ADVANCED ENVIRONMENTAL REDEVELOPMENT, LLC

RESEARCH • REMEDIATE • REBUILD

YONKERS WATERFRONT DEVELOPMENT
PERIODIC REVIEW REPORT
SOUTHERN PARCEL C (OPERABLE UNIT 1) AND PARCEL B, NORTHERN PARCEL C (OPERABLE UNIT 2)
BCP #C360071
YONKERS, NEW YORK
PROJECT #368

Prepared for:

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June 2010

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Principal

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1.0 INTRODUCTION

ADVANCED ENVIRONMENTAL REDEVELOPMENT (AER) is pleased to submit this Periodic Review Report (the Report) as required by 6NYCRR 375-1.2(at) and the requirements of the AER Site Management Plan dated December 2008. The Site, also known as Parcel B and C Yonkers Waterfront Development, is located in the downtown section of Yonkers, west of the Metro North Railroad right of way, and along the eastern bank of the Hudson River, as shown on Figure 1. The parcels have a history of industrial use dating back more than 100 years.

The remedial program documented in the Site Management Plan has been effective in obtaining the remedial goals. The program has:

1. Reduced, controled or eliminated to the extent practicable the contamination present within the surface soils.
2. Eliminated the potential for direct human contact with contaminated surface soils.
3. Eliminated the potential for leaching of contamination into groundwater and surface water.
4. Restricted access and land use involving affected soils where appropriate.
5. Limited the potential for volatile organic compound exposure through the floor slab of the future residential building.

AER does not believe that any changes to the Site Management Plan are needed. Annual inspections and Periodic Review Reporting are appropriate at this time. The completed Institutional and Engineering Controls Certification Form is found in Appendix A.

2.0 SITE OVERVIEW

The property consists of two Operable Units (OU). OU-1 includes Parcel C, Parcel D, and the former beds of Water Street and a portion of Dock Street. OU-1 consists of approximately 2.54 acres and is bounded on the north by OU-2, on the east by the New York Central Railroad, on the south by the Saw Mill River Cove and west by the Hudson River. OU-2 consists of approximately 1.91 acres and includes Northern Parcel C, the former bed and a portion of Wells Avenue, and Parcel B. OU-2 is bounded on the north by the Yonkers sewer treatment plant, on the east by the New York Central Railroad, on the south by OU-1, and on the west by the Hudson River. Both sites have been used for industrial purposes since the 1800's.

The site had been under investigation beginning in 1997 with a Phase I Environmental Site Assessment. In conjunction with the NYSDEC a Final Engineering Report, documenting the environmental investigation and remedial actions conducted, was issued in December 2008. Soil Constitutes of Concerns include total metals and semi-volatile compounds. Specifically lead, mercury, benzo[a]anthracene, benzo[a]pyrene and chrysene have been detected in on-site soils over time.

The redevelopment project consisted of the construction of two structures. A four and one half story parking structure consisting of approximately 400 spaces was constructed on Parcel B. A residential structure consisting of 294 apartments was constructed on Parcel C. The residential structure consisted of a 14 story tower in the north, a 12 story structure in the south and a four story structure in the middle joining the two structures.

The approved remedy involved capping the parcels with either an approximate two-foot clean soil cover on top of a high visibility (snow fence) layer, buildings, sidewalk or asphalt pavement. A sub-slab depressurization system (SSDS) was also installed that manages sub-slab air beneath residential areas of the buildings. The system incorporated design elements found in the USEPA document *Radon prevention in the Design and Construction of Schools and Other Large Structures,* June 1994. The AER report titled *Specifications For An Active Sub-slab Depressurization System, Parcels B and C, Yonkers, NY,* dated August 2006 details the SSDS.

3.0 EVALUATE REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

3.1 Sub-Slab Depressurization System

A Sub-Slab Depressurization System (SSDS) was installed as a component of the new construction of the Hudson Park North building. This system was installed within the foundation of the building, prior to pouring the ground floor/foundation slab. The system is a passive venting design, designed to provide a "preferential pathway" for sub-slab soil vapor underneath the foundation slab to be channeled to rooftop vents for dispersion into ambient air. In addition, a low-permeability, "rubberized asphalt" membrane, sealed to the foundation frost walls and the underside of the foundation slab, provides a barrier to sub-slab soil vapor intrusion into the building.

In its current passive operation, the System, directs sub-slab vapors that may accumulate beneath the building away from the building interior to a vent on the roof. Each monitoring point is constructed as a separate four inch PVC pipe completed within the crushed stone permeable layer found below the spray-on impermeable barrier as noted on Figures 2 and 3.

Initial soil vapor samples were collected in October 2009. Levels of volatile organic compounds, typical of the plastic components used to construct the system were detected. In response to these detections, and in consultation with the NYSDEC, the air found within the System was purged prior to sample collection. The intent of this process was to remove any air trapped during or affected by the construction of the System. On March 13, 2010, AER supervised the temporary installation of a 2 Hp regeneration blower. The blower was attached to withdraw air from the existing rooftop ventilation stacks. The blower operated for approximately 67 hours removing approximately 265 volumes of air from the System. On March 15, 2010, air from the three individual monitoring points located within the building was purged for approximately two

hours using a one Hp blower. Approximately 20,000 volumes of air were removed from the monitoring point piping. The monitoring point was ventilated to the outdoors via flexible piping.

After the completion of the air purging process air samples were collected. The samples were collected in SUMMA canisters after first field screening air quality with a photoionization detector (PID) equipped with an 11.7-eV lamp. AER notes that no PID readings were detected.

The canisters were calibrated to collect the air sample over an approximately 24 hour period. After the 24 hour period the canisters were secured and deliver to Severn Trent Laboratories, Inc. (STL) a New York State certified lab (NY134357) for analysis of volatile organic compounds using USEPA Method TO-15. As requested by the NYSDEC/DOH, a laboratory method detection limit of 0.25ug/m3 was achieved for the compounds trichloroethene, vinyl chloride, and carbon tetrachloride.

The current round of sampling data indicates a significant decrease in compounds detected. Laboratory data and a summary table of detected compounds are attached on Table 1.

A Data Usability Summary Report (DUSR) was performed by Ms. Lori Beyer of Lab Validation Corporation located in East Northport, New York. Data validation was performed on six air samples; three previous samples collected in October 2009 and three samples from this current round. The samples were collected under chain of custody documentation by AER and submitted to STL for analysis. The data was evaluated in accordance with the National Functional Guidelines for Organic and Inorganic Data Review and the NYSDEC ASP 1995 Revised Guidelines. According to the DUSR, acceptable system performance was maintained throughout the analysis of the samples and the data was of acceptable quality. The DUSR and analytical data is attached as Appendix B.

AER believes that this information addresses the NYSDEC and NYSDOH concerning the presence of volatile organic compounds, typical of the plastic components used to construct the system. The latest round of data indicates a reduction in the parameters detected. AER recommends the collection of additional air samples in October 2011.

The SSDS was inspected by representatives from AER and Mr. Mathew E. Hackman, NYS Certified Professional Engineer #083778 on June 3, 2010. The system was found to be in good working order. No faults were found with the system.

3.2 Site Cover System

As part of the development of Parcels B and C, the majority of these Parcels were capped with a building, paved roadway, sidewalk or other "hardscape" or impermeable surface. In the areas that were not capped with impermeable surfaces the site contractor placed approximately two feet of clean fill to act as a soil cap. A high visibility barrier fence (orange snow fence) was placed on top of the affected, native fill soil remaining in place and beneath the clean fill approximately two feet below the final grade. Maintenance of the cap is minimal, however, AER recommended the following to ensure the integrity and function of the soil cap:

- Landscaped areas must be maintained with a pitch away from buildings to keep water from entering the building and the pooling of water in the landscaped areas.
- The soil cap above the orange snow fence must be maintained at approximately two feet.
- The vegetation in the landscaped areas must be kept in place and maintained to retain the cover and prevent soil erosion.
- If the soil cap or hardscape is breached for any reason, any native soils removed from below the hardscape or below the orange snow fence must be stockpiled on and covered with a PVC liner and then returned to the same location below the orange snow fence. The breached snow fence must be repaired or replaced.
- Imported, clean fill soils from above the orange snow fence must be segregated from the deeper soils during any excavation. The imported fill may be returned to any portion of the excavation.
- Any additional soils needed to be placed above the orange snow fence and imported from off-site must be analyzed for semivolatile compounds (EPA 8270 PAH's only), volatile organic compounds (EPA 8260) and Total and TCLP TAL metals. The analytical results should be compared to and must not exceed the SCOs (6NYCRR Subpart 375-6).
- If the native stockpiled soils removed below the snow fence cannot be returned to their original area, these soils must disposed of off-site as special waste at a licensed soil recycling facility.
- Soils beneath the buildings, garages, sidewalks or other "hardscape" areas must be considered affected soil. Therefore, if any soils are excavated from beneath these areas, they must be treated as special waste and be placed back into the excavation and capped with "hardscape" or orange snow fence and approximately two feet of clean fill. Any soil not returned to the excavation must be disposed of off-site at a licensed facility.
- An annual certification must be made to the NYSDEC indicating that the requirements of this Plan have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by March 1st following the calendar reporting year, along with an Annual Certification, signed and certified by the Owner, and certifying that the engineering control (SSDS) and site cover system is in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering control (SSDS).

The Cover System was inspected by representatives from AER and Mr. Mathew E. Hackman, NYS Certified Professional Engineer #083778 on June 3 2010. The system was found to be in working order and the warning layer was not exposed at any location. However a small area of stressed vegetation that may lead to erosion was noted in the grassed area west of the parking garage along Wells Avenue. The bare soils in this limited area should be reseeded. The Environmental Inspection Form and Institutional and Engineering Controls Certification Form are attached in Appendix B. Photographs of the property are found in Appendix C.

3.3 Environmental Easement

An Environmental Easement (EE) applies to the entire Site. The EE restricts the use of the Site; in particular, the Site may be used for restricted residential use as long as the following long-term institutional and engineering controls are employed:

- The barrier layer consisting of the asphalt in the parking areas, impervious sidewalks/walkways, the soil cover in the landscaped areas and the building structures are maintained in accordance with the approved SMP.
- All future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP.
- The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purposes.
- The SSDS and site cover system will be operated and maintained as required by the approved SMP. Annual inspection and reporting will be performed in a manner specified in the approved SMP

The Site may not be used for a higher level of use such as unrestricted use and the described engineering controls may not be discontinued without an amendment or extinguishment of the EE. Until such time as the EE is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, deeds, leases, licenses and other instruments granting a right to own or use the Site shall give notice of and incorporate by reference the EE. The EE also grants rights of access and inspection to NYSDEC, and will be provided to affected local governments.

No actions observed at the Site during the June 3rd inspection would compromise this EE.

4.0 CONCLUSIONS

The Remedy complies with the Site Management Plan. No deviations from the Final Engineering Report or the Site Management Plan were noted. Re-seeding is necessary in a very limited area west of the parking garage. AER recommends continued annual inspection of the engineering control and collection of air samples from the SSDS monitoring points.

TABLES

TABLE 1
SUMMARY OF DETECTED COMPOUNDS IN SUB-SLAB VAPOR
METHOD TO-15
YONKERS WATERFRONT DEVELOPMENT
BCP #C360071
YONKERS, NEW YORK

Location	*SV-1*		*SV-2*		*SV-3*	
Parameter (ug/m3)						
Date	*10/21/09*	*3/15/10*	*10/21/09*	*3/15/10*	*10/21/09*	*3/15/10*
Dichlorodifluoromethane	ND	2.0	ND	1.9	3.1	2.3
Chloromethane	9.7	5.1	31	26	10	1.8
Vinyl Chloride	ND	ND	ND	ND	2.5	0.38
Chloroethane	ND	ND	32	4.4	ND	ND
Trichlorofluoromethane	5.3	1.6	2.1	1.2	3.3	1.3
Tert-Butyl Alcohol	ND	ND	ND	5.1	ND	2.8
Acetone	57	33	1300e	64	55	20
Isopropyl Alcohol	47	27	390e	90	66	35
Carbon Disulfide	3.7	ND	2.1	ND	17	ND
Carbon Tetrachloride	ND	0.56	ND	0.52	ND	0.49
Methylene Chloride	3.4	0.71	4.2	1.3	2.7	0.81
n-Hexane	2.3	ND	3.3	ND	5.3	ND
Methyl Ethyl Ketone	10	3.0	1200e	7.5	17	2.5
4-Methly-2-pentanone	ND	ND	ND	1.2	ND	0.9
Tetrahydrofuran	ND	ND	1400e	4.3	530e	ND
Chloroform	2.1	0.49	1.5	ND	2.0	ND
1,1,1-Trichloroethane	1.5	ND	ND	ND	ND	ND
Cyclohexane	0.86	ND	1.5	ND	24	ND
2,2,4-Trimethylpentane	1.9	ND	2.2	ND	46	ND
Benzene	2.3	0.89	2.4	0.59	2.6	0.54
n-Heptane	3.3	ND	4.9	ND	3.7	ND

TABLE 1 *(continued)*
SUMMARY OF DETECTED COMPOUNDS IN SUB-SLAB VAPOR
METHOD TO-15
YONKERS WATERFRONT DEVELOPMENT
BCP #C360071
YONKERS, NEW YORK

Location	***SV-1***		***SV-2***		***SV-3***	
Parameter (ug/m3)						
Date	*10/21/09*	*3/15/10*	*10/21/09*	*3/15/10*	*10/21/09*	*3/15/10*
Trichloroethene	3.5	ND	1.2	ND	7.5	0.36
Toluene	10	3.4	11	2.3	12	3.1
Tetrachloroethene	3.0	2.0	8.8	2.6	4.7	ND
Ethylbenzene	1.7	0.42	1.7	0.40	1.8	0.37
Xylene (m,p)	5.2	1.4	5.2	1.4	5.2	1.1
Xylene (o)	1.6	0.41	1.6	0.41	1.6	0.40
Styrene	ND	ND	ND	ND	0.94	0.55
Xylene (total)	6.5	ND	6.5	ND	6.5	ND
1,2,4-Trimethylbenzene	2.2	0.54	1.3	0.57	1.5	0.95
1,3-Dichlorobenzene	25	ND	16	ND	11	ND
1,4-Dichlorobenzene	ND	120e	ND	200e	ND	28
Photoionization Detector (no units)	0.0	0.0	0.0	0.0	0.8	0.0

ug/m3 = micrograms per cubic meter;; ND = not detected; e = estimated value exceeded calibrated response

FIGURES

APPENDIX A
INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM
ENVIRONMENTAL INSPECTION FORM

ENVIRONMENTAL INSPECTION FORM
Hudson Park North, Yonkers, New York

Property Name: Yonkers Waterfront Development Inspection Date: 3 Jun 2010
Property Address: 1 Alexander St — BCP # C360071
City: Yonkers State: NY Zip Code: 10701
Property ID Tax Assessment Map: Section: 2 Block: 2600 Lot: 45 (Parcel C)
2 2600 67+77 (Parcel C North)
2 2605 73 (Parcel B)
Weather conditions during inspection: Temperature 85 F
Conditions: Sunny, clear, Wind 5-10 MPH

SIGNATURE

The findings of this inspection were discussed with appropriate personnel, corrective actions (if warranted), were identified and implemented in accordance with the approved Site Management Plan. Inspector: Matthew E. Hackman Date: 3 Jun 2010
Next scheduled Inspection Date: NY P.E. 083778

Sub-Slab Depressurization System

Are sub-slab soil vapor concentrations above NYSDOH or NYSDEC guidelines?	Yes ___	No ✓
Visual Inspection		
Sub-slab vacuum/soil vapor monitor points: Any cracks or potential leaks?	Yes ___	No ✓
Valve closed?	Yes ✓	No ___
Roof stack cracked or leaking?	Yes ___	No ✓
Roof stack fixed to roof securely?	Yes ✓	No ___
Roof stack clear of debris?	Yes ✓	No ___
Roof stack drainage good?	Yes ✓	No ___

Site Cover System

Is there any evidence of ponding, settlement, erosion, sloughing?	Yes ___	No ✓
Is there any evidence of distressed vegetation or turf?	Yes ✓	No ___
Are unusual cracks visible in soil, sidewalk or building slab?	Yes ___	No ✓
Is there any breach of the site cover system?	Yes ___	No ✓

Comments:
Grassed area west of parking garage, along Wells Street has bare soil along sidewalk, approximately 50' by 3'. Bare soil needs to be re-vegetated to avoid erosion

Attachments:
Site Sketch
Photographs
Laboratory reports

CORRECTIVE ACTION FORM
Hudson Park North, Yonkers, New York

Property Name: Yonkers Waterfront Development Inspection Date: 3 Jun 2010
Property Address: 1 Alexander Street – BCP # C 360071
City: Yonkers State: NY Zip Code:
Property ID Tax Assessment Map: Section: 2 Block: 2600 Lot: 45 (Parcel C)
2 2600 67+77 (Parcel C North)
2 2605 73 (Parcel B)

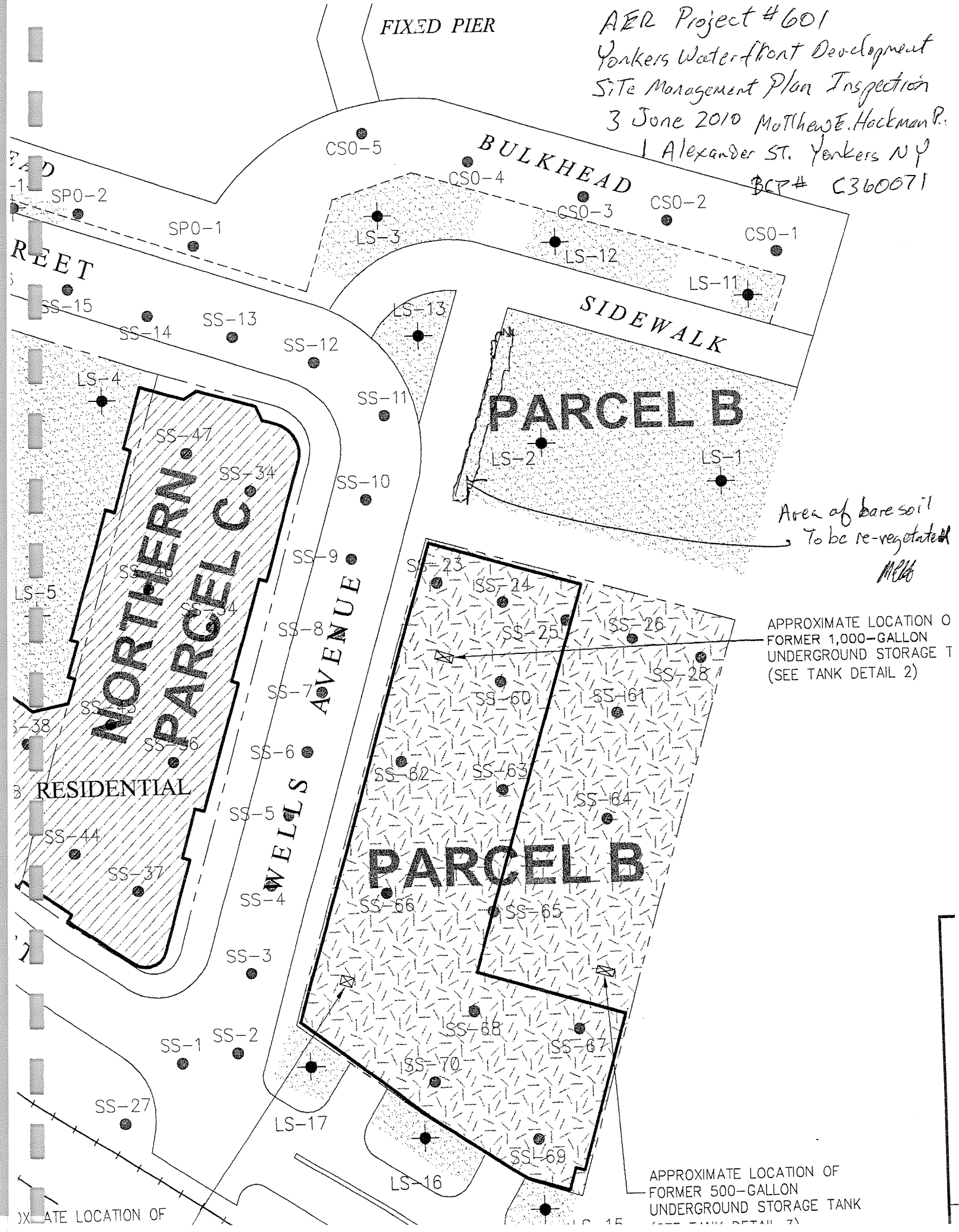
Weather conditions during inspection: Temperature 85 F
Conditions: Sunny, clear, wind 5-10 MPH

An inspection of the subject property identified the need for corrective actions described below:

CORRECTIVE ACTIONS TAKEN
(attach site sketch and photographs)
Bare soils were observed in vegetated area of Parcel B (see attached site sketch and photo) along sidewalk on North side of Wells Street west of parking garage. Bare soils must be re-vegetated to prevent erosion of cover soils.

Date completed: _____ Signature: _____
The corrective actions described above were completed in accordance with the relevant requirements of the Remedial Action Plan.

Attachments:
Site Sketch ✓
Photographs ✓
Laboratory reports


AER Project #601
Yonkers Waterfront Development
Site Management Plan Inspection
3 June 2010 Matthew E. Hackman P.E.
1 Alexander St. Yonkers NY
BCP# C360071
FIXED PIER
BULKHEAD
SIDEWALK
REET
CS0-5
CS0-4
CS0-3
CS0-2
CS0-1
SP0-2
SP0-1
LS-3
LS-12
LS-11
LS-13
SS-15
SS-14
SS-13
SS-12
SS-11
SS-10
SS-9
SS-8
SS-7
SS-6
SS-5
SS-4
SS-3
SS-2
SS-1
LS-4
LS-5
LS-2
LS-1
LS-17
LS-16
PARCEL B
NORTHERN PARCEL C
RESIDENTIAL
WELLS AVENUE
Area of bare soil
To be re-vegetated
MPH
APPROXIMATE LOCATION O
FORMER 1,000-GALLON
UNDERGROUND STORAGE T
(SEE TANK DETAIL 2)
APPROXIMATE LOCATION OF
FORMER 500-GALLON
UNDERGROUND STORAGE TANK
SS-23
SS-24
SS-25
SS-26
SS-28
SS-60
SS-61
SS-62
SS-63
SS-64
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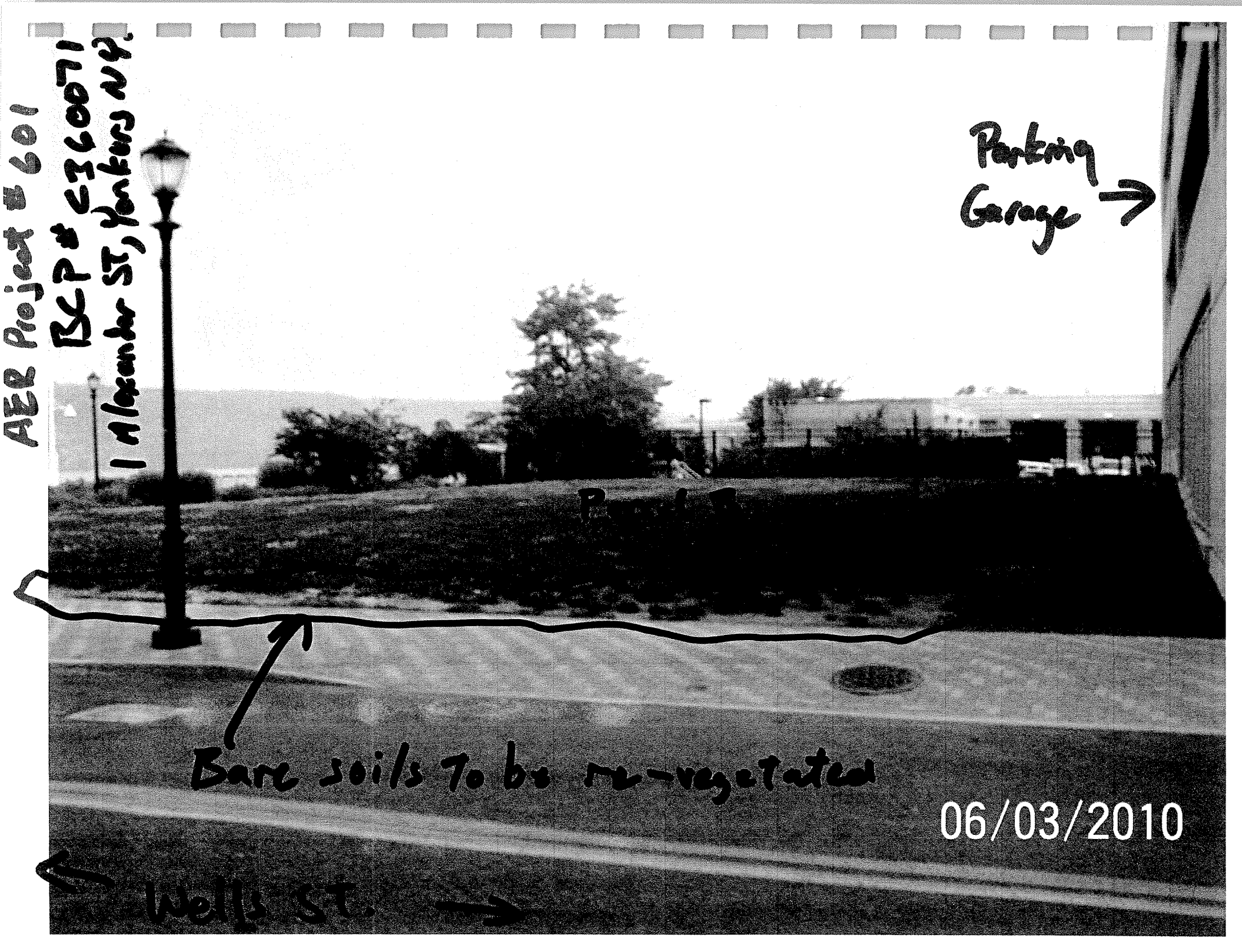
SS-38
SS-44
SS-47


AER Project # 601
BCP # C360071
1 Hamilton St, Yonkers NY
Parking Garage
Bare soils To be re-vegetated
Wells St.
06/03/2010

Enclosure 1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. C360071

Site Name Yonkers Parcels B and C

Site Address: 75 Dock St., 1 and 11 Alexander St. and Wells Ave. Zip Code: 10701
City/Town: Yonkers
County: Westchester
Allowable Use(s) (if applicable, does not address local zoning): Restricted-Residential, Commercial, and Industrial
Site Acreage: 4.5
Owner: City of Yonkers IDA
470 Nepperhan Ave., Suite 200, Yonkers, NY 10701

Reporting Period: December 31, 2008 to June 28, 2010

Verification of Site Details **Box 2**

	YES	NO
1. Is the information in Box 1 correct?	☒	☐
If NO, are changes handwritten above or included on a separate sheet?	☐	
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
If YES, is documentation or evidence that documentation has been previously submitted included with this certification?	☐	
3. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If YES, is documentation (or evidence that documentation has been previously submitted) included with this certification?	☐	
4. If use of the site is restricted, is the current use of the site consistent with those restrictions?	☒	☐
If NO, is an explanation included with this certification?	☐	
5. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☒
If YES, is the new information or evidence that new information has been previously submitted included with this Certification?	☐	
6. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), are the assumptions in the Qualitative Exposure Assessment still valid (must be certified every five years)?	☒	☐
If NO, are changes in the assessment included with this certification?	☐	

SITE NO. C360071

Box 3

Description of Institutional Controls

Parcel	Institutional Control
S_B_L Image: **2600-45**	Ground Water Use Restriction Landuse Restriction Site Management Plan
S_B_L Image: **2600-67**	Ground Water Use Restriction Landuse Restriction Site Management Plan
S_B_L Image: **2600-77**	Ground Water Use Restriction Landuse Restriction Site Management Plan
S_B_L Image: **2605-73**	Ground Water Use Restriction Landuse Restriction Site Management Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
S_B_L Image: **2600-45**	Cover System Vapor Mitigation
S_B_L Image: **2600-67**	Cover System Vapor Mitigation
S_B_L Image: **2600-77**	Cover System Vapor Mitigation
S_B_L Image: **2605-73**	Cover System Vapor Mitigation

Attach documentation if IC/ECs cannot be certified or why IC/ECs are no longer applicable. (See instructions)

Control Description for Site No. C360071

Control Description for Site No. C360071

Parcel: 2600-45

The engineering controls installed at the Controlled Property (Hudson Park North) are as follows:

1. a Sub-Slab Depressurization System consisting of three main components:

a. A permeable aggregate bed layer, to provide a high permeability zone immediately beneath the low permeability membrane, in order to allow VOCs to migrate easily to the vapor collection system and piping, and to allow for the relatively uniform propagation of vacuum under the foundation slab if an active sub-slab depressurization system (SSDS) is required in the future.

b. A vapor collection system within the aggregate layer which utilizes a high permeability, low profile, high structural strength vent layer, designed to effectively collect and transmit gasses and vapors.

c. Low-permeability membrane above the venting layer designed to limit chlorinated solvent vapors from entering the on-site structure.

The passive SSDS is capable of being upgraded to an active system if required. If it is determined by appropriate sampling of the sub-slab soil vapor below the membrane that a potential exists to impact indoor air, an active mechanical vacuum extraction system can be installed, in an appropriate weatherproof enclosure, in order to actively depressurize the permeable aggregate bed layer beneath the first floor foundation slab.

Sub-slab soil vapor monitoring can be performed at the three vacuum and sub-slab soil vapor monitoring points to determine if contaminants are present in sub-slab soil vapor in the permeable bed layer beneath the membrane and first floor foundation, to determine if a potential for indoor air intrusion exists.

2. Site Cover System

As part of the development of Parcels B and C, the majority of these Parcels were capped with a building, paved roadway, sidewalk or other "hardscape" or impermeable surface. In the areas that were not capped with impermeable surfaces, a minimum two-feet soil cap was constructed. A high visibility demarcation barrier fence (orange snow fence) was placed on top of the affected, native fill soil remaining in place and beneath the clean fill approximately two feet below the final grade. Maintenance of the cap would require the following:

a. Landscaped areas must be maintained with a pitch away from buildings to keep water from entering the building and the pooling of water in the landscaped areas.

b. The soil cap above the orange snow fence must be maintained at approximately two feet.

c. The vegetation in the landscaped areas must be kept in place and maintained to retain the cover and prevent soil erosion.

d. If the soil cap or hardscape is breached for any reason, any underlying soils removed from below the hardscape or below the orange snow fence must be stockpiled on and covered with a PVC liner and then returned to the same location below the demarcation barrier. The breached barrier must be repaired or replaced.

e. Imported, clean fill soils from above the demarcation barrier must be segregated from the deeper soils during any excavation. The imported fill may be returned to any portion of the excavation.

f. Any additional soils needed to be placed above the demarcation barrier, and imported from off-site, must be analyzed for semivolatile compounds (EPA 8270 PAH's only), volatile organic compounds (EPA 8260) and metals. The analytical results should be compared to and must not exceed the soil cleanup objectives (6NYCRR Subpart 375-6).

g. If the native stockpiled soils removed below the demarcation barrier cannot be returned to their original area, these soils must be disposed of off-site at a licensed facility in accordance with applicable rules and regulations.

h. Soils beneath the buildings, garages, sidewalks or other "hardscape" areas must be considered affected soil. Therefore, if any soils are excavated from beneath these areas, they must be placed back into the excavation and capped with "hardscape" or demarcation barrier and approximately two feet of

clean fill. Any soil not returned to the excavation must be disposed of off-site at a licensed facility in accordance with applicable rules and regulations.

i. An annual certification must be made to the NYSDEC indicating that the requirements of this Plan have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by March 1st following the calendar reporting year, along with an Annual Certification, signed and certified by the Owner, and certifying that the engineering controls (SSDS and site cover system) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

3. The institutional controls installed at the Controlled Property are as follows:

a. The impermeable surfaces, consisting of the asphalt in the parking areas and sidewalks/walkways and the soil cover in the landscaped areas and the building structures are maintained in accordance with the approved Site Management Plan (SMP).

b. All future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP.

c. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purposes.

d. The SSDS and site cover system will be operated and maintained as required by the approved SMP dated December 2008. Annual inspection and reporting will be performed in a manner specified in the approved SMP dated December 2008.

Control Description for Site No. C360071

Parcel: 2600-67

The engineering controls installed at the Controlled Property (Hudson Park North) are as follows:

1. a Sub-Slab Depressurization System consisting of three main components:

a. A permeable aggregate bed layer, to provide a high permeability zone immediately beneath the low permeability membrane, in order to allow VOCs to migrate easily to the vapor collection system and piping, and to allow for the relatively uniform propagation of vacuum under the foundation slab if an active sub-slab depressurization system (SSDS) is required in the future.

b. A vapor collection system within the aggregate layer which utilizes a high permeability, low profile, high structural strength vent layer, designed to effectively collect and transmit gasses and vapors.

c. Low-permeability membrane above the venting layer designed to limit chlorinated solvent vapors from entering the on-site structure.

The passive SSDS is capable of being upgraded to an active system if required. If it is determined by appropriate sampling of the sub-slab soil vapor below the membrane that a potential exists to impact indoor air, an active mechanical vacuum extraction system can be installed, in an appropriate weatherproof enclosure, in order to actively depressurize the permeable aggregate bed layer beneath the first floor foundation slab.

Sub-slab soil vapor monitoring can be performed at the three vacuum and sub-slab soil vapor monitoring points to determine if contaminants are present in sub-slab soil vapor in the permeable bed layer beneath the membrane and first floor foundation, to determine if a potential for indoor air intrusion exists.

2. Site Cover System

As part of the development of Parcels B and C, the majority of these Parcels were capped with a building, paved roadway, sidewalk or other "hardscape" or impermeable surface. In the areas that were not capped with impermeable surfaces, a minimum two-feet soil cap was constructed. A high visibility demarcation barrier fence (orange snow fence) was placed on top of the affected, native fill soil remaining in place and beneath the clean fill approximately two feet below the final grade. Maintenance of the cap would require the following:

a. Landscaped areas must be maintained with a pitch away from buildings to keep water from entering the building and the pooling of water in the landscaped areas.

b. The soil cap above the orange snow fence must be maintained at approximately two feet.

c. The vegetation in the landscaped areas must be kept in place and maintained to retain the cover and prevent soil erosion.

d. If the soil cap or hardscape is breached for any reason, any underlying soils removed from below the hardscape or below the orange snow fence must be stockpiled on and covered with a PVC liner and then returned to the same location below the demarcation barrier. The breached barrier must be repaired or replaced.

e. Imported, clean fill soils from above the demarcation barrier must be segregated from the deeper soils during any excavation. The imported fill may be returned to any portion of the excavation.

f. Any additional soils needed to be placed above the demarcation barrier, and imported from off-site, must be analyzed for semivolatile compounds (EPA 8270 PAH's only), volatile organic compounds (EPA 8260) and metals. The analytical results should be compared to and must not exceed the soil cleanup objectives (6NYCRR Subpart 375-6).

g. If the native stockpiled soils removed below the demarcation barrier cannot be returned to their original area, these soils must be disposed of off-site at a licensed facility in accordance with applicable rules and regulations.

h. Soils beneath the buildings, garages, sidewalks or other "hardscape" areas must be considered affected soil. Therefore, if any soils are excavated from beneath these areas, they must be placed back into the excavation and capped with "hardscape" or demarcation barrier and approximately two feet of

clean fill. Any soil not returned to the excavation must be disposed of off-site at a licensed facility in accordance with applicable rules and regulations.

i. An annual certification must be made to the NYSDEC indicating that the requirements of this Plan have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by March 1st following the calendar reporting year, along with an Annual Certification, signed and certified by the Owner, and certifying that the engineering controls (SSDS and site cover system) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

3. The institutional controls installed at the Controlled Property are as follows:

a. The impermeable surfaces, consisting of the asphalt in the parking areas and sidewalks/walkways and the soil cover in the landscaped areas and the building structures are maintained in accordance with the approved Site Management Plan (SMP).

b. All future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP.

c. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purposes.

d. The SSDS and site cover system will be operated and maintained as required by the approved SMP dated December 2008. Annual inspection and reporting will be performed in a manner specified in the approved SMP dated December 2008.

Control Description for Site No. C360071

Parcel: 2600-77

The engineering controls installed at the Controlled Property (Hudson Park North) are as follows:

1. a Sub-Slab Depressurization System consisting of three main components:

a. A permeable aggregate bed layer, to provide a high permeability zone immediately beneath the low permeability membrane, in order to allow VOCs to migrate easily to the vapor collection system and piping, and to allow for the relatively uniform propagation of vacuum under the foundation slab if an active sub-slab depressurization system (SSDS) is required in the future.

b. A vapor collection system within the aggregate layer which utilizes a high permeability, low profile, high structural strength vent layer, designed to effectively collect and transmit gasses and vapors.

c. Low-permeability membrane above the venting layer designed to limit chlorinated solvent vapors from entering the on-site structure.

The passive SSDS is capable of being upgraded to an active system if required. If it is determined by appropriate sampling of the sub-slab soil vapor below the membrane that a potential exists to impact indoor air, an active mechanical vacuum extraction system can be installed, in an appropriate weatherproof enclosure, in order to actively depressurize the permeable aggregate bed layer beneath the first floor foundation slab.

Sub-slab soil vapor monitoring can be performed at the three vacuum and sub-slab soil vapor monitoring points to determine if contaminants are present in sub-slab soil vapor in the permeable bed layer beneath the membrane and first floor foundation, to determine if a potential for indoor air intrusion exists.

2. Site Cover System

As part of the development of Parcels B and C, the majority of these Parcels were capped with a building, paved roadway, sidewalk or other "hardscape" or impermeable surface. In the areas that were not capped with impermeable surfaces, a minimum two-feet soil cap was constructed. A high visibility demarcation barrier fence (orange snow fence) was placed on top of the affected, native fill soil remaining in place and beneath the clean fill approximately two feet below the final grade. Maintenance of the cap would require the following:

a. Landscaped areas must be maintained with a pitch away from buildings to keep water from entering the building and the pooling of water in the landscaped areas.

b. The soil cap above the orange snow fence must be maintained at approximately two feet.

c. The vegetation in the landscaped areas must be kept in place and maintained to retain the cover and prevent soil erosion.

d. If the soil cap or hardscape is breached for any reason, any underlying soils removed from below the hardscape or below the orange snow fence must be stockpiled on and covered with a PVC liner and then returned to the same location below the demarcation barrier. The breached barrier must be repaired or replaced.

e. Imported, clean fill soils from above the demarcation barrier must be segregated from the deeper soils during any excavation. The imported fill may be returned to any portion of the excavation.

f. Any additional soils needed to be placed above the demarcation barrier, and imported from off-site, must be analyzed for semivolatile compounds (EPA 8270 PAH's only), volatile organic compounds (EPA 8260) and metals. The analytical results should be compared to and must not exceed the soil cleanup objectives (6NYCRR Subpart 375-6).

g. If the native stockpiled soils removed below the demarcation barrier cannot be returned to their original area, these soils must be disposed of off-site at a licensed facility in accordance with applicable rules and regulations.

h. Soils beneath the buildings, garages, sidewalks or other "hardscape" areas must be considered affected soil. Therefore, if any soils are excavated from beneath these areas, they must be placed back into the excavation and capped with "hardscape" or demarcation barrier and approximately two feet of

clean fill. Any soil not returned to the excavation must be disposed of off-site at a licensed facility in accordance with applicable rules and regulations.

i. An annual certification must be made to the NYSDEC indicating that the requirements of this Plan have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by March 1st following the calendar reporting year, along with an Annual Certification, signed and certified by the Owner, and certifying that the engineering controls (SSDS and site cover system) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

3. The institutional controls installed at the Controlled Property are as follows:

a. The impermeable surfaces, consisting of the asphalt in the parking areas and sidewalks/walkways and the soil cover in the landscaped areas and the building structures are maintained in accordance with the approved Site Management Plan (SMP).

b. All future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP.

c. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purposes.

d. The SSDS and site cover system will be operated and maintained as required by the approved SMP dated December 2008. Annual inspection and reporting will be performed in a manner specified in the approved SMP dated December 2008.

Control Description for Site No. C360071

Parcel: 2605-73

The engineering controls installed at the Controlled Property (Hudson Park North) are as follows:

1. a Sub-Slab Depressurization System consisting of three main components:

a. A permeable aggregate bed layer, to provide a high permeability zone immediately beneath the low permeability membrane, in order to allow VOCs to migrate easily to the vapor collection system and piping, and to allow for the relatively uniform propagation of vacuum under the foundation slab if an active sub-slab depressurization system (SSDS) is required in the future.

b. A vapor collection system within the aggregate layer which utilizes a high permeability, low profile, high structural strength vent layer, designed to effectively collect and transmit gasses and vapors.

c. Low-permeability membrane above the venting layer designed to limit chlorinated solvent vapors from entering the on-site structure.

The passive SSDS is capable of being upgraded to an active system if required. If it is determined by appropriate sampling of the sub-slab soil vapor below the membrane that a potential exists to impact indoor air, an active mechanical vacuum extraction system can be installed, in an appropriate weatherproof enclosure, in order to actively depressurize the permeable aggregate bed layer beneath the first floor foundation slab.

Sub-slab soil vapor monitoring can be performed at the three vacuum and sub-slab soil vapor monitoring points to determine if contaminants are present in sub-slab soil vapor in the permeable bed layer beneath the membrane and first floor foundation, to determine if a potential for indoor air intrusion exists.

2. Site Cover System

As part of the development of Parcels B and C, the majority of these Parcels were capped with a building, paved roadway, sidewalk or other "hardscape" or impermeable surface. In the areas that were not capped with impermeable surfaces, a minimum two-feet soil cap was constructed. A high visibility demarcation barrier fence (orange snow fence) was placed on top of the affected, native fill soil remaining in place and beneath the clean fill approximately two feet below the final grade. Maintenance of the cap would require the following:

a. Landscaped areas must be maintained with a pitch away from buildings to keep water from entering the building and the pooling of water in the landscaped areas.

b. The soil cap above the orange snow fence must be maintained at approximately two feet.

c. The vegetation in the landscaped areas must be kept in place and maintained to retain the cover and prevent soil erosion.

d. If the soil cap or hardscape is breached for any reason, any underlying soils removed from below the hardscape or below the orange snow fence must be stockpiled on and covered with a PVC liner and then returned to the same location below the demarcation barrier. The breached barrier must be repaired or replaced.

e. Imported, clean fill soils from above the demarcation barrier must be segregated from the deeper soils during any excavation. The imported fill may be returned to any portion of the excavation.

f. Any additional soils needed to be placed above the demarcation barrier, and imported from off-site, must be analyzed for semivolatile compounds (EPA 8270 PAH's only), volatile organic compounds (EPA 8260) and metals. The analytical results should be compared to and must not exceed the soil cleanup objectives (6NYCRR Subpart 375-6).

g. If the native stockpiled soils removed below the demarcation barrier cannot be returned to their original area, these soils must be disposed of off-site at a licensed facility in accordance with applicable rules and regulations.

h. Soils beneath the buildings, garages, sidewalks or other "hardscape" areas must be considered affected soil. Therefore, if any soils are excavated from beneath these areas, they must be placed back into the excavation and capped with "hardscape" or demarcation barrier and approximately two feet of

clean fill. Any soil not returned to the excavation must be disposed of off-site at a licensed facility in accordance with applicable rules and regulations.

i. An annual certification must be made to the NYSDEC indicating that the requirements of this Plan have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by March 1st following the calendar reporting year, along with an Annual Certification, signed and certified by the Owner, and certifying that the engineering controls (SSDS and site cover system) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

3. The institutional controls installed at the Controlled Property are as follows:

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b. All future soil disturbance activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP.

c. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purposes.

d. The SSDS and site cover system will be operated and maintained as required by the approved SMP dated December 2008. Annual inspection and reporting will be performed in a manner specified in the approved SMP dated December 2008.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

3. If this site has an Operation and Maintenance (O&M) Plan (or equivalent as required in the Decision Document);

   I certify by checking "YES" below that the O&M Plan Requirements (or equivalent as required in the Decision Document) are being met.

YES	NO
☒	☐

4. If this site has a Monitoring Plan (or equivalent as required in the remedy selection document);

   I certify by checking "YES" below that the requirements of the Monitoring Plan (or equivalent as required in the Decision Document) is being met.

YES	NO
☒	☐

IC CERTIFICATIONS
SITE NO. C360071

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I CHRIS KOPLEY at ADVANCE ENVIRONMENTAL DEVELOPMENT
print name print business address

am certifying as REMEDIAL PARTY (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner or Remedial Party Rendering Certification — 6/3/10 Date

IC/EC CERTIFICATIONS

Box 7

QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE

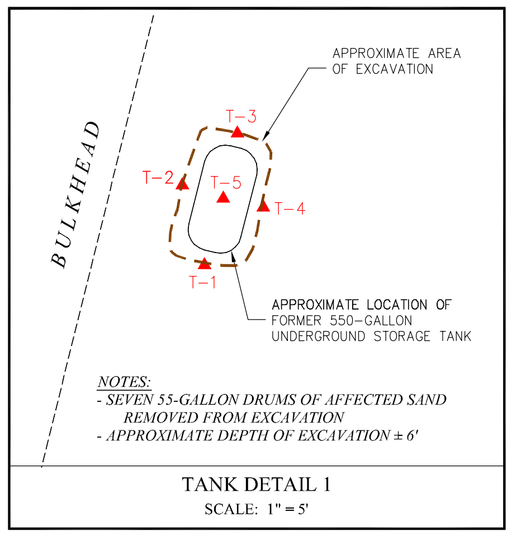
I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Matthew E. Hackman at 97 Asylum Rd, Warwick RI 02886
print name print business address

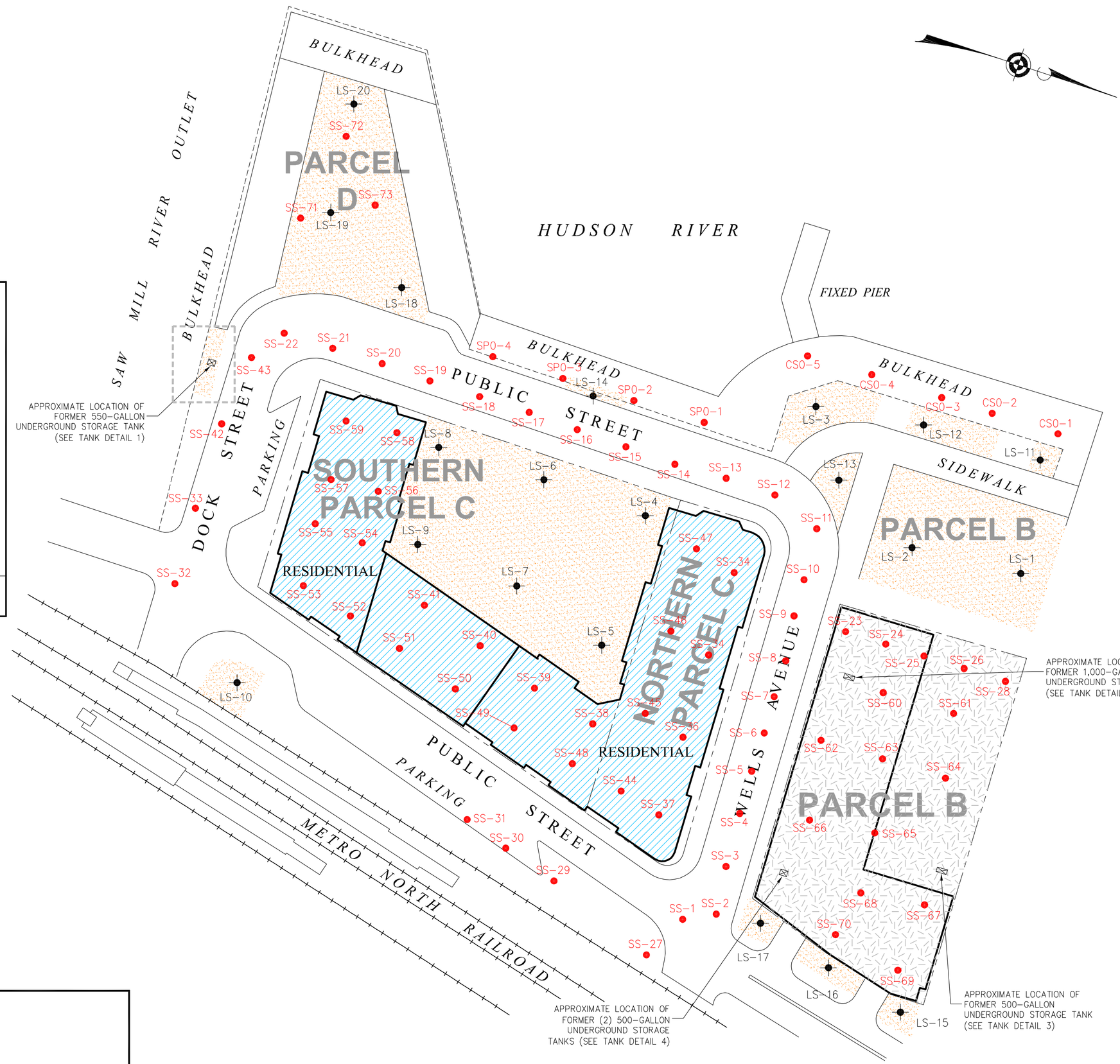
am certifying as a Qualified Environmental Professional for the Collins Yonkers II LLC

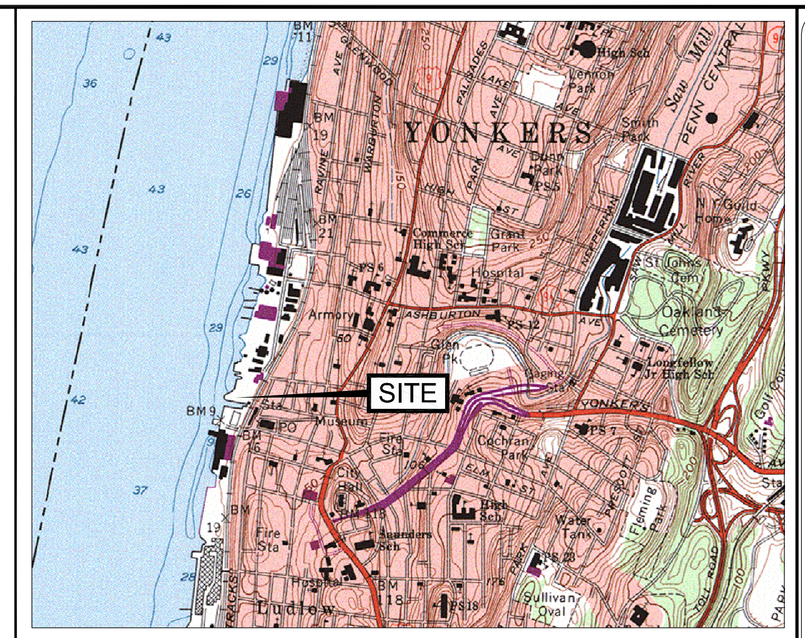
(Owner or Remedial Party) for the Site named in the Site Details Section of this form.

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification — N.Y.P.E. 083778 Stamp (if Required) — 3 June 2010 Date



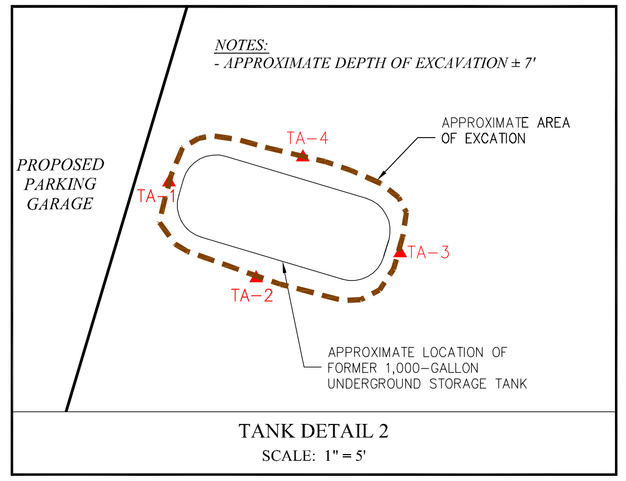
TANK DETAIL 1
SCALE: 1" = 5'



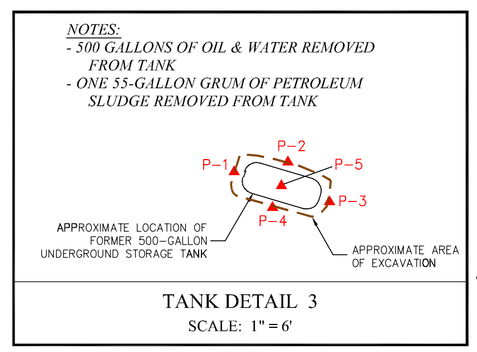


SITE LOCATOR
APPROXIMATE SCALE: 1" = 1,500'

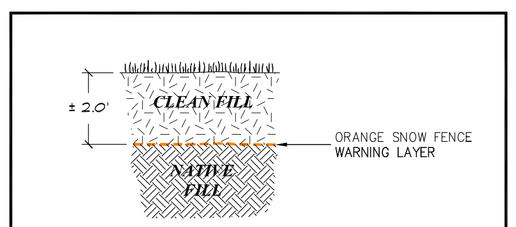
QUADRANGLE LOCATION



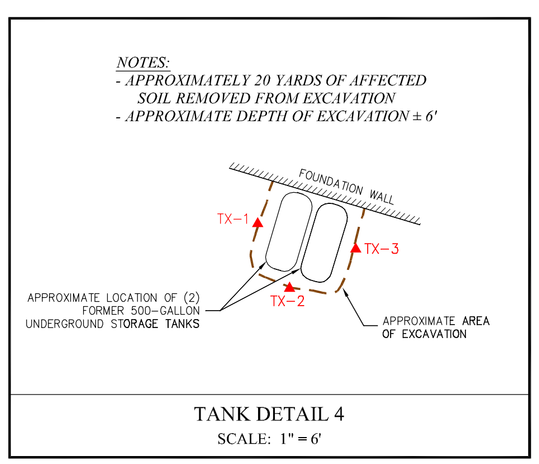
TANK DETAIL 2
SCALE: 1" = 5'



TANK DETAIL 3
SCALE: 1" = 6'



TYPICAL WARNING LAYER SECTION
SCALE: 1" = 3'



TANK DETAIL 4
SCALE: 1" = 6'

LEGEND

- APPROXIMATE LOCATION OF WARNING LAYER/ ORANGE SNOW FENCE
- APPROXIMATE LOCATION OF SUBSLAB DEPRESSURIZATION SYSTEM
- APPROXIMATE AREA OF SOIL SAMPLES COLLECTED FROM FOUNDATION EXCAVATIONS
- APPROXIMATE LOCATION OF IMPACTED SOIL SAMPLE COLLECTED BY AER
- SS-27 ● DISCRETE GRAB SOIL SAMPLE COLLECTED BY AER
- T-1 ▲ APPROXIMATE LOCATION OF TANK GRAVE SOIL SAMPLES
- APPROXIMATE LOCATION OF PROPERTY LINE

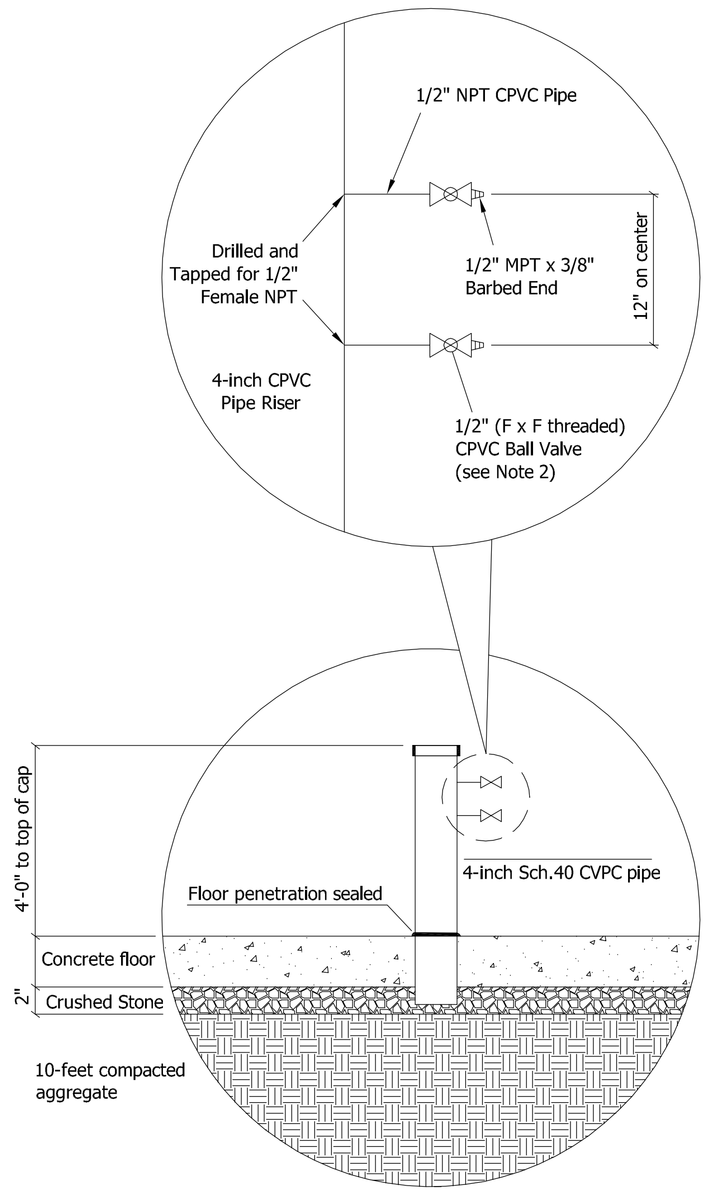
0 20 40 60 80
Scale in Feet

P.E. NAME _____
P.E. SIGNATURE _____
DATE: _____

RESEARCH ◆ REMEDIATE ◆ REBUILD
AER
Advanced Environmental Redevelopement, LLC
900 Madison Avenue, Suite 213 Bridgeport, Connecticut 06606 www.aercl.com

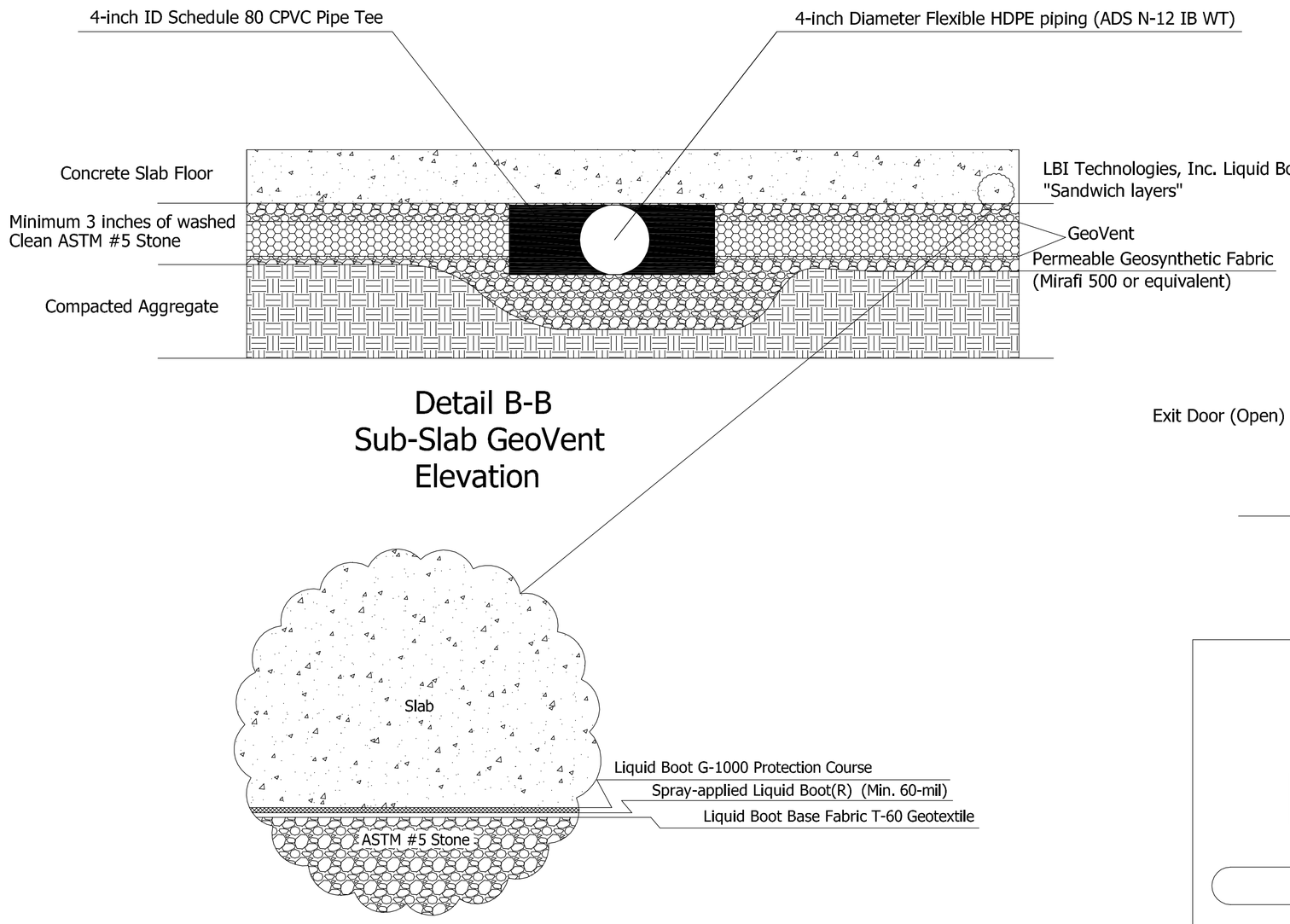
HUDSON PARK NORTH
PARCELS B & C, YONKERS, NY
SITE LOCATION PLAN AND AS-BUILT WARNING LAYER INSTALLATION

DRAWN BY:	JJS
APPROVED BY:	CK
REVISION DATE:	12/20/08
FILE No.	0368-1G
DATE CREATED	3/29/06
SCALE	AS SHOWN
PROJECT No.	0368
FIGURE No.	1

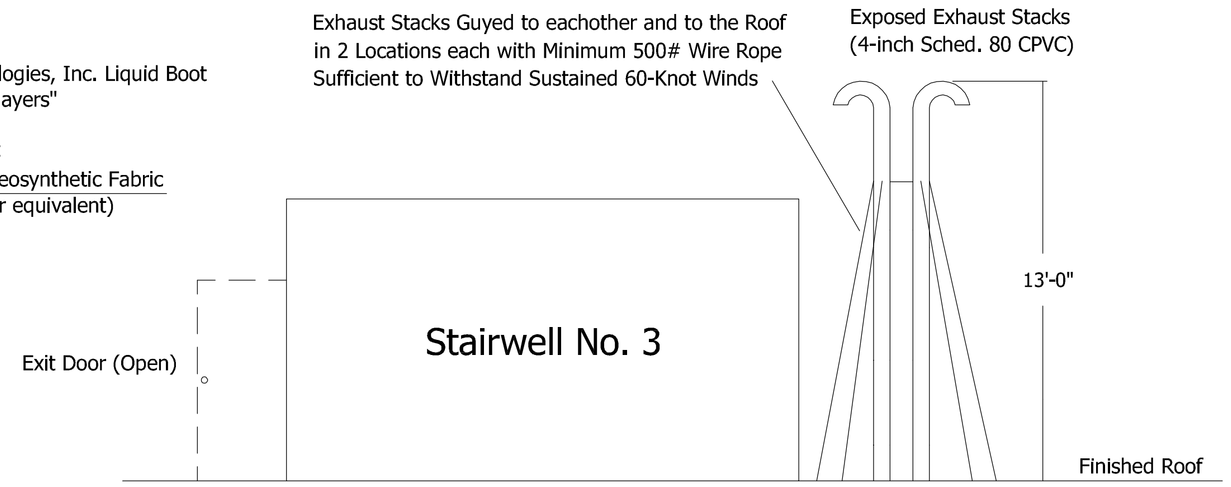


Detail A-A
Utility Closet Vacuum Stubbed-Out
Elevation View

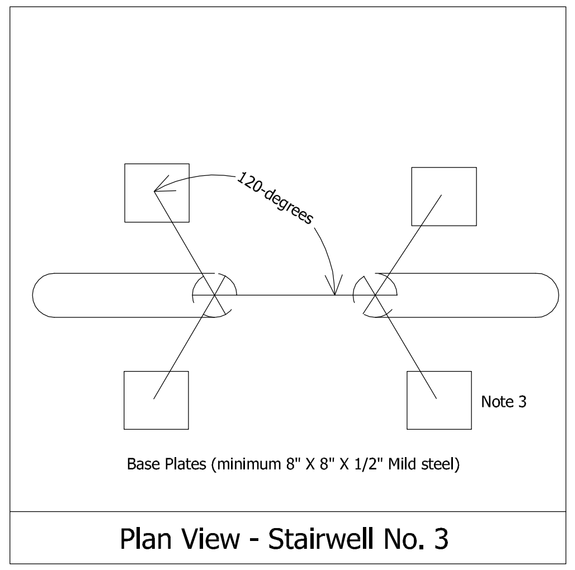
Note 1: Both Assemblies identical
Note 2: Hayward True Union or equivalent



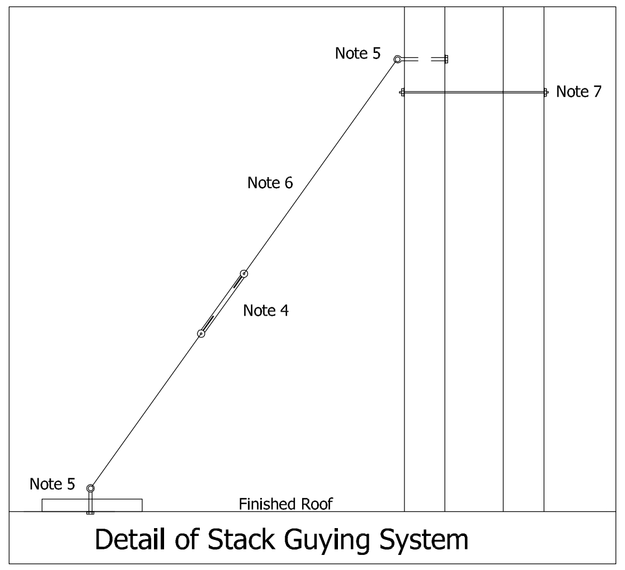
Detail B-B
Sub-Slab GeoVent
Elevation



4th Floor Exhaust Stacks



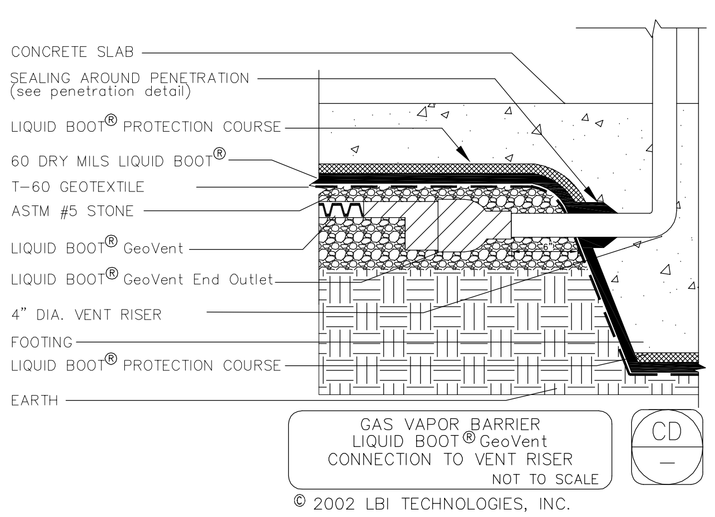
Plan View - Stairwell No. 3



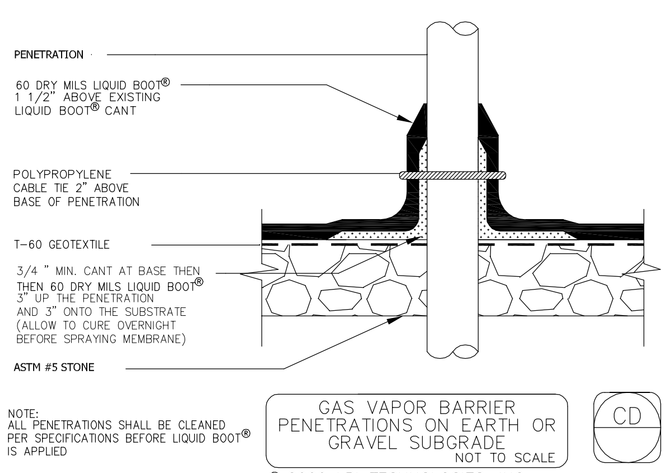
Detail of Stack Guying System

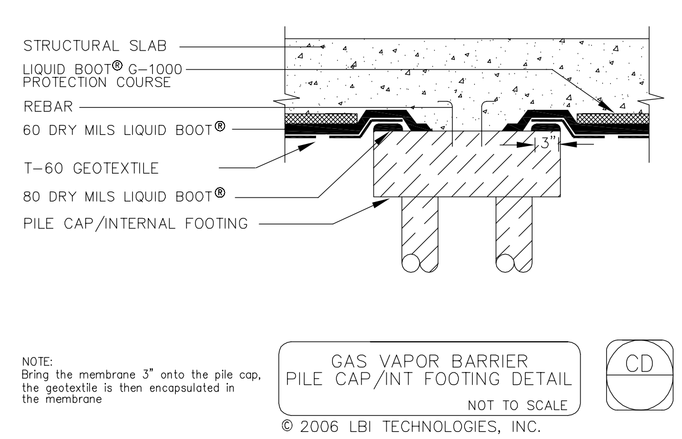
NOTES:

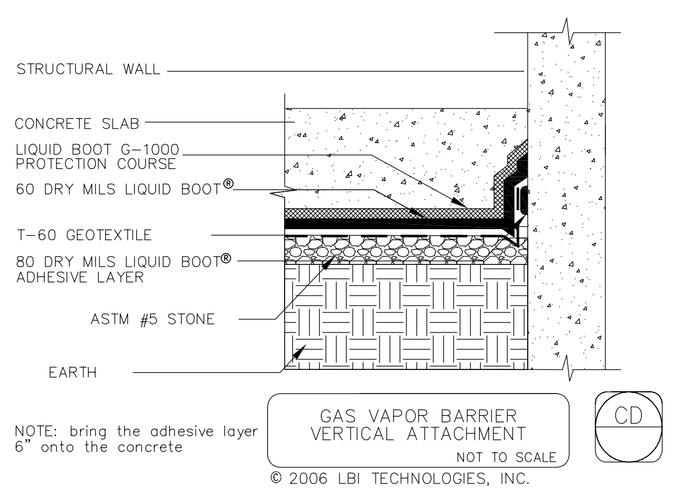
Note 1- 180 degree Stack Vent formed by connecting two-90-degree Ells with a 12-inch long nipple.
Note 2- Exhaust Stacks Guyed to each other and to the Roof in 2 Locations each with Minimum 400# Wire Rope Sufficient to Withstand Sustained 60-Knot Winds.
Note 3- Roof Anchoring System to be Approved by Structural Engineer. Base Plates to be Secured at all 4 Corners with 3/8" 316 SS Bolts to the Roof Substrate Adequate to Withstand 400# Rating.
Note 4- 3/8" x 6" E/E T/B S/S Working Load Limit (WLL) 900#.
Note 5- 3/8"X6" S/S EYEBOLT (WLL 1,000#) Backed by 3/16 SS Washer.
Note 6- 1/16" 304 SS 7 X 7 Aircraft Cable (WLL 480#).
Note 7- 3/8" SS All Thread with 3/8" SS Nuts and Washers.



GeoVent Connection to Vent Riser







Liquid Boot Attachment to Vertical

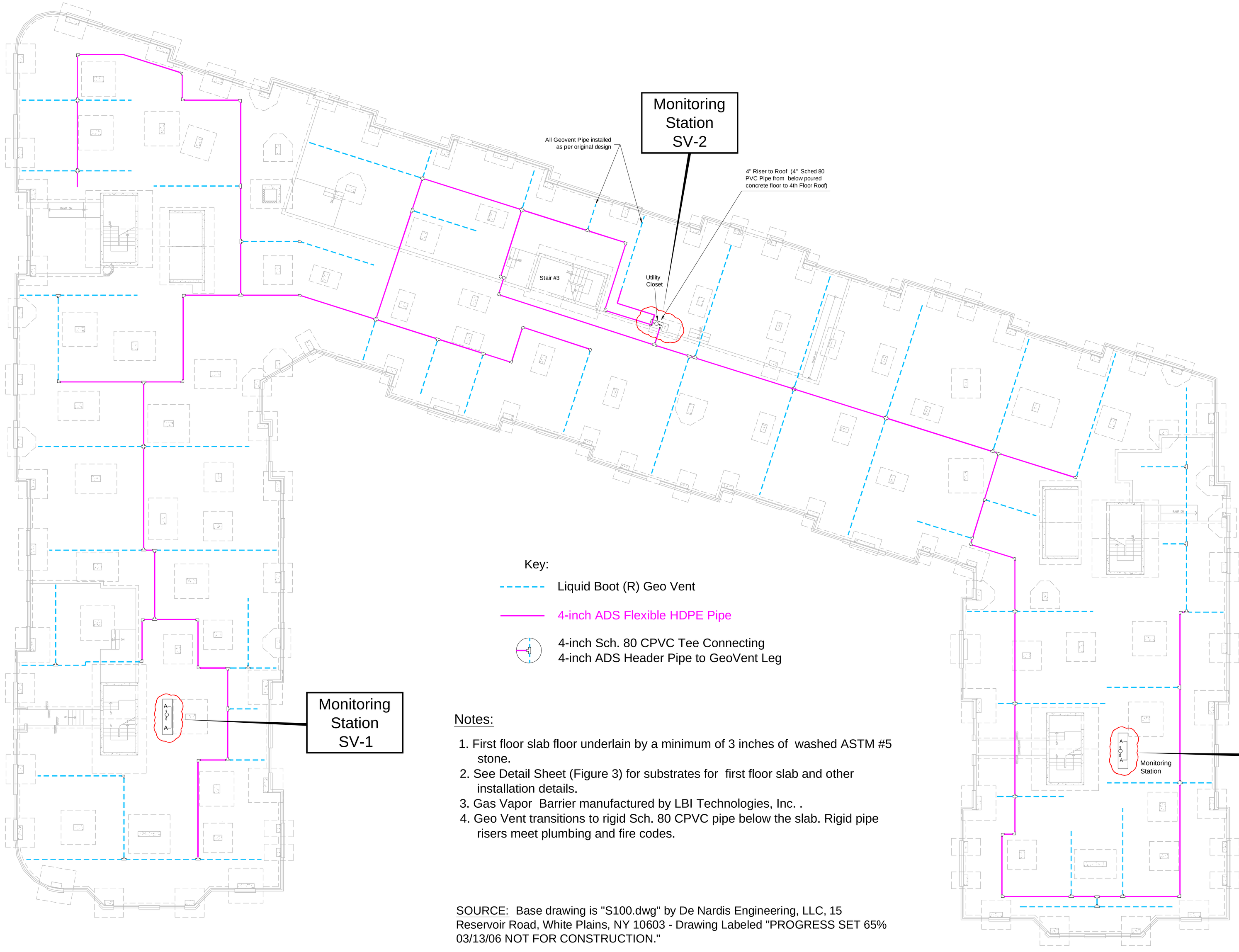
Note:
LBI Drawings shown for connection & sealing method purposes only.

RESEARCH ◆ REMEDIATE ◆ REBUILD
AER
Advanced Environmental Redevelopement, LLC
900 Madison Avenue, Suite 213 Bridgeport, Connecticut 06606 www.aerct.com

HUDSON PARK NORTH
PARCELS B & C, YONKERS, NY
SUB SLAB DEPRESSURIZATION SYSTEM
DESIGN DETAIL SHEET

DRAWN BY: JJS
APPROVED BY: CK
REVISION DATE: 12/20/08
FILE No. 0368-F3b
DATE CREATED 3/29/06
SCALE AS SHOWN
PROJECT No. 0368
FIGURE No. 2

STATE OF NEW YORK
MATTHEW E. HACKMAN
063778
LICENSED PROFESSIONAL ENGINEER
P.E. NAME: Matthew E. Hackman
P.E. SIGNATURE: Matthew E. Hackman
DATE: 23 December 2008



Key:

- Liquid Boot (R) Geo Vent
- 4-inch ADS Flexible HDPE Pipe
- 4-inch Sch. 80 CPVC Tee Connecting 4-inch ADS Header Pipe to GeoVent Leg

Notes:

1. First floor slab floor underlain by a minimum of 3 inches of washed ASTM #5 stone.
2. See Detail Sheet (Figure 3) for substrates for first floor slab and other installation details.
3. Gas Vapor Barrier manufactured by LBI Technologies, Inc. .
4. Geo Vent transitions to rigid Sch. 80 CPVC pipe below the slab. Rigid pipe risers meet plumbing and fire codes.

SOURCE: Base drawing is "S100.dwg" by De Nardis Engineering, LLC, 15 Reservoir Road, White Plains, NY 10603 - Drawing Labeled "PROGRESS SET 65% 03/13/06 NOT FOR CONSTRUCTION."

S:\ADV-Red\Drawings from others\yonkers\Fig 3 sheet.dwg

P.E. NAME _____

P.E. SIGNATURE _____

DATE: _____

06-0368 AER - Hudson Park North Active Soil Depressurization System - Bldg C - Sub - Slab (Figure 1) (3-27-06).dwg

RESEARCH ◈ REMEDIATE ◈ REBUILD

Advanced Environmental Redevelopement, LLC
900 Madison Avenue, Suite 213 Bridgeport, Connecticut 06606 www.aerct.com

HUDSON PARK NORTH
PARCELS B & C, YONKERS, NY

SUB SLAB DEPRESSURIZATION SYSTEM
FIRST FLOOR - AS-BUILT DRAWING

DRAWN BY:	JJS
APPROVED BY:	CK
REVISION DATE:	11/16/09
FILE No.	0368-F1b
DATE CREATED	3/29/06
SCALE	3/32"=1'-0"
PROJECT No.	0368
FIGURE No.	3

APPENDIX B
ANALYTICAL REPORTS
VALIDATION REPORTS

L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

DATA VALIDATION REPORT

ORGANIC ANALYSES

EPA Compendium Method TO-15
VOLATILES BY GC/MS

For Soil Gas Samples Collected
October 21, 2009
Hudson Park, Yonkers, New York
AER, LLC.

SAMPLE DELIVERY GROUP NUMBER: NY134357
TestAmerica South Burlington, VT.

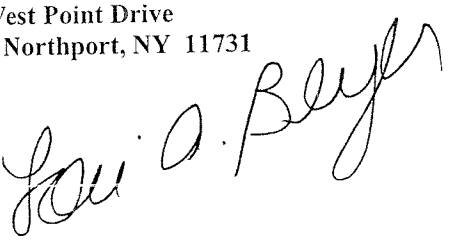
SUBMITTED TO:

Mr. Todd Snowden
AER, LLC.
900 Madison Avenue, Suite 213
Bridgeport, CT 06606

May 16, 2010

PREPARED BY:

Lori A. Beyer/President
L.A.B. Validation Corp.
14 West Point Drive
East Northport, NY 11731



Phone (516) 523-7891 email LABValidation@aol.com

Hudson Park, Yonkers, New York; October 2009
Data Validation Report: Volatile Organics – TO15

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Data Qualifier Definitions
Sample Receipt

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- 1.4 Laboratory Control Sample
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- 1.6 GC/MS Instrument Performance Check
- 1.7 Initial and Continuing Calibrations
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- 1.10 Tentatively Identified Compounds
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APPENDICES:

A. Data Summary Tables with Qualifications
B. Chain of Custody Documents
C. SDG Narratives
D. Tentatively Identified Compounds (TICs)

Introduction:

A validation was performed on three (3) soil gas [air] samples for Volatile Organic analysis collected by AER and submitted to TestAmerica South Burlington, VT. for subsequent analysis under chain of custody documentation. This report contains the laboratory and validation results for the three (3) field samples itemized below. The samples were collected on October 21, 2009.

The samples were analyzed by TestAmerica South Burlington, VT. utilizing EPA Method TO-15 and in accordance with NYSDEC Analytical Services Protocol (10/95) and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodology employed. The analytical testing consisted of the selected TO-15 Target Compound List (TCL) of analytes for Volatile Organics listed in Appendix A.

The data was evaluated in accordance with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (Publication 9240.1-05) and in conjunction with the analytical methodology for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following field soil gas/air samples:

Sample Identification	Laboratory Identification(s)	Sample Matrix	Collection Date
SV-1	811578	Air	10/21/09
SV-2	811579	Air	10/21/09
SV-3	811580	Air	10/21/09

Data Qualifier Definitions:

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

Sample Receipt:

The Chain of Custody document from 10/21/09 indicates that three (3) air samples were received at TestAmerica South Burlington, VT. via Federal Express on 10/23/09 after completion of the sampling event. Sample login notes and the chain of custody indicate that at the Validated Time of Sample Receipt (VTSR) at the laboratory no discrepancies were notated and therefore the integrity of the canister samples is assumed to be good.

The data summary tables included in Appendix A includes all usable (qualified) and unusable (rejected) results for the samples identified above. These tables summarize the detailed narrative section of the report. All data validation qualifications have been reported in the excel spreadsheet in bold for ease of review and verification.

NOTE:
L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

Volatile Organics by EPA Compendium Method TO-15

The following method criteria were reviewed: holding times, surrogate standards, LCS, Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification and Quantitation, Reported Quantitation Limits and Overall System Performance. The volatile results were considered to be valid and useable as noted on the data summary tables in Appendix A and within the following text:

1.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Air samples pertaining to this SDG were performed within the method required thirty (30) days from sample collection for analysis. No qualifications were required based upon holding time criteria.

1.2 Surrogate Standards

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contact specification, qualifications are required to be applied to associated samples and analytes.

Air samples were not spiked with surrogate standards.

1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

Matrix Spike/Matrix Spike Duplicate analysis was not performed on samples pertaining to this SDG.

1.4 Laboratory Control Sample

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

Acceptable LCS was analyzed.

Acceptable recoveries for all spiked components were observed.

1.5 Blank Contamination

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Storage blanks measure cross-contamination during sample storage of the field samples.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Methylene Chloride, Acetone, Toluene & 2-Butanone	Sample Conc. Is >CRQL, but </=10x blank value	Sample Conc. is <CRQL and </=10x blank value	Sample Conc. is >CRQL and >10x blank value
Other Contaminants	Sample Conc. Is >CRQL, but </=5x blank value	Sample Conc. Is <CRQL and </=5x blank value	Sample Conc. is >CRQL and >5x blank value

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

A) **Method Blank Contamination:**

Target analytes were not detected in the method blanks associated with sample analysis.

B) **Field Blank Contamination:**

Field Blank analysis was not conducted for this SDG.

C) **Trip Blank Contamination:**

Trip Blank analysis was not submitted with this SDG.

D) **Storage Blank Contamination:**

Storage blanks were not submitted for this SDG. It should be noted that storage blanks are not mandated by EPA Method TO-15.

1.6 GC/MS Instrument Performance Check

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses conducted for this SDG.

1.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:
The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

All the response factors for the target analytes reported were found to be within acceptable limits (>/=0.05), for the initial and continuing calibrations.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):
Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <30% and %D must be <25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >30% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 30% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high level results will be qualified, "J" in the portion of the curve where non linearity exists.

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (30%) for all target compounds.

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (25%) for all target compounds with the following exceptions:

CCAL 10/31/09:

Methyl Isobutyl Ketone – 26.1%; "J/UJ" samples SV-1, SV-2 and SV-3

Trans-1,3-Dichloropropene – 28.1%; "J/UJ" samples SV-1, SV-2 and SV-3

Methyl Butyl Ketone – 28.7%; "J/UJ" samples SV-1, SV-2 and SV-3

1.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

Internal Standard area responses met QC requirements for all analysis pertaining to this SDG.

1.9 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.

1.10 Tentatively Identified Compounds (TICs)

TICs were reported in accordance with the project requirements. The identification must be considered tentative (both quantitative and qualitative) due to the lack of required compound specific response factors. Consequently all concentrations should be considered estimate, "J" and as a result of the qualitative uncertainty should be qualified, "N" where an identification has been made.

GC/MS "3 best match spectra" met method criteria.

TICs are presented in Appendix E and primarily consist of unknown hydrocarbons and aromatic compounds. Compounds suspected to be attributed to column bleed were rejected, "R."

1.11 Compound Quantification and Reported Detection Limits

GC/MS quantitative analysis is considered to be acceptable. Correct internal standards and response factors and air volumes were used to calculate final concentrations.

Sample results have been presented in ug/m3 as well as ppbv.

1.12 Overall System Performance

GC/MS analytical methodology was acceptable for this analysis.

All samples were analyzed undiluted.

Analysis of SV-2 resulted in Acetone, Isopropyl Alcohol, Methyl Ethyl Ketone and Tetrahydrofuran concentrations exceeding the instruments linear calibration range. Diluted analysis was not submitted in the data package. Reported results must be considered estimated, biased low, "J."

SV-3 resulted in Tetrahydrofuran concentrations over the linear calibration range. Again, results must be considered estimated, "J" biased low.

Reviewer's Signature Lou A. Bey Date 05/16/10

L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

Appendix A
Data Summary Tables
With Qualifications

Phone (516) 523-7891 email LABValidation@aol.com

VOLATILE ORGANICS EPA Compendium METHOD TO-15

Hudson Park, Yonkers, NY
SDG NY134357

	SV-1	SV-2	SV-3
AER Sample ID:	811578	811579	811580
Laboratory ID:			
Sampling Date:	10/21/2009	10/21/2009	10/21/2009
Dilution	1	1	1

Cas #	Analyte	Units:			
75-71-8	Dichlorodifluoromethane	ppbv	0.50 U	0.50 U	0.62
76-14-2	1,2-Dichlorotetrafluoroethane	ppbv	0.20 U	0.20 U	0.20 U
74-87-3	Chloromethane	ppbv	4.7	15	4.9
106-99-0	1,3-Butadiene	ppbv	0.50 U	0.50 U	0.50 U
74-83-9	Bromomethane	ppbv	0.20 U	0.20 U	0.20 U
75-01-4	Vinyl Chloride	ppbv	0.20 U	0.20 U	0.96
75-00-3	Chloroethane	ppbv	0.50 U	12	0.50 U
75-09-2	Methylene Chloride	ppbv	0.97	1.2	0.77
107-05-1	Allyl Chloride (3-Chloropropene)	ppbv	0.50 U	0.50 U	0.50 U
593-60-2	Bromoethene	ppbv	0.20 U	0.20 U	0.20 U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	ppbv	0.20 U	0.20 U	0.20 U
75-35-4	1,1-Dichloroethene	ppbv	0.20 U	0.20 U	0.20 U
67-64-1	Acetone	ppbv	24	560 J	23
67-63-0	Isopropyl Alcohol	ppbv	19	160 J	27
75-15-0	Carbon Disulfide	ppbv	1.2	0.66	5.4
75-65-0	tert-Butyl Alcohol	ppbv	5.0 U	5.0 U	5.0 U
1634-04-4	Methyl tert-Butyl Ether	ppbv	0.50 U	0.50 U	0.50 U
156-60-5	trans-1,2-Dichloroethene	ppbv	0.20 U	0.20 U	0.20 U
110-54-3	n-Hexane	ppbv	0.65	0.94	1.5
75-34-3	1,1-Dichloroethane	ppbv	0.20 U	0.20 U	0.20 U
75-69-4	Trichlorofluoromethane	ppbv	0.94	0.38	0.59
78-93-3	Methyl Ethyl Ketone	ppbv	3.4	390 J	5.7
156-59-2	cis-1,2-Dichloroethene	ppbv	0.20 U	0.20 U	0.20 U
109-99-9	Tetrahydrofuran	ppbv	5.0 U	470 J	180 J
67-66-3	Chloroform	ppbv	0.42	0.30	0.40
71-55-6	1,1,1-Trichloroethane	ppbv	0.28	0.20 U	0.20 U
110-82-7	Cyclohexane	ppbv	0.25	0.43	7.0
56-23-5	Carbon Tetrachloride	ppbv	0.20 U	0.20 U	0.20 U
540-84-1	2,2,4-Trimethylpentane	ppbv	0.40	0.47	9.8
71-43-2	Benzene	ppbv	0.73	0.76	0.81
540-59-0	1,2-Dichloroethene (total)	ppbv	0.20 U	0.20 U	0.20 U
107-06-2	1,2-Dichloroethane	ppbv	0.20 U	0.20 U	0.20 U
142-82-5	n-Heptane	ppbv	0.81	1.2	0.90
79-01-6	Trichloroethene	ppbv	0.66	0.22	1.4
78-87-5	1,2-Dichloropropane	ppbv	0.20 U	0.20 U	0.20 U
123-91-1	1,4-Dioxane	ppbv	5.0 U	5.0 U	5.0 U
75-27-4	Bromodichloromethane	ppbv	0.20 U	0.20 U	0.20 U
10061-01-5	cis-1,3-Dichloropropene	ppbv	0.20 U	0.20 U	0.20 U
108-10-1	Methyl Isobutyl Ketone	ppbv	0.50 UJ	0.50 UJ	0.50 UJ
108-88-3	Toluene	ppbv	2.7	2.8	3.1
10061-02-6	trans-1,3-Dichloropropene	ppbv	0.20 UJ	0.20 UJ	0.20 UJ
79-00-5	1,1,2-Trichloroethane	ppbv	0.20 U	0.20 U	0.20 U
127-18-4	Tetrachloroethene	ppbv	0.44	1.3	0.69
591-78-6	Methyl Butyl Ketone	ppbv	0.50 UJ	0.50 UJ	0.50 UJ
124-48-1	Dibromochloromethane	ppbv	0.20 U	0.20 U	0.20 U
106-93-4	1,2-Dibromoethane	ppbv	0.20 U	0.20 U	0.20 U
108-90-7	Chlorobenzene	ppbv	0.20 U	0.20 U	0.20 U
100-41-4	Ethylbenzene	ppbv	0.39	0.40	0.42
1330-20-7	Xylene (m,p)	ppbv	1.2	1.2	1.2
95-47-6	Xylene (o)	ppbv	0.36	0.36	0.36
100-42-5	Styrene	ppbv	0.20 U	0.20 U	0.22
75-25-2	Bromoform	ppbv	0.20 U	0.20 U	0.20 U
79-34-5	1,1,2,2-Tetrachloroethane	ppbv	0.20 U	0.20 U	0.20 U
1330-20-7	Xylene (total)	ppbv	1.6	1.6	1.6
622-96-8	4-Ethyltoluene	ppbv	0.20 U	0.20 U	0.20 U
108-67-8	1,3,5-Trimethylbenzene	ppbv	0.20 U	0.20 U	0.20 U
95-49-8	2-Chlorotoluene	ppbv	0.20 U	0.20 U	0.20 U
95-63-6	1,2,4-Trimethylbenzene	ppbv	0.45	0.26	0.31
541-73-1	1,3-Dichlorobenzene	ppbv	4.2	2.6	1.9
106-46-7	1,4-Dichlorobenzene	ppbv	0.20 U	0.20 U	0.20 U
95-50-1	1,2-Dichlorobenzene	ppbv	0.20 U	0.20 U	0.20 U
120-82-1	1,2,4-Trichlorobenzene	ppbv	0.50 U	0.50 U	0.50 U
87-68-3	Hexachlorobutadiene	ppbv	0.20 U	0.20 U	0.20 U
	Tentatively Identified Compounds	ppbv	159 J	88 J	109 J

VOLATILE ORGANICS EPA Compendium METHOD TO-15

Hudson Park, Yonkers, NY
SDG NY134357
AER Sample ID:
Laboratory ID:
Sampling Date:
Dilution

Cas #	Analyte	SV-1 811578 10/21/2009 1	SV-2 811579 10/21/2009 1	SV-3 811580 10/21/2009 1
	Units:			
75-71-8	Dichlorodifluoromethane	ug/m3 2.5 U	2.5 U	3.1
76-14-2	1,2-Dichlorotetrafluoroethane	ug/m3 1.4 U	1.4 U	1.4 U
74-87-3	Chloromethane	ug/m3 9.7	31	10
106-99-0	1,3-Butadiene	ug/m3 1.1 U	1.1 U	1.1 U
74-83-9	Bromomethane	ug/m3 0.78 U	0.78 U	0.78 U
75-01-4	Vinyl Chloride	ug/m3 0.51 U	0.51 U	2.5
75-00-3	Chloroethane	ug/m3 1.3 U	32	1.3 U
75-09-2	Methylene Chloride	ug/m3 3.4	4.2	2.7
107-05-1	Allyl Chloride (3-Chloropropene)	ug/m3 1.6 U	1.6 U	1.6 U
593-60-2	Bromoethene	ug/m3 0.87 U	0.87 U	0.87 U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	ug/m3 1.5 U	1.5 U	1.5 U
75-35-4	1,1-Dichloroethene	ug/m3 0.79 U	0.79 U	0.79 U
67-64-1	Acetone	ug/m3 57	**1300 J**	55
67-63-0	Isopropyl Alcohol	ug/m3 47	**390 J**	66
75-15-0	Carbon Disulfide	ug/m3 3.7	2.1	17
75-65-0	tert-Butyl Alcohol	ug/m3 15 U	15 U	15 U
1634-04-4	Methyl tert-Butyl Ether	ug/m3 1.8 U	1.8 U	1.8 U
156-60-5	trans-1,2-Dichloroethene	ug/m3 0.79 U	0.79 U	0.79 U
110-54-3	n-Hexane	ug/m3 2.3	3.3	5.3
75-34-3	1,1-Dichloroethane	ug/m3 0.81 U	0.81 U	0.81 U
75-69-4	Trichlorofluoromethane	ug/m3 5.3	2.1	3.3
78-93-3	Methyl Ethyl Ketone	ug/m3 10	**1200 J**	17
156-59-2	cis-1,2-Dichloroethene	ug/m3 0.79 U	0.79 U	0.79 U
109-99-9	Tetrahydrofuran	ug/m3 15 U	**1400 J**	**530 J**
67-66-3	Chloroform	ug/m3 2.1	1.5	2.0
71-55-6	1,1,1-Trichloroethane	ug/m3 1.5	1.1 U	1.1 U
110-82-7	Cyclohexane	ug/m3 0.86	1.5	24
56-23-5	Carbon Tetrachloride	ug/m3 1.3 U	1.3 U	1.3 U
540-84-1	2,2,4-Trimethylpentane	ug/m3 1.9	2.2	46
71-43-2	Benzene	ug/m3 2.3	2.4	2.6
540-59-0	1,2-Dichloroethene (total)	ug/m3 0.79 U	0.79 U	0.79 U
107-06-2	1,2-Dichloroethane	ug/m3 0.81 U	0.81 U	0.81 U
142-82-5	n-Heptane	ug/m3 3.3	4.9	3.7
79-01-6	Trichloroethene	ug/m3 3.5	1.2	7.5
78-87-5	1,2-Dichloropropane	ug/m3 0.92 U	0.92 U	0.92 U
123-91-1	1,4-Dioxane	ug/m3 18 U	18 U	18 U
75-27-4	Bromodichloromethane	ug/m3 1.3 U	1.3 U	1.3 U
10061-01-5	cis-1,3-Dichloropropene	ug/m3 0.91 U	0.91 U	0.91 U
108-10-1	Methyl Isobutyl Ketone	ug/m3 **2.0 UJ**	**2.0 UJ**	**2.0 UJ**
108-88-3	Toluene	ug/m3 10	11	12
10061-02-6	trans-1,3-Dichloropropene	ug/m3 **0.91 UJ**	**0.91 UJ**	**0.91 UJ**
79-00-5	1,1,2-Trichloroethane	ug/m3 1.1 U	1.1 U	1.1 U
127-18-4	Tetrachloroethene	ug/m3 3.0	8.8	4.7
591-78-6	Methyl Butyl Ketone	ug/m3 **2.0 UJ**	**2.0 UJ**	**2.0 UJ**
124-48-1	Dibromochloromethane	ug/m3 1.7 U	1.7 U	1.7 U
106-93-4	1,2-Dibromoethane	ug/m3 1.5 U	1.5 U	1.5 U
108-90-7	Chlorobenzene	ug/m3 0.92 U	0.92 U	0.92 U
100-41-4	Ethylbenzene	ug/m3 1.7	1.7	1.8
1330-20-7	Xylene (m,p)	ug/m3 5.2	5.2	5.2
95-47-6	Xylene (o)	ug/m3 1.6	1.6	1.6
100-42-5	Styrene	ug/m3 0.85 U	0.85 U	0.94
75-25-2	Bromoform	ug/m3 2.1 U	2.1 U	2.1 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/m3 1.4 U	1.4 U	1.4 U
1330-20-7	Xylene (total)	ug/m3 6.5	6.5	6.5
622-96-8	4-Ethyltoluene	ug/m3 0.98 U	0.98 U	0.98 U
108-67-8	1,3,5-Trimethylbenzene	ug/m3 0.98 U	0.98 U	0.98 U
95-49-8	2-Chlorotoluene	ug/m3 1.0 U	1.0 U	1.0 U
95-63-6	1,2,4-Trimethylbenzene	ug/m3 2.2	1.3	1.5
541-73-1	1,3-Dichlorobenzene	ug/m3 25	16	11
106-46-7	1,4-Dichlorobenzene	ug/m3 1.2 U	1.2 U	1.2 U
95-50-1	1,2-Dichlorobenzene	ug/m3 1.2 U	1.2 U	1.2 U
120-82-1	1,2,4-Trichlorobenzene	ug/m3 3.7 U	3.7 U	3.7 U
87-68-3	Hexachlorobutadiene	ug/m3 2.1 U	2.1 U	2.1 U

Appendix B
Chain of Custody

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802-660-1990 fax 802-660-1919

Canister Samples Chain of Custody Record

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information		Project Manager: Todd Snowden	Samples Collected By: Todd Snowden	of ___ COCs
Company: AER		Phone: 860-601-1121		
Address: 900 Main St Ext		Email: Todd@AERCT.com		
City/State/Zip: Bridgeport / CT / 06606				
Phone: 203-335-2767		Site Contact: Todd Snowden		
FAX: 335-4776		TA Contact:		
Project Name: Yonkers		Analysis Turnaround Time		
Site: Hudson Park		Standard (Specify)		
PO #		Rush (Specify)		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SV-1	10/21	11:45	11:50	~~30~~ 30	7	4182	3552	X											
SV-2	10/21	11:25	11:45	30	7	3720	2900	X											
SV-3	10/21	12:15	12:10	27	5	3624	4490	X											

Temperature (Fahrenheit)		
	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)		
	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date/Time:	Samples Received by:
Samples Relinquished by: Todd Snowden	Date/Time: 10/22 2:27	Received by: 10/22/09 14:27
Relinquished by:	Date/Time: 10/22/09 14:31	Received by: 10/23/09 1037

Lab Use Only Shipper Name: Opened by: Condition:


ORIGIN ID: OXCA (203) 929-8140
RECEIVING
TESTAMERICA
128 LONG HILL CROSS ROAD
SHELTON, CT 06484
UNITED STATES US
Ship Date: 220CT09
ActWgt: 29.0 LB MAN
System#: 585591/CAFE2361
Account: S 309102843
TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON, VT 05403
(802) 660-1990
FedEx
Express
Ref: AER airs
Delivery Address Barcode
BILL RECIPIENT
STANDARD OVERNIGHT
FRI
Deliver By:
230CT09
TRK# 4220 7054 9143
Form 0201
BTV
AA
05403 -VT-US
ZF BTVA
TAPE

TestAmerica Burlington
SAMPLE RECEIPT & LOG IN CHECKLIST

Client: AER	Date Received: 10/23/09	Log In Date: 10/24/09	
ETR: 134357	Time Received: 1037	By: CK	
SDG: NY134357	Received By: CK	Signature:	
Project: 79000	# Coolers Received: 1 BOX	PM Signature:	
Samples Delivered By: X Shipping Service ☐ Courier ☐ Hand ☐ Other (specify)		Date: 10/26/09	
List Air bill Number(s) or Attach a photocopy of the Air Bill:			

COOLER SCREEN	YES	NO	NA	COMMENTS
There is *no* evidence to indicate tampering	X			
Custody seals are present and intact	X			
Custody seal numbers are present		X		
If yes, list custody seal numbers:				

Thermal Preservation Type: ☐ Wet Ice ☐ Blue Ice X None ☐ Other (specify)

IR Gun ID: 96 Correction Factor (CF) = 0 °C

Cooler 1: AIR	°C	Cooler 6	°C	Cooler 11	°C	Cooler 16	°C
Cooler 2:	°C	Cooler 7	°C	Cooler 12	°C	Cooler 17	°C
Cooler 3:	°C	Cooler 8	°C	Cooler 13	°C	Cooler 18	°C
Cooler 4:	°C	Cooler 9	°C	Cooler 14	°C	Cooler 19	°C
Cooler 5	°C	Cooler 10	°C	Cooler 15	°C	Cooler 20	°C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun

EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.

Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	NA	COMMENTS
Sample containers were received intact	X			
Legible sample labels are affixed to each container	X			

CHAIN OF CUSTODY (COC)	YES	NO	NA	COMMENTS
COC is present and includes the following information for each container:				
• Sample ID / Sample Description	X			
• Date of Sample Collection	X			
• Time of Sample Collection	X			
• Identification of the Sampler	X			
• Preservation Type			X	Ambient
• Requested Tests Method(s)	X			
• Necessary Signatures	X			
Internal Chain of Custody (ICOC) Required		X		
If yes to above, ICOC Record Initiated for every Worksheet			X	

SAMPLE INTEGRITY / USABILITY	YES	NO	NA	COMMENTS
The sample container matches the COC	X			
Appropriate sample containers were received for the tests requested	X			
Samples were received within holding time	X			
Sufficient amount of sample is provided for requested analyses	X			
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)			X	
Appropriate preservatives were used for the tests requested			X	
pH of inorganic samples checked and is within method specification			X	
If no, attach Inorganic Sample pH Adjustment Form			X	

ANOMALY / NCR SUMMARY

Sample id tags list start times only. Used end times from COC for log-in.

FSR002:12.19.07:3
TestAmerica Burlington

L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

Appendix C
SDG Narrative

Phone (516) 523-7891 email LABValidation@aol.com

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

November 12, 2009

Mr. Todd Snowden
Advanced Env Redevelopment
900 Madison Avenue
Bridgeport, CT 06606

Re: Laboratory Project No. 29000
Case: 29000; SDG: NY134357

Dear Mr. Snowden:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on October 23rd, 2009. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 10/23/09 ETR No: 134357		
811578	SV-1	10/21/09	AIR
811579	SV-2	10/21/09	AIR
811580	SV-3	10/21/09	AIR

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The original volatile organics analyses for several of the samples in this delivery group yielded concentrations of target analytes Acetone, Methyl Ethyl Ketone, Tetrahydrofuran and Isopropyl Alcohol that exceeded the range of calibrated instrument response. Only the original analysis with these target analyte's concentrations exceeding the calibrated instrument response were reported per your request.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Sara Goff
Project Manager

Enclosure

L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

Appendix D
Tentatively Identified Compounds (TICs)

Phone (516) 523-7891 email LABValidation@aol.com

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

AER SAMPLE NO.

SV-1

Lab Name: TESTAMERICA BURLINGTON Contract: 29000

Lab Code: STLV Case No.: 29000 SAS No.: SDG No.: NY134357

Matrix: (soil/water) AIR Lab Sample ID: 811578

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 811578

Level: (low/med) LOW Date Received: 10/23/09

% Moisture: not dec. _____ Date Analyzed: 10/31/09

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ppbv

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.06	2.4	J
2.		UNKNOWN	3.53	140	J
3.		UNKNOWN	4.14	5.6	J
4.		UNKNOWN	6.30	8.8	J
5.	123-72-8	BUTANAL	10.53	1.1	NJ
6.		UNKNOWN	11.89	1.3	J
7.	~~541-05-9~~	~~CYCLOTRISILOXANE, HEXAMETHYL~~	~~15.69~~	~~19~~	~~NJ~~ R
8.					
9.					
10.					
11.					
12.					
13.					
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26.					
27.					
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30.					

5/15/10

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

AER SAMPLE NO.

SV-2

Lab Name: TESTAMERICA BURLINGTON Contract: 29000

Lab Code: STLV Case No.: 29000 SAS No.: SDG No.: NY134357

Matrix: (soil/water) AIR Lab Sample ID: 811579

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 811579

Level: (low/med) LOW Date Received: 10/23/09

% Moisture: not dec. _____ Date Analyzed: 10/31/09

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) ppbv

Number TICs found: 8

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.50	45	J
2.		UNKNOWN	4.10	1.4	J
3.		UNKNOWN	6.25	5.3	J
4.	591-76-4	HEXANE, 2-METHYL-	11.57	1.2	NJ
5.		UNKNOWN	11.71	1.3	J
6.	589-34-4	HEXANE, 3-METHYL-	11.88	1.9	NJ
7.		UNKNOWN	15.68	23	J
8.		UNKNOWN	20.95	8.8	J
9.					
10.					
11.					
12.					
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29.					
30.					

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

AER SAMPLE NO.

SV-3

Lab Name: TESTAMERICA BURLINGTON Contract: 29000

Lab Code: STLV Case No.: 29000 SAS No.: SDG No.: NY134357

Matrix: (soil/water) AIR Lab Sample ID: 811580

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 811580

Level: (low/med) LOW Date Received: 10/23/09

% Moisture: not dec. _____ Date Analyzed: 10/31/09

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 16

CONCENTRATION UNITS:
(ug/L or ug/Kg) ppbv

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	115-07-1	PROPENE	3.13	2.3	NJ
2.		UNKNOWN	3.50	71	J
3.		UNKNOWN	3.74	3.2	J
4.		UNKNOWN	4.11	3.1	J
5.	109-66-0	PENTANE	5.73	2.0	NJ
6.		UNKNOWN	6.25	2.8	J
7.	107-83-5	PENTANE, 2-METHYL-	8.14	3.6	NJ
8.	96-14-0	PENTANE, 3-METHYL-	8.69	4.3	NJ
9.	1191-99-7	FURAN, 2,3-DIHYDRO-	9.38	2.6	NJ
10.	108-08-7	PENTANE, 2,4-DIMETHYL-	10.31	1.0	NJ
11.	96-37-7	CYCLOPENTANE, METHYL-	10.48	4.1	NJ
12.		UNKNOWN	11.57	1.0	J
13.		UNKNOWN	11.88	1.7	J
14.	822-50-4	CYCLOPENTANE, 1,2-DIMETHYL-,	12.46	1.4	NJ
15.		UNKNOWN	14.16	2.3	J
16.	560-21-4	PENTANE, 2,3,3-TRIMETHYL-	14.35	3.0	NJ
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

DATA VALIDATION REPORT

ORGANIC ANALYSES

EPA Compendium Method TO-15
VOLATILES BY GC/MS

For Soil Gas Samples Collected
March 15, 2010 through March 16, 2010
Yonkers, New York
AER, LLC.

SAMPLE DELIVERY GROUP NUMBER: HOC180404
TestAmerica, Knoxville, TN

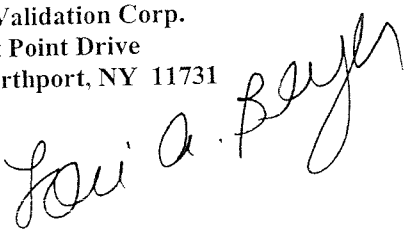
SUBMITTED TO:

Mr. Todd Snowden
AER, LLC.
900 Madison Avenue, Suite 213
Bridgeport, CT 06606

May 16, 2010

PREPARED BY:

Lori A. Beyer/President
L.A.B. Validation Corp.
14 West Point Drive
East Northport, NY 11731



Phone (516) 523-7891 email LABValidation@aol.com

Yonkers, New York; March 2010
Data Validation Report: Volatile Organics – TO15

Table of Contents:

Introduction
Data Qualifier Definitions
Sample Receipt

1.0 Volatile Organics by GC/MS EPA Compendium Method TO-15
- 1.1 Holding Time
- 1.2 Surrogate Standards
- 1.3 Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
- 1.4 Laboratory Control Sample
- 1.5 Blank Contamination
- 1.6 GC/MS Instrument Performance Check
- 1.7 Initial and Continuing Calibrations
- 1.8 Internal Standards
- 1.9 Target Compound List Identification
- 1.10 Tentatively Identified Compounds
- 1.11 Compound Quantification and Reported Detection Limits
- 1.12 Overall System Performance

APPENDICES:

A. Data Summary Tables with Qualifications
B. Chain of Custody Documents
C. SDG Narratives

Introduction:

A validation was performed on three (3) soil gas [air] samples for Volatile Organic analysis collected by AER and submitted to TestAmerica Knoxville, TN. for subsequent analysis under chain of custody documentation. This report contains the laboratory and validation results for the three (3) field samples itemized below. The samples were collected on March 15, 2010 through March 16, 2010.

The samples were analyzed by TestAmerica Knoxville, TN utilizing EPA Method TO-15 and in accordance with NYSDEC Analytical Services Protocol (10/95) and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodology employed. The analytical testing consisted of the selected TO-15 Target Compound List (TCL) of analytes for Volatile Organics listed in Appendix A.

The data was evaluated in accordance with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (Publication 9240.1-05) and in conjunction with the analytical methodology for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following field soil gas/air samples:

Sample Identification	Laboratory Identification(s)	Sample Matrix	Collection Date
S-1	H0C180404-001	Air	03/15/10 through 03/16/10
S-2	H0C180404-002	Air	03/15/10 through 03/16/10
S-3	H0C180404-003	Air	03/15/10 through 03/16/10

Data Qualifier Definitions:

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

Volatile Organics by EPA Compendium Method TO-15

The following method criteria were reviewed: holding times, surrogate standards, LCS, Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification and Quantitation, Reported Quantitation Limits and Overall System Performance. The volatile results were considered to be valid and useable as noted on the data summary tables in Appendix A and within the following text:

1.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Air samples pertaining to this SDG were performed within the method required thirty (30) days from sample collection for analysis. No qualifications were required based upon holding time criteria.

1.2 Surrogate Standards

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contact specification, qualifications are required to be applied to associated samples and analytes.

Bromofluorobenzene recoveries fell within in house established limits.

1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

Matrix Spike/Matrix Spike Duplicate analysis was not performed on samples pertaining to this SDG.

1.4 Laboratory Control Sample

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

Acceptable LCS was analyzed.

Acceptable recoveries for all spiked components were observed with the exception of Bromoform which recovered high at 134%. No qualifications to the data are required for high recoveries where the analyte was not detected in associated field samples.

1.5 Blank Contamination

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Storage blanks measure cross-contamination during sample storage of the field samples.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Methylene Chloride, Acetone, Toluene & 2-Butanone	Sample Conc. Is >CRQL, but </=10x blank value	Sample Conc. is <CRQL and </=10x blank value	Sample Conc. is >CRQL and >10x blank value
Other Contaminants	Sample Conc. Is >CRQL, but </=5x blank value	Sample Conc. Is <CRQL and </=5x blank value	Sample Conc. is >CRQL and >5x blank value

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

A) **Method Blank Contamination:**

Target analytes were not detected in the method blanks associated with sample analysis.

A) Response Factor GC/MS:
The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

All the response factors for the target analytes reported were found to be within acceptable limits (>/=0.05), for the initial and continuing calibrations.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):
Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <30% and %D must be <25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >30% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 30% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high level results will be qualified, "J" in the portion of the curve where non linearity exists.

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (30%) for all target compounds with the exception of Bromoform (38.0%). Non-detects in samples S-1, S-2 and S-3 must be considered estimated, "UJ."

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (25%) for all target compounds with the following exceptions:

CCAL 03/22/10:

Bromoform – 34.21%; "UJ" samples S-1, S-2 and S-3. Results were previously qualified based on initial calibration.

Styrene – 25.9%; "J/UJ" samples S-1, S-2 and S-3

1.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

Internal Standard area responses met QC requirements for all analysis pertaining to this SDG.

1.9 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.

1.10 **Tentatively Identified Compounds (TICs)**

TICs were reported in accordance with the project requirements. The identification must be considered tentative (both quantitative and qualitative) due to the lack of required compound specific response factors. Consequently all concentrations should be considered estimate, "J" and as a result of the qualitative uncertainty should be qualified, "N" where an identification has been made.

TICs were not submitted for this SDG.

1.11 **Compound Quantification and Reported Detection Limits**

GC/MS quantitative analysis is considered to be acceptable. Correct internal standards and response factors and air volumes were used to calculate final concentrations.

Sample results have been presented in ug/m3 as well as ppbv.

1.12 **Overall System Performance**

GC/MS analytical methodology was acceptable for this analysis.

All samples were initially analyzed undiluted.

Analysis of S-1 resulted in 1,4-Dichlorobenzene above the instruments linear calibration range. Diluted reanalysis at 1:2 dilution was performed. Lower than expected concentrations of this analyte were detected and therefore based on professional judgment, the initial value was utilized. The reported concentration has been qualified as estimated, "J" since the raw value was over range.

Analysis of S-2 resulted in 1,4-Dichlorobenzene, Acetone and Isopropyl Alcohol concentrations exceeding the instruments linear calibration range. Diluted analysis was performed at 1:5. Based on professional judgment, the initial values were utilized. Reported results must be considered estimated, biased low, "J."

Reviewer's Signature Lori A Bly **Date** 05/16/10

L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

Appendix A
Data Summary Tables
With Qualifications

Phone (516) 523-7891 email LABValidation@aol.com

Sample Receipt:

The Chain of Custody document from 03/15/10 indicates that three (3) air samples were received at TestAmerica Knoxville, TN via Federal Express on 03/17/10 after completion of the sampling event. Sample login notes and the chain of custody indicate that at the Validated Time of Sample Receipt (VTSR) at the laboratory no discrepancies were notated and therefore the integrity of the canister samples is assumed to be good.

The data summary tables included in Appendix A includes all usable (qualified) and unusable (rejected) results for the samples identified above. These tables summarize the detailed narrative section of the report. All data validation qualifications have been reported in the excel spreadsheet in bold for ease of review and verification.

NOTE:
L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

VOLATILE ORGANICS EPA Compendium METHOD TO-15

Yonkers, NY
SDG H0C180404

		S-1	S-2	S-3
AER Sample ID:				
Laboratory ID:		H0C180404-001	H0C180404-002	H0C180404-003
Sampling Date:		03/15-16/2010	03/15-16/2010	03/15-16/2010
Dilution		1 and 2	1 and 5	1
Analyte	Units:			
trans-1,3-Dichloropropene	ug/m3	0.36 U	0.36 U	0.36 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	0.56 U	0.56 U	0.56 U
1,4-Dioxane	ug/m3	1.4 U	1.4 U	1.4 U
Ethylbenzene	ug/m3	0.42	0.40	0.37
Trichlorofluoromethane	ug/m3	1.6	1.2	1.3
Hexachlorobutadiene	ug/m3	4.3 U	4.3 U	4.3 U
n-Hexane	ug/m3	0.70 U	0.70 U	0.70 U
2,2,4-Trimethylpentane	ug/m3	0.93 U	0.93 U	0.93 U
tert-Butyl Alcohol	ug/m3	2.40 U	5.1	2.8
Methylene Chloride	ug/m3	0.71	1.3	0.81
Benzene	ug/m3	0.89	0.59	0.54
Benzyl Chloride	ug/m3	0.83 U	0.83 U	0.83 U
Styrene	ug/m3	**0.34 UJ**	**0.34 UJ**	**0.55 J**
1,1,2,2-Tetrachloroethane	ug/m3	0.55 U	0.55 U	0.55 U
Tetrachloroethene	ug/m3	2.0	2.6	0.54 U
Toluene	ug/m3	3.4	2.3	3.1
1,2,4-Trichlorobenzene	ug/m3	3.0 U	3.0 U	3.0 U
1,1,1-Trichloroethane	ug/m3	0.44 U	0.44 U	0.44 U
1,1,2-Trichloroethane	ug/m3	0.44 U	0.44 U	0.44 U
Trichloroethene	ug/m3	0.21 U	0.21 U	0.21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	0.61 U	0.61 U	0.61 U
1,2,4-Trimethylbenzene	ug/m3	0.54	0.57	0.95
1,3,5-Trimethylbenzene	ug/m3	0.39 U	0.39 U	0.39 U
Vinyl Chloride	ug/m3	0.20 U	0.20 U	0.38
o-Xylene	ug/m3	0.41	0.41	0.40
Methyl tert-butyl ether	ug/m3	1.4 U	1.4 U	1.4 U
Xylene (m & p)	ug/m3	1.4	1.4	1.1
Bromodichloromethane	ug/m3	0.54 U	0.54 U	0.54 U
1,2-Dibromoethane (EDB)	ug/m3	0.61 U	0.61 U	0.61 U
2-Butanone (MEK)	ug/m3	3.0	7.5	2.5
4-Methyl-2-pentanone (MIBK)	ug/m3	0.82 U	1.2	0.90
Bromoform	ug/m3	**0.83 UJ**	**0.83 UJ**	**0.83 UJ**
Bromomethane	ug/m3	0.31 U	0.31 U	0.31 U
Carbon Tetrachloride	ug/m3	0.56	0.52	0.49
Chlorobenzene	ug/m3	0.37 U	0.37 U	0.37 U
Dibromochloromethane	ug/m3	0.68 U	0.68 U	0.68 U
Chloroethane	ug/m3	0.21 U	4.4	0.21 U
Chloroform	ug/m3	0.49	0.39 U	0.39 U
Chloromethane	ug/m3	5.1	26	1.8
Cyclohexane	ug/m3	0.69 U	0.69 U	0.69 U
1,2-Dichlorobenzene	ug/m3	0.48 U	0.48 U	0.48 U
1,3-Dichlorobenzene	ug/m3	0.48 U	0.48 U	0.48 U
1,4-Dichlorobenzene	ug/m3	**120 J**	**200 J**	28
Dichlorodifluoromethane	ug/m3	2.0	1.9	2.3
1,1-Dichloroethane	ug/m3	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	ug/m3	0.32 U	0.32 U	0.35
1,1-Dichloroethene	ug/m3	0.32 U	0.32 U	0.32 U
cis-1,2-Dichloroethene	ug/m3	0.32 U	0.32 U	0.32 U
trans-1,2-Dichloroethene	ug/m3	0.32 U	0.32 U	0.32 U
1,2-Dichloropropane	ug/m3	0.37 U	0.37 U	0.37 U
cis-1,3-Dichloropropene	ug/m3	0.36 U	0.36 U	0.36 U
Acetone	ug/m3	33	**64 J**	20
n-Haptane	ug/m3	0.82 U	0.82 U	0.82 U
2-Hexanone	ug/m3	0.82 U	0.82 U	0.82 U
Isopropyl Alcohol	ug/m3	27	**90 J**	35
Tetrahydrofuran	ug/m3	1.2 U	4.3	1.2 U
Viny Bromide	ug/m3	0.35 U	0.35 U	0.35 U
1,3-Butadiene	ug/m3	0.35 U	0.35 U	0.35 U
4-Ethyltoluene	ug/m3	0.79 U	0.79 U	0.79 U
Carbon Disulfide	ug/m3	0.62 U	0.62 U	0.62 U
3-Chloroprene	ug/m3	0.25 U	0.25 U	0.25 U
2-Chlorotoluene	ug/m3	0.83 U	0.83 U	0.83 U

VOLATILE ORGANICS EPA Compendium METHOD TO-15

Yonkers, NY
SDG H0C180404

		S-1	S-2	S-3
AER Sample ID:		H0C180404-001	H0C180404-002	H0C180404-003
Laboratory ID:		03/15-16/2010	03/15-16/2010	03/15-16/2010
Sampling Date:		1 and 2	1 and 5	1
Dilution				
Analyte	Units:			
trans-1,3-Dichloropropene	ppbv	0.080 U	0.080 U	0.080 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ppbv	0.080 U	0.080 U	0.080 U
1,4-Dioxane	ppbv	0.40 U	0.40 U	0.40 U
Ethylbenzene	ppbv	0.096	0.091	0.086
Trichlorofluoromethane	ppbv	0.29	0.22	0.22
Hexachlorobutadiene	ppbv	0.40 U	0.40 U	0.40 U
n-Hexane	ppbv	0.20 U	0.20 U	0.20 U
2,2,4-Trimethylpentane	ppbv	0.20 U	0.20 U	0.20 U
tert-Butyl Alcohol	ppbv	0.80 U	1.7	0.91
Methylene Chloride	ppbv	0.20	0.38	0.23
Benzene	ppbv	0.28	0.18	0.17
Benzyl Chloride	ppbv	0.16 U	0.16 U	0.16 U
Styrene	ppbv	**0.080 UJ**	**0.080 UJ**	**0.13 J**
1,1,2,2-Tetrachloroethane	ppbv	0.080 U	0.080 U	0.080 U
Tetrachloroethene	ppbv	0.29	0.38	0.080 U
Toluene	ppbv	0.89	0.60	0.83
1,2,4-Trichlorobenzene	ppbv	0.40 U	0.40 U	0.40 U
1,1,1-Trichloroethane	ppbv	0.080 U	0.080 U	0.080 U
1,1,2-Trichloroethane	ppbv	0.080 U	0.080 U	0.080 U
Trichloroethene	ppbv	0.040 U	0.040 U	0.040 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ppbv	0.080 U	0.080 U	0.080 U
1,2,4-Trimethylbenzene	ppbv	0.11	0.12	0.19
1,3,5-Trimethylbenzene	ppbv	0.080 U	0.080 U	0.080 U
Vinyl Chloride	ppbv	0.080 U	0.080 U	0.15
o-Xylene	ppbv	0.095	0.094	0.093
Methyl tert-butyl ether	ppbv	0.40 U	0.40 U	0.40 U
Xylene (m & p)	ppbv	0.31	0.31	0.25
Bromodichloromethane	ppbv	0.080 U	0.080 U	0.080 U
1,2-Dibromoethane (EDB)	ppbv	0.080 U	0.080 U	0.080 U
2-Butanone (MEK)	ppbv	1.0	2.5	0.83
4-Methyl-2-pentanone (MIBK)	ppbv	0.20 U	0.28	0.22
Bromoform	ppbv	**0.080 UJ**	**0.080 UJ**	**0.080 UJ**
Bromomethane	ppbv	0.080 U	0.080 U	0.080 U
Carbon Tetrachloride	ppbv	0.088	0.083	0.078
Chlorobenzene	ppbv	0.080 U	0.080 U	0.080 U
Dibromochloromethane	ppbv	0.080 U	0.080 U	0.080 U
Chloroethane	ppbv	0.080 U	1.7	0.080 U
Chloroform	ppbv	0.10	0.080 U	0.080 U
Chloromethane	ppbv	2.5	12	0.88
Cyclohexane	ppbv	0.20 U	0.20 U	0.20 U
1,2-Dichlorobenzene	ppbv	0.080 U	0.080 U	0.080 U
1,3-Dichlorobenzene	ppbv	0.080 U	0.080 U	0.080 U
1,4-Dichlorobenzene	ppbv	**20 J**	**33 J**	4.7
Dichlorodifluoromethane	ppbv	0.41	0.39	0.46
1,1-Dichloroethane	ppbv	0.080 U	0.080 U	0.080 U
1,2-Dichloroethane	ppbv	0.080 U	0.080 U	0.087
1,1-Dichloroethene	ppbv	0.080 U	0.080 U	0.080 U
cis-1,2-Dichloroethene	ppbv	0.080 U	0.080 U	0.080 U
trans-1,2-Dichloroethene	ppbv	0.080 U	0.080 U	0.080 U
1,2-Dichloropropane	ppbv	0.080 U	0.080 U	0.080 U
cis-1,3-Dichloropropene	ppbv	0.080 U	0.080 U	0.080 U
Acetone	ppbv	14	**27 J**	8.6
n-Haptane	ppbv	0.20 U	0.20 U	0.20 U
2-Hexanone	ppbv	0.20 U	0.20 U	0.20 U
Isopropyl Alcohol	ppbv	11	**37 J**	14
Tetrahydrofuran	ppbv	0.40 U	1.4	0.40 U
Viny Bromide	ppbv	0.080 U	0.080 U	0.080 U
1,3-Butadiene	ppbv	0.16 U	0.16 U	0.16 U
4-Ethyltoluene	ppbv	0.16 U	0.16 U	0.16 U
Carbon Disulfide	ppbv	0.20 U	0.20 U	0.20 U
3-Chloroprene	ppbv	0.080 U	0.080 U	0.080 U
2-Chlorotoluene	ppbv	0.16 U	0.16 U	0.16 U

L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

Appendix B
Chain of Custody

Phone (516) 523-7891 email LABValidation@aol.com

TAL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

HOC 180404

Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information	Project Manager: Todd Sprowls	Sampled By: TMS	___ of ___ COCs
Company: AEK	Phone: 203-333-2767		
Address: 900 Madison Ave	Site Contact:		
City/State/Zip Bridgeport CT 06606	TAL Contact:		
Phone: 203-333-2767			
FAX: 203-330-4220	Analysis Turnaround Time		
Project Name: Yonkers	Standard (Specify)		
Site/location: Yonkers	Rush (Specify)		
PO #			

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
S-1	3/15-3/16	1200	1205	30	6	K327	6667	X											
S-2	↓	1210	1215	31	8	K419	6233	X											
S-3	↓	1215	1225	31	6	K355	9300811	X											

Sampled by : TMS

Temperature (Fahrenheit)			
	Interior	Ambient	
Start			
Stop			

Pressure (Inches of Hg)			
	Interior	Ambient	
Start			
Stop			

CUSTODY SEALS INTACT
RECEIVED AT AMBIENT TEMP
OKD 3-17-10
1 BOX FEDEX # 422070559350

3 CANS / 3 FLOWS

Special Instructions/QC Requirements & Comments:

Please provide DL of 0.25 ug/m³ for TCE, Vinylchloride, and Carbon Tet.

Canisters Shipped by:	Date/Time:	Canisters Received by:
Samples Relinquished by: Todd Sprowls	Date/Time: 3/16	Received by: 3.16.10 352
Relinquished by:	Date/Time:	Received by: 3-17-10 10:00

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Lot Number: HOC180404

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ 1a Do not match COC ☐ 1b Incomplete information ☐ 1c Marking smeared ☐ 1d Label torn ☐ 1e No label ☐ 1f COC not received ☐ 1g Other:	NA
2. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C; NC, 1668, 1613B: 0-4°C; VOST: 10°C; MA: 2-6 °C)			✓	☐ 2a Temp Blank = _____ ☐ 2b Cooler Temp = _____	
3. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ 3a Sample preservative =	
4. Were custody seals present/intact on cooler and/or containers?	✓			☐ 4a Not present ☐ 4b Not intact ☐ 4c Other:	
5. Were all of the samples listed on the COC received?	✓			☐ 5a Samples received-not on COC ☐ 5b Samples not received-on COC	
6. Were all of the sample containers received intact?	✓			☐ 6a Leaking ☐ 6b Broken	
7. Were VOA samples received without headspace?		✓		☐ 7a Headspace (VOA only)	
8. Were samples received in appropriate containers?	✓			☐ 8a Improper container	
9. Did you check for residual chlorine, if necessary?		✓		☐ 9a Could not be determined due to matrix interference	
10. Were samples received within holding time?	✓			☐ 10a Holding time expired	
11. For rad samples, was sample activity info. provided?			✓	☐ Incomplete information	
12. For 1613B water samples is pH<9?			✓	If no, was pH adjusted to pH 7 - 9 with sulfuric acid? _____	
13. Are the shipping containers intact?	✓			☐ 13a Leaking ☐ 13b Other:	
14. Was COC relinquished? (Signed/Dated/Timed) DRY 3-17-10	✓			☐ 14a Not relinquished	
15. Are tests/parameters listed for each sample?	✓			☐ 15a Incomplete information	
16. Is the matrix of the samples noted?	✓			☐ 15a Incomplete information	
17. Is the date/time of sample collection noted?	✓			☐ 15a Incomplete information	
18. Is the client and project name/# identified?	✓			☐ 15a Incomplete information	
19. Was the sampler identified on the COC?	✓				

Quote #: _____ PM Instructions: _____

Sample Receiving Associate: _____ Date: 3-17-10

QA026R21.doc, 090409

L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

Appendix C
SDG Narrative

Phone (516) 523-7891 email LABValidation@aol.com

PROJECT NARRATIVE
H0C180404
REVISED

This report has been revised. The list of requested compounds has been updated.

The results reported herein are applicable to the samples submitted for analysis only.

This report shall not be reproduced except in full, without the written approval of the laboratory.

The original chain of custody documentation was included with the original report.

Sample Receipt

The "Relinquished by" field on the chain of custody documentation did not contain a signature.

Quality Control and Data Interpretation

Unless otherwise noted, all holding times and QC criteria were met and the test results shown in this report meet all applicable NELAC requirements.

EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Quantitation for ethanol was based on a one-point calibration standard at the reporting limit. Results for this analyte should be considered estimated.

The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria. Even though the calibration verification analyzed on 03/22/10 exhibited a % difference of > 30% for bromoform, the results were within the LCS acceptance limits.

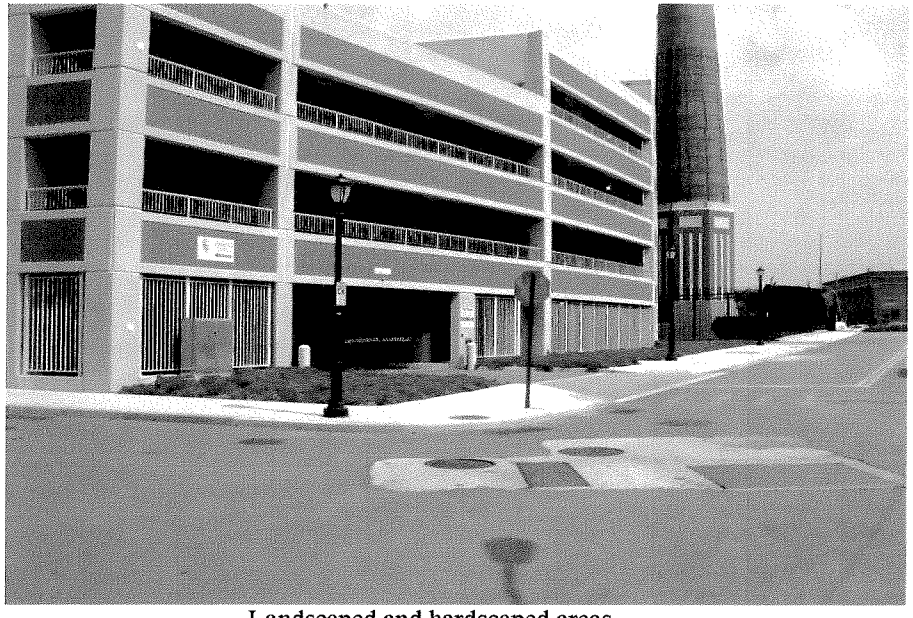
PROJECT NARRATIVE
H0C180404

Although bromoform is flagged as being outside recovery limits in the laboratory control sample for batch 0082149, the laboratory control sample is in control. The standard operating procedure allows for 3 analytes to be outside the control limits, but within marginal exceedence limit.

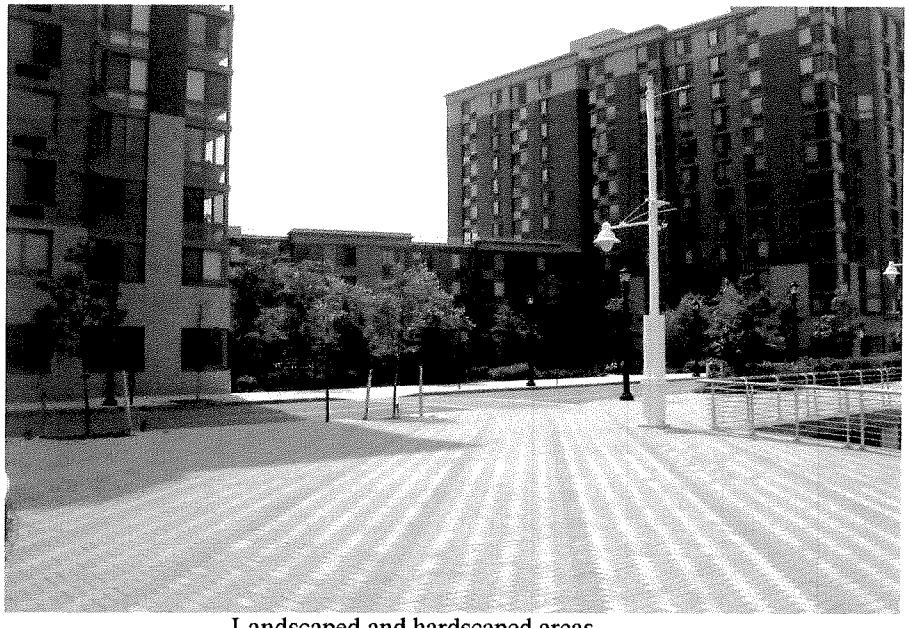
The concentration of 1,4-dichlorobenzere in samples S-1 and S-2 exceeded the calibration level of the instrument. The samples were analyzed at a dilution to bring the concentration of the compound into the instrument calibration range. The results for both analyses are reported in order to provide the lowest possible reporting limits.

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION

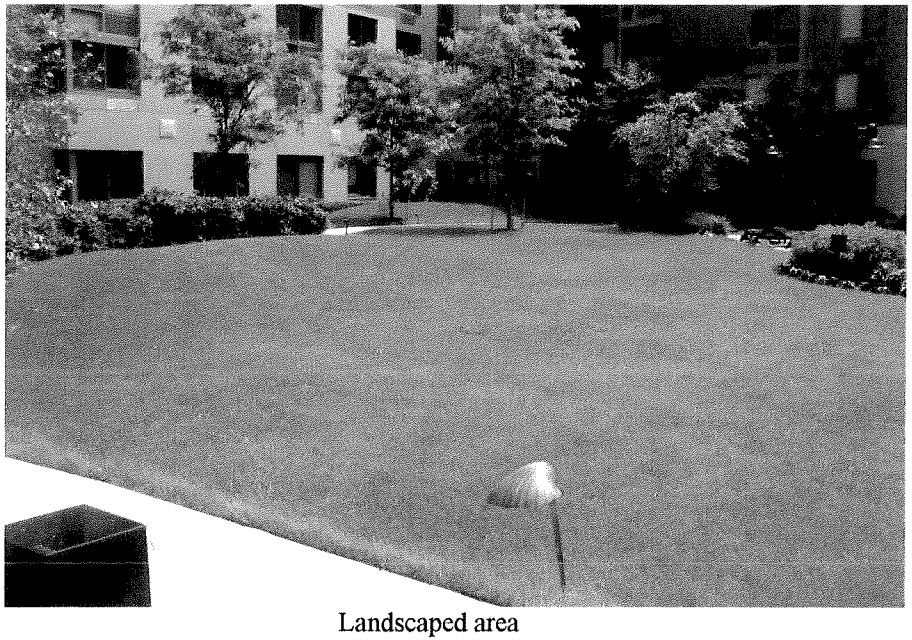
PARCELS B AND C
HUDSON PARK, YONKERS



Landscaped and hardscaped areas



Landscaped and hardscaped areas



Landscaped area

Landscaped area requiring additional grass cover