042707	NA	NA	NA	ND	ND	ND	NA	NA	NA	Yes-ESMI
PRE J12 COMP - 042707	NA	NA	NA	ND	70	ND	NA	NA	NA	Yes-ESMI
PRE G10 COMP - 043007	NA	NA	NA	14500	9900	4600	NA	NA	NA	Yes-ESMI
PRE B6 2'-7' - 052307	NA	NA	NA	82000	40000	42000	NA	NA	NA	**TSCA - Off-Site Only**

Notes:
Bold/italicized text indicates exceedance of established Site Cleanup Goals (SCGs)
ND - Not Detected at the reporting limit.
NA - Not Analyzed
TSCA soil were slated for treatment by Indirect LTTD (TD*X) prior to 3/15/07 when it was determined that all TSCA soil would be disposed of off site.

Table 4

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Post Treatment Soil Data

		Site Specific Cleanup Criteria Established							
Analyte		**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	**Mercury**	**Lead**	**Chromium**	**Approved For Backfill**
Units		µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry	
SCG		10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	2.0	1200.0	50.0	
Sample ID									
Prior to PoP Testing	LTTD POST NT BATCH 1-011707	86.7	7953	3720	139	ND	108	17.6	Yes
	LTTD POST NT BATCH 2-012207	43	3670	1680	52	ND	193	20.9	Yes
	LTTD POST NT BATCH 3-020107	86	2010	950	37	ND	216	27.8	Yes
	LTTD POST NT BATCH 4-020507	80	390	ND	35.1	ND	235	40.5	Yes
	LTTD POST NT BATCH 5-020507	107	1240	370	43.8	0.12	329	***65.9***	**NO - Offsite Disposal**
	LTTD POST NT BATCH 6-020707	120	10540	3140	39.7	0.15	105	23.1	Yes
	LTTD POST NT BATCH 7-020807	85	370	ND	7.62	ND	105	20.2	Yes
	LTTD POST NT BATCH 8-021207	150	80	ND	32.2	0.0735	162	32.3	Yes
LTTD POST NT BATCH 9-022007		65	590	190	49.3	ND	176	21.4	Yes
LTTD POST NT BATCH 10-022307		140	600	ND	34.1	ND	157	16.7	Yes
LTTD POST NT BATCH 11-022407		90	5080	1300	54.8	ND	86.3	17.7	Yes
LTTD POST NT BATCH 12-022507		100	800	ND	52.7	ND	189	27.4	Yes
LTTD POST NT BATCH 13-022807		99	ND	ND	51.1	ND	18	11.6	Yes
LTTD POST NT BATCH 14-031507		730	5710	900	11.2	ND	154	28.8	Yes
LTTD POST NT BATCH 15-031207		170	7940	2400	328	ND	357	17.2	Yes
LTTD POST NT BATCH 16-031207		261	15800	5000	274	ND	255	19.6	Yes
LTTD POST NT BATCH 17-031407		383	6000	2000	39.2	ND	111	4.22	Yes
LTTD POST NT BATCH 18-032607		550	4200	800	73.7	ND	236	14.9	Yes
LTTD POST NT BATCH 19-041207		2790	12980	4260	19.4	ND	489	***77.2***	**NO - Offsite Disposal**
LTTD POST NT BATCH 20-041007		240	3600	400	20.7	ND	191	22.5	Yes
LTTD POST NT BATCH 21-041207		150	8800	4400	33.7	ND	254	21.4	Yes
LTTD POST NT BATCH 22-041307		480	9500	3300	135	ND	226	22.7	Yes
LTTD POST NT BATCH 23-042407		490	6930	1600	133	ND	124	16	Yes
LTTD POST NT BATCH 24-042607		140	5192	300	35	ND	161	15.6	Yes
LTTD POST NT BATCH 25-042707		83	9350	3200	4.9	ND	258	18.8	Yes
LTTD POST NT BATCH 26-050207		98	ND	ND	2.5	ND	206	23.1	Yes
LTTD POST NT BATCH 27-050407		250	5800	3000	10.3	ND	615	22.3	Yes
LTTD POST NT BATCH 28-050707		259	500	ND	11.6	ND	217	14.6	Yes
LTTD POST NT BATCH 29-050807		120	ND	ND	6	ND	193	12.9	Yes

Table 4

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Post Treatment Soil Data

	Site Specific Cleanup Criteria Established							
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	**Mercury**	**Lead**	**Chromium**	**Approved For Backfill**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry	
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	2.0	1200.0	50.0	
Sample ID								
LTTD POST NT BATCH 30-050907	153	ND	ND	8.9	ND	144	9.88	Yes
LTTD POST NT BATCH 31-051007	72	400	ND	68.5	ND	186	16.7	Yes
LTTD POST NT BATCH 32-051407	120	ND	ND	115	0.084	446	18.7	Yes
LTTD POST NT BATCH 33-051507	160	600	ND	12.6	ND	177	23.1	Yes
LTTD POST NT BATCH 34-051707	ND	ND	ND	84	ND	264	24.4	Yes
LTTD POST NT BATCH 35-051807	144	3000	ND	449	ND	249	36.5	Yes
LTTD POST NT BATCH 36-052307	92	3800	ND	27.3	ND	212	24.4	Yes
LTTD POST NT BATCH 37-052407	100	5570	1980	80.3	ND	384	***67.1***	**NO - Offsite Disposal**
LTTD POST NT BATCH 38-052907	50	9500	4800	486	0.0648	370	***70.1***	**NO - Offsite Disposal**
LTTD POST NT BATCH 39-053107	185	2100	600	108	0.084	550	***105***	**YES, w/Restrictions**
LTTD POST NT BATCH 40-052907	33	ND	ND	16.9	0.0983	469	***81.1***	**YES, w/Restrictions**
LTTD POST NT BATCH 41-060607	85	3300	ND	18.4	ND	645	***76.9***	**YES, w/Restrictions**
LTTD POST NT BATCH 42-060707	149	2790	ND	19	0.08	464	***71.3***	**YES, w/Restrictions**
LTTD POST NT BATCH 43-060807	700	1900	ND	21.1	ND	370	32.9	Yes
LTTD POST NT BATCH 44-061207	92	12	ND	ND	ND	84.5	8.42	Yes
LTTD POST NT BATCH 45-061407	110	10500	6000	361	ND	316	26.6	Yes
LTTD POST NT BATCH 46-062007	78	1511	ND	77.7	ND	282	9.33	Yes
LTTD POST NT BATCH 47-062107	140	1922	ND	14	ND	212	36	Yes
LTTD POST NT BATCH 48-062207	89	411	ND	21	ND	145	25	Yes
LTTD POST NT BATCH 49-062607	65	11	ND	29	ND	188	29.5	Yes
LTTD POST NT BATCH 50-062707	14	1530	ND	9.86	ND	133	22.2	Yes
LTTD POST NT BATCH 51-062807	78	429.3	ND	27	0.0568	128	18.6	Yes
LTTD POST NT BATCH 52-062907	87	10.6	ND	38.16	0.0594	184	20.5	Yes
LTTD POST NT BATCH 53-070307	69	410.1	ND	499.311	0.0553	181	23	Yes
LTTD POST NT BATCH 54-070607	75	12	ND	8	0.074	132	24.5	Yes
LTTD POST NT BATCH 55-070607	148	2259	319	34	0.091	137	19.7	Yes
LTTD POST NT BATCH 56-071107	18	440	ND	31	0.092	246	24.8	Yes
LTTD POST NT BATCH 57-071207	82	10	ND	385	ND	215	24.5	Yes
LTTD POST NT BATCH 58-071307	110	12	0	32	0	117	23.3	Yes

Table 4

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Post Treatment Soil Data

	Site Specific Cleanup Criteria Established							
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	**Mercury**	**Lead**	**Chromium**	**Approved For Backfill**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry	
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	2.0	1200.0	50.0	
Sample ID								
LTTD POST NT BATCH 59-071707	62	12	ND	16	ND	152	22.7	Yes
LTTD POST NT BATCH 60-071807	62	10	ND	19	ND	172	17.7	Yes
LTTD POST NT BATCH 61-071907	40	709	ND	19	ND	168	23.9	Yes
LTTD POST NT BATCH 62-072307	270	6111	900	238	ND	322	29.5	Yes
LTTD POST NT BATCH 63-072507	230	512	ND	104	0.056	170	18.6	Yes
LTTD POST NT BATCH 64-072607	168	12	ND	228	0.131	210	22	Yes
LTTD POST NT BATCH 65-072707	310	512	ND	3	0.079	255	27.9	Yes
LTTD POST NT BATCH 66-080207	173	12	ND	***1040***	ND	319	14.2	**YES, w/Restrictions**
LTTD POST NT BATCH 67-080307	170	12	ND	195	0.031	247	25.3	Yes
LTTD POST NT BATCH 68-080707	58	ND	ND	222	ND	138	16.7	Yes
LTTD POST NT BATCH 69-080807	80	300	ND	109	ND	89.5	13.5	Yes
LTTD POST NT BATCH 70-080907	120	200	ND	146	ND	221	31.3	Yes
LTTD POST NT BATCH 71-081007	85	201	ND	186	ND	212	18.8	Yes
LTTD POST NT BATCH-72 091607	318	6,211	1,030	19	ND	134	13.8	Yes
LTTD POST NT BATCH-73 081708	303	6,151	960	17	ND	162	18.1	Yes
LTTD POST NT BATCH-74-082007	800	5,702	1,290	14	ND	133	17.5	Yes

Notes:

=after treatment soil batch exceeds SCG's

Bold/italicized text indicates exceedance of established Site Cleanup Goals (SCGs)

ND - Not Detected at the reporting limit.

Table 5

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Post Construction Concrete Core and Sub Slab Summary Data

	Site Specific Cleanup Criteria Established		
Analyte	**Total PCBs**	**Approved For Backfill**	**Corrective Action**
Units	µg/Kg-dry		
SCG	1,000 Surf/10,000 S-Surf		
Sample ID			
Sub-Slab Crushed Stone Samples			
Sub Slab F17-072507	ND	Yes	NA
Sub Slab F19 091707	18.2	Yes	NA
Sub Slab G17-072507	ND	Yes	NA
Sub Slab G19 091707	383	Yes	NA
Sub Slab G20 091707	13.7	Yes	NA
Sub Slab G21 091707	12.9	Yes	NA
Sub Slab H17 091707	285	Yes	NA
Sub Slab H18 091707	58.2	Yes	NA
Sub Slab H19 091707	29.6	Yes	NA
Sub Slab H20 091707	ND	Yes	NA
Sub Slab H21 091707	190	Yes	NA
Sub Slab I17 091707	***3600***	**No**	**Additional 8"excavated. Soils disposed of offsite as non-TSCA soils. Resampled 9/21/07.**
Sub Slab I17(A) 092107	***1214.4***	**No**	**Additional 8"excavated. Soils disposed of offsite as non-TSCA soils. Resampled 9/24/07.**
Sub Slab I 17(B) 092409	267.1	Yes	NA
Sub Slab I18 091707	***2950***	**No**	**Additional 8"excavated. Soils disposed of offsite as non-TSCA soils. Resampled 9/21/07.**
Sub Slab I18(A) 092107	449.4	Yes	NA
Sub Slab I19 091707	34.2	Yes	NA
Sub Slab I20 091707	51.1	Yes	NA
Sub Slab I21 091707	29.8	Yes	NA
Sub Slab J18 091809	260.5	Yes	NA
Sub Slab J19 091807	63.3	Yes	NA
Sub Slab J20 091807	296	Yes	NA
Sub Slab J21 091807	26.1	Yes	NA
Sub Slab K18 091807	109.7	Yes	NA
Sub Slab K19 091807	113.2	Yes	NA
Sub Slab K20-21 091807	264.7	Yes	NA
Concrete Treatment Pad Core Samples			
TD*X Pad 083107	170	Yes	NA
TD*X Sump 1 083107	290	Yes	NA
TD*X Sump 2 083107	ND	Yes	NA
IB Bin 5-070207	ND	Yes	NA
IB Bin 6-070207	ND	Yes	NA
Concrete Coring Coolant Samples			
Coring Coolant-070207	ND	NA	NA

Notes:
NA - Not applicable
Bold/italicized text indicates exceedance of established Site Cleanup Goals (SCGs)
ND - Not Detected at the reporting limit.
Sub Slab samples are labelled Sub Slab xxx zzzzzz. xxx= cell location, zzzzzz= sampling date.

Table 6

34 Freeman's Bridge Road
NYS DEC Site # 4-47-028
PM-10 and PCB Air Monitoring Summary Data

Sample Information	Wind Parameters		Air Station 1				Air Station 2				Air Station 3				Air Station 4			
			Analysis		Air Volume		Analysis		Air Volume		Analysis		Air Volume		Analysis		Air Volume	
	Speed	Direction	TO-4 (µg/m^3) BG=0.0008	PM_{10} (mg/m^3) BG=0.015	TO-4 (liters)	PM_{10} (m^3)	TO-4 (µg/m^3) BG=0.0011	PM_{10} (mg/m^3) BG=0.014	TO-4 (liters)	PM_{10} (m^3)	TO-4 (µg/m^3) BG=0.0006	PM_{10} (mg/m^3) BG=0.015	TO-4 (liters)	PM_{10} (m^3)	TO-4 (µg/m^3) BG=0.0006	PM_{10} (mg/m^3) BG=0.012	TO-4 (liters)	PM_{10} (m^3)
Sample Date																		
Jan-07																		
1/4/2007	1.5 mph	ESE 102	ND	0.0160	119500	571.9	ND	0.0160	119900	563.3	ND	***0.2840***	114200	543.9	0.0015	0.0350	139600	540.6
1/5/2007	1 mph	N 360	0.0016	0.0130	109700	525.4	0.0014	0.0130	114500	524.2	ND	0.0980	115500	522.5	0.0149	0.0170	119100	530.1
1/6/2007	9 mph	SW 210	ND	ND	109500	544.7	0.0022	ND	113900	548.3	0.0048	ND	112000	536.9	0.0177	ND	119100	538.2
1/8/2007	3 mph	SW 212	ND	NA	369300	NA	ND	NA	383100	NA	0.0001	NA	383500	NA	0.0028	NA	395600	NA
1/9/2007	9 mph	SW 222	ND	NA	81920	NA	ND	NA	85940	NA	ND	NA	91990	NA	ND	NA	94490	NA
1/11/2007	2 mph	SW 200	0.0001	0.0250	368300	846.28	ND	0.0310	381400	853.46	0.0003	***0.5980***	381200	854.66	0.0042	0.0260	394000	865.64
1/18/2007	7 mph	SE 150	0.0002	0.0030	369200	1712.79	0.0009	0.0040	384000	1727.47	0.0063	0.0200	384800	1711.09	0.0099	0.0070	411000	1685.03
1/25/2007	8 mph	W 270	0.0016	0.0030	374200	1598.7	0.0020	0.0080	398200	1594.7	ND	ND	405300	1612.8	0.0011	0.0010	426300	1596.18
Feb-07																		
2/1/2007	2 mph	S 180	0.0080	0.0140	378900	1811.5	ND	0.0130	402100	1837.6	0.0048	0.0840	404100	1847.6	ND	0.0220	420900	1855.1
2/7/2007	2 mph	SW 245	0.0060	0.0150	352900	1535.09	0.0100	0.0440	359100	1647.14	ND	0.0120	366200	1674.53	ND	0.0030	365200	1693.2
2/8/2007	17 mph	SW 246	0.0158	0.0110	358900	1715	0.0130	0.0320	379600	1745	ND	0.0150	369200	1687.5	ND	0.0020	401100	1770
2/9/2007	8 mph	SW 253	0.0093	0.0270	263000	1706.25	0.0204	0.0800	325400	1732.5	ND	0.0050	390000	1783.75	ND	ND	402500	1778.75
2/11-17/07	Operations shutdown pending ESMI POP test results and inclimate weather- no monitoring																	
2/21/2007	10 mph	NW/W	0.0135	0.0060	367700	1781.3	0.0119	0.0140	387400	1776.25	ND	0.0060	388700	1776.25	ND	0.0140	402500	1777.5
2/27/2007	0 mph	NE	0.0467	0.0230	357700	1771.35	0.0224	0.0210	380500	1749.3	ND	0.0030	380500	1740.73	ND	0.0080	367900	1727.25
Mar-07																		
3/9/2007	1 mph	WNW	0.0050	0.0180	370500	1740.96	0.0043	0.0240	387000	1751.6	0.0038	0.0520	387200	1747	0.0101	0.0260	403700	1776.56
3/13/2007	3 mph	SW	0.0127	0.0250	362000	1788.5	0.0094	0.0350	377600	1790.95	0.0093	0.0600	378500	1800.75	0.0298	0.0210	388300	1789.72
3/14/2007	0 mph	SW	0.0542	0.0060	362100	1846.08	0.0105	0.0160	381600	1813	0.0026	0.0110	380300	1794.62	0.0068	0.0120	387700	1789.72
3/27/2007	3mph	SSW	0.0093	ND	372600	1779.1	0.0067	ND	389400	1786.58	0.0031	ND	393800	1802.76	0.0068	ND	396200	1750.47
Apr-07																		
4/4/2007	10 mph	E	0.0052	ND	372600	1778.7	0.0040	ND	389400	1782.38	0.0045	ND	393800	1831.38	0.0167	ND	396200	1822.8
4/13/2007	1 mph	NNE	0.0045	ND	369200	1727.72	0.0090	0.0240	398000	1797.81	ND	ND	387000	1733.82	ND	ND	396200	1721.61
4/24/2007	5 mph	WNW	ND	0.0050	363700	1703.3	0.0234	0.0360	377000	1703.3	ND	0.0050	380900	1721.61	ND	ND	355300	1794.87
May-07																		
5/2/2007	13 mph	N	0.0106	0.0290	340700	1639.83	0.0063	0.0190	354500	1642.65	0.0027	0.0070	344400	1622.38	0.0061	0.0100	362500	1634.02
5/10/2007	2 mph	SSE	0.0175	0.0030	362100	1811.48	0.0152	0.0140	381600	1811.48	0.0139	0.0350	380300	1811.48	0.0292	0.0150	387700	1848.83
5/14/2007	7 mph	SE	0.0149	0.0200	362000	1690.5	0.0058	0.0230	377600	1672.13	0.0102	0.0580	378500	1641.5	0.0109	0.0180	388300	1653.75
5/23/2007	4 mph	S	0.0127	0.0250	381600	1885.31	0.0066	0.0820	390800	1850.18	0.1004	0.0310	379700	1807.65	0.1114	0.0510	377100	1756.5
5/30/2007	4 mph	SW	0.0852	0.0300	381600	1598.42	0.0366	0.0300	390800	1604.27	0.0105	0.0250	379700	1608.75	0.0540	0.0320	377100	1604.27
Jun-07																		
6/6/2007	4 mph	NW	0.0165	0.0200	381600	1614.24	0.0118	0.0730	390800	1614.24	0.0069	0.0150	379700	1612.8	0.0093	0.0050	377100	1631.06
6/14/2007	1 mph	SE	0.0207	0.0190	381600	1774.07	0.0141	0.0060	390800	1768.21	0.0129	0.0340	379700	1772.55	0.0513	0.0210	377100	1779.92
6/20/2007	3 mph	SW	0.0169	0.0310	362100	1703.81	0.0167	0.0400	381900	1674.53	0.0720	0.2360	380300	1686.24	0.0334	0.0530	387700	1648.8
6/28/2007	6 mph	W	0.0027	0.0310	362100	1830.15	0.0018	0.0220	381600	1830.15	0.0024	NC	380300	*NC*	0.0012	0.0180	387700	1792.8

Table 6

34 Freeman's Bridge Road
NYS DEC Site # 4-47-028
PM-10 and PCB Air Monitoring Summary Data

Sample Information	Wind Parameters		Air Station 1				Air Station 2				Air Station 3				Air Station 4			
			Analysis		Air Volume		Analysis		Air Volume		Analysis		Air Volume		Analysis		Air Volume	
	Speed	Direction	TO-4 ($\mu g/m^3$) BG=0.0008	PM_{10} (mg/m^3) BG=0.015	TO-4 (liters)	PM_{10} (m^3)	TO-4 ($\mu g/m^3$) BG=0.0011	PM_{10} (mg/m^3) BG=0.014	TO-4 (liters)	PM_{10} (m^3)	TO-4 ($\mu g/m^3$) BG=0.0006	PM_{10} (mg/m^3) BG=0.015	TO-4 (liters)	PM_{10} (m^3)	TO-4 ($\mu g/m^3$) BG=0.0006	PM_{10} (mg/m^3) BG=0.012	TO-4 (liters)	PM_{10} (m^3)
Sample Date																		
Jul-07																		
7/5/2007	0 mph	SSW	0.1092	0.0290	381500	1786.58	0.0255	0.0340	382900	1780.35	0.0150	0.0060	380300	1774.12	0.0153	0.0140	387700	1780.35
7/11/2007	8 mph	SSE	0.0761	0.0070	381600	1834.47	0.0133	0.0120	390800	1835.86	0.0156	0.0240	379700	1850.91	0.0128	0.0050	377100	1853.8
7/19/2007	0 mph	SW	0.0287	0.0050	362100	1805.25	0.0179	0.0050	381600	1805.25	0.0238	0.0140	380300	1799.03	0.0213	0.0070	387700	1805.25
7/24/2007	2 mph	SSE	0.0715	0.0140	381600	1690.59	0.0113	0.0100	390800	1692.34	0.0076	0.0040	379700	1695.17	0.0101	0.0040	377100	1686.36
7/30/2007	0 mph		0.0310	0.0280	381600	1672.61	0.0098	0.0190	390800	1668.42	0.0042	0.0160	379700	1677.2	0.0203	0.0070	377100	1674.4
Aug-07																		
8/9/2007	1 mph	NNW	0.0332	0.0280	362100	1786.57	0.0096	0.0280	381600	1786.57	0.0042	0.0040	380300	1780.35	0.0328	0.0130	387700	1774.12
8/15/2007	3 mph	SSW	0.0350	0.0330	362100	1755	0.0182	0.0120	381500	1755	0.0129	0.0110	380300	1762	0.0122	0.0070	387700	1762
8/21/2007	11 mph	S	ND	0.0160	397400	1805.25	ND	ND	390500	1811.48	0.0079	0.0290	392900	1811.48	0.0270	0.0170	385300	1817.7
8/31/2007	1 mph	NNW	ND	0.0410	381600	1668.68	ND	0.0290	390800	1668.68	ND	0.0470	379700	1667.25	0.0122	0.0510	377100	1668.68
Sep-07																		
9/7/2007	0 mph	SW	ND	0.0150	381600	1689.51	ND	ND	390800	1689.51	ND	ND	379700	1688.1	ND	0.0020	377100	1687.12

ND - Not detected at levels above established background levels
NA - Data not available at this time
NC- Data not collected
BG - Background Levels

Table 7

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Post Construction Soil Sample Results

	Site Specific Cleanup Criteria Established										
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	**Mercury**	**Lead**	**Chromium**	**Approved For Backfill or to be left in place.**	**Corrective Action**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry		
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2.0	1200.0	50.0		
Sample ID											
Post Construction Soil Samples											
Post Con 1 092707	ND	170	ND	140	140	ND	ND	56	12.2	Yes	NA
Post Con 2 092707	ND	490	ND	130	130	ND	0.11	65.5	15.1	Yes	NA
Post Con 3 092707	ND	3490	1570	180	180	ND	ND	69.1	12.3	Yes	NA
Post Con 4 092707	ND	390	ND	210	210	ND	0.1	61.1	13.3	Yes	NA
Post Con 5 092707	ND	530	ND	150	150	ND	0.06	66.4	12.8	Yes	NA
Post Con 6 092707	ND	ND	ND	75	75	ND	0.06	25.6	15.82	Yes	NA
Post Con 7 092707	ND	ND	ND	ND	ND	ND	ND	8.46	2.4	Yes	NA
Post Con 8 092707	ND	ND	ND	ND	ND	ND	0.18	5.28	1.21	Yes	NA
Post Con 10 092707	33	ND	ND	60	60	ND	ND	16.7	4.38	Yes	NA
Post Con 11 092707	29	ND	ND	ND	ND	ND	ND	1.8	1.25	Yes	NA
Post Con 12 092707	ND	ND	ND	120	120	ND	ND	12	4.98	Yes	NA
Post Con 14 092707	ND	770	ND	140	140	ND	ND	17.9	4.68	Yes	NA
Post Con 15 092707	ND	ND	ND	ND	ND	ND	ND	19.9	3.04	Yes	NA
Post Con 16 092707	ND	2660	ND	380	380	ND	ND	20.6	8.23	Yes	NA
Post Con 17 092707	ND	ND	ND	210	210	ND	ND	55.4	10	Yes	NA
Post Con 23 092707	ND	570	ND	380	380	ND	ND	491	***97.8***	**No**	***Resample cell using composite sample.***
Post Con 23(A) 100407	NA	NA	NA	NA	NA	NA	NA	NA	6.16	Yes	NA
Post Con 27 092707	29	880	280	330	330	ND	0.06	49.4	10.2	Yes	NA
Post Con 39-092807	ND	200	ND	170	100	70	0.17	49.9	7.39	Yes	NA
Post Con 40-092807	31	5440	2500	62	ND	62	1.14	39.4	10.3	Yes	NA
Post Con 41-092807	ND	4740	1400	265	180	85	ND	60.3	12.3	Yes	NA
Post Con 47-092807	ND	1583	779	170	170	ND	ND	113	17.9	Yes	NA
Post Con 48-092807	28	3360	1510	150	150	ND	0.11	99.5	19.1	Yes	NA
Post Con 49-092807	ND	3900	1700	120	120	ND	0.07	184	29.8	Yes	NA
Post Con 55-092807	36	1000	350	86	86	ND	ND	167	26.3	Yes	NA
Post Con 56-092807	ND	2040	1100	280	280	ND	0.11	80.5	11.8	Yes	NA
Post Con 57-092807	ND	3300	1500	40	40	ND	ND	48.7	10.9	Yes	NA
Post Con 58-092807	ND	8630	3920	***2030***	***1300***	ND	0.88	87	13.6	***No***	***Resample cell using composite sample.***
PostCon 58(A) 100307	NA	NA	NA	60	30	30	NA	NA	NA	Yes	NA
Post Con 59-092807	ND	210	ND	ND	ND	ND	ND	7.94	13.7	Yes	NA
Post Con 60-092807	ND	410	ND	30	30	ND	ND	16.2	9.68	Yes	NA
Post Con 61-092807	ND	4820	2500	61	61	ND	ND	180	25.4	Yes	NA

Table 7

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Post Construction Soil Sample Results

	Site Specific Cleanup Criteria Established										
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	**Mercury**	**Lead**	**Chromium**	**Approved For Backfill or to be left in place.**	**Corrective Action**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry		
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2.0	1200.0	50.0		
Sample ID											
Post Construction Soil Samples											
Post Con 62-092807	38	4450	2080	140	140	ND	ND	211	18.4	Yes	NA
Post-Con 63 092807	42	ND	ND	360	ND	360	0.21	39.8	16.67	Yes	NA
Post Con 64-092807	4	ND	ND	ND	ND	ND	ND	2.68	4.21	Yes	NA
Post Con 65-092807	50	4800	2060	800	510	ND	0.6	85.6	12.9	Yes	NA
Post Con 66-092807	109	1152	412	110	110	ND	ND	134	24.6	Yes	NA
Post Con 67-092807	119	2240	1040	99	99	ND	ND	104	18.7	Yes	NA
Post Con 68-092807	56	8530	4020	344	260	ND	0.55	77.7	9.08	Yes	NA
Post Con 69-092807	137	1518	609	500	360	ND	0.16	180	34.7	Yes	NA
Post Con 70-092807	194	3240	1570	61	61	ND	0.51	46.2	11.7	Yes	NA
Post Con 71-092807	130	1950	1070	30	30	ND	0.24	21.8	8.39	Yes	NA
Post Construction Test Pit Samples											
TP 08 0'-2' parking lot	22	ND	ND	126	78	48	0.08	32.6	20.5	Yes	NA
TP 08 2'-4- parking lot	18	ND	ND	ND	ND	ND	0.09	38.8	14.6	Yes	NA
TP 08 4'-6' parking lot	17	ND	ND	***9800***	***9800***	ND	0.08	31.8	15	Yes	Soil will be left in place.
TP 13 0'-2' parking lot	8	ND	ND	ND	ND	ND	ND	25.1	14.8	Yes	NA
TP 13 2'-4' parking lot	11	ND	ND	ND	ND	ND	ND	34.1	24.6	Yes	NA
TP 13 4'-6' parking lot	58	ND	ND	280	280	ND	ND	24.9	20.4	Yes	NA
TP 33 0'-2' parking lot	16	5000	2400	95	ND	95	1.56	47.3	23.6	Yes	NA
TP 33 2'-4' parking lot	10	6900	3500	ND	ND	ND	1.26	99.7	20.9	Yes	NA
TP 33 4'-6' parking lot	12	18600	7700	320	320	ND	0.36	66.7	24.9	Yes	NA

Notes:
Bold/italicized text indicates exceedance of established Site Cleanup Goals (SCGs)
ND - Not Detected at the reporting limit.
NA - Not applicable
Sample numbers refer to the Post Construction Sampling grid see the Post Construction Sampling Drawing **Figure 8**.
Test Pit 08 is mislabeled. It is actually Test Pit 09. See the Post Construction Sampling Drawing **Figure 8.**

Table 8

34 Freeman's Bridge Road Site
Town of Glenville, New York
NYSDEC Site No. 4-47-028
Verification Soil Sample Failure Summary

	Site Specific Cleanup Criteria Established										
Analyte	**Total VOC**	**Total SVOC**	**Total C.SVOC**	**Total PCBs**	Aroclor 1248	Aroclor 1254	**Mercury**	**Lead**	**Chromium**	**Pass/Fail**	**Corrective Action**
Units	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/Kg-dry	µg/g-dry	µg/g-dry	µg/g-dry		
SCG	10,000	500,000	10,000	1,000 Surf/10,000 S-Surf	1,000 Surf/10,000 S-Surf		2.0	1200.0	50.0		
VER A3 SW 071907	9070	49900	ND	***7300***	***7300***	ND	ND	55.6	16.2	**Fail**	**Further excavation not possible due to proximity of gas main.**
VER D11SW 081307	31	157250	***53300***	***1090***	560	530	0.12	80.7	20.3	**Fail**	**Edge of site. Poly sidewall before backfill.**
VER D17 SW 050407	10	22900	***10300***	ND	ND	ND	0.262	480	10.1	**Fail**	**Edge of site. Poly sidewall before backfill.**
VER E2 SW 052507	30	46,810	***21,260***	480	140	340	0.28	72.1	16.7	**Fail**	**Further excavation not possible due to Proximity of Road.**
VER E13 SW 042307	ND	***546700***	***169000***	***8700***	***8700***	0	0.501	509	***75.5***	**Fail**	**Edge of site. Poly sidewall before backfill.**
VER I3A SW 083007	33	ND	ND	***1600***	ND	ND	ND	3.5	10.2	**Fail**	**Additional excavation not possible due to proximity of power poles.**
VER J13A 080207	***1144000***	4940	ND	ND	ND	ND	0.03	8.47	8.42	**Fail**	**Further excavation not possible due to water interface.**