

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Surface and Subsurface Soil Sampling, Soil
Vapor Sampling, Groundwater Sampling, and
Test Pit Excavations

for the property known as:

Serenity Estates
95 North Phillips Avenue
Speonk, New York
Tax Map No. 0900-350-03-85.1

prepared for:

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prepared by:


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EXECUTIVE SUMMARY

This report presents the findings of a Phase II Environmental Site Assessment performed by Cashin Associates, P.C. (CA) in May 2010 for the site known as Serenity Estates, Speonk, New York (Suffolk County Tax Map No. 0900-350-03-85.1). This Phase II investigation was performed to identify environmental concerns at the subject property associated with the historic use of the subject property as a duck feather processing facility, and with a solvent-contaminated groundwater plume originated from an off-site location upgradient of the subject property.

The Phase II investigation included the following: the collection and analysis of surface and sub-surface soil samples; the collection and analysis of soil samples in the former building area for asbestos content; the collection and analysis of soil vapor samples; groundwater sampling at up-gradient and down-gradient locations; the performance of test pit excavations within the sump areas of the site; and the performance of a visual inspection of the property for the presence of potential asbestos containing debris. In addition, CA conducted a file review for the subject property at relevant municipal departments and agencies. This study was performed to update and supplement the findings and results of previous site investigations, to check for evidence of residual on-site contamination resulting from the former industrial usage of the subject property (former duck feather processing facility), and to obtain the latest information about the plume of contaminated water originating from an upstream, off-site source.

The findings and recommendations of the Phase II investigation are summarized as follows:

Test Holes at Former Sludge Pits: No visible or olfactory evidence of residue sludge, discolored soils or other indications of possible contamination. Test holes dug to a depth of approximately 15 feet indicated clean sandy soils at all test hole locations.

On-Site Groundwater: One metal was present in *unfiltered* groundwater samples at concentrations slightly above the Ambient Water Quality Standard at upgradient and downgradient groundwater sample locations. Detectable levels of any metals were not present in filtered groundwater samples.

On-Site Soil Vapors: Acetone, chloroform and toluene were detected in soil vapor sample SV-1. Acetone was also detected in soil vapor samples SV-2 and SV-3. The soil vapor detections reported were all detected at concentrations well below New York State Department of Environmental Conservation's (NYSDEC) Division of Air Resources indoor air quality AGC screening values and the federal guidelines (OSHA and NIOSH).

Asbestos Containing Debris: Small remnant pieces of asbestos-containing materials (ACM) from construction/demolition debris are scattered in some areas within the fenced area in the eastern portion of the subject property. ACM was not reported in any of the soil samples.

Based on the results and data collected during this investigation and the proposed future development of the site, CA makes the following general recommendations:

- The area of the subject property where the former buildings were demolished should be inspected for any remnant asbestos-containing construction/demolition debris. Any remaining ACM should be removed from the subject property.
- To address and mitigate possible exposures from the migration or intrusion of soil vapors from the existing solvent groundwater plume originating off-site, CA recommends any future building development proposed for the subject property be properly equipped with vapor barrier systems. In addition, CA recommends any future development of the subject property be serviced by the municipal water supply.

PHASE II ENVIRONMENTAL SITE ASSESSMENT

**SURFACE AND SUBSURFACE SOIL SAMPLING,
SOIL VAPOR SAMPLING, GROUNDWATER SAMPLING,
AND TEST PIT EXCAVATIONS**

FOR THE PROPERTY KNOWN AS:

**SERENITY ESTATES
SPEONK, NEW YORK
TAX MAP NO. 0900-350-03-85.1**

BACKGROUND AND PURPOSE

This report presents the findings of a Phase II Environmental Site Assessment performed by Cashin Associates, P.C. (CA) on May 18th and 20th, 2010 at the above referenced site. The Phase II investigation included the collection and analysis of surface and sub-surface soil samples from across the site; groundwater sampling at up-gradient and down-gradient locations; and the performance of test pit excavations within the three sump areas of the site. Previous studies have detected a plume of solvent contaminated groundwater (chloroform, carbon tetrachloride, trichloroethene) originating off-site and upgradient of the site, in the vicinity of North Phillips Avenue. As part of this Phase II assessment, CA conducted a soil vapor analysis on the subject property to address the presence/absence of soil vapors possibly associated with the plume. CA also conducted a visual inspection of the property for the presence of potential asbestos-containing debris in the vicinity of the former, demolished buildings. Surface soil samples within the area of the demolished buildings were collected and analyzed for asbestos content. In addition, CA conducted a file review for the subject property at relevant municipal departments and agencies. This file review included a review of the Town records and transcripts of testimony concerning the proposed development of the site.

The subject property is identified on the County of Suffolk Real Property Tax Service Agency Tax Map, State of New York, by Tax Map Number 0900-350-03-85.1. The approximately 15.2-acre parcel is located in Speonk, Town of Southampton, Suffolk County, New York. The subject parcel is located on the west side of North Phillips Avenue, between Old Country Road to the north and Montauk Highway to the south. Additional details regarding the site can be found in CA's Phase I ESA (January 2003).

A Limited Phase II Environmental Assessment was performed by CA in 2003 in follow-up to issues regarding soil and groundwater contamination identified in a Phase I Environmental Site Assessment (2003) prepared by CA. The findings of the Limited Phase II Assessment found detectable levels of metals in unfiltered groundwater samples, in many cases above groundwater standards. The highest exceedances were noted for chromium and nickel. Filtered groundwater samples were not collected as part of the Limited Phase II ESA. Soil samples collected from the former sludge pits showed no detections of VOCs but some detections of metals, all of which were reported at concentrations below Suffolk County action levels.

This Phase II study was performed to update and supplement the findings and results of the previous Limited Phase II investigation and to check for evidence of residual on-site contamination resulting from the former industrial usage of the subject property (former duck feather processing facility). It was also performed to follow-up on concerns expressed to the Town from local residents and interested parties (Speonk-Remsenburg Civic Association).

METHODOLOGY AND SAMPLING

This Phase II investigation was performed to analyze for residual contamination in site soils and for evidence of groundwater contamination beneath the site. The Phase II work performed is described below. The sampling program was established based on consultation with the Suffolk County Department of Health Services (SCDHS) and Town of Southampton Department of Land Management and interested parties (Speonk-Remsenburg Civic Association). Prior to undertaking the investigation, CA forwarded copies of the proposed Work Plan to NYSDEC, SCDHS, Town of Southampton, and interested parties (Speonk-Remsenburg Civic Association) for comment.

Soil Sampling

A shallow soil survey was conducted across the eastern, historically disturbed portion of the site. Soil sample locations were spaced approximately 150 feet apart in a grid-like pattern. Soil was collected using a trowel to depths of three inches (surface) and three feet below land surface (sub-surface), with depths alternating at every other sample location. An additional sub-surface soil sample was collected in the western, undisturbed portion of the site. A total of seven surface samples and six sub-surface samples were collected for a total of 13 soil samples. The final locations of the sample points were determined in the field, based on site conditions. Soil samples were field screened using a photoionization detector (PID) prior to sampling. All soil samples were submitted to a New York State certified laboratory (EcoTest Laboratories, Inc., North Babylon, NY) and analyzed for the presence of volatile organic compounds (VOCs) via

EPA Method 8260 and metals (Suffolk County List) via EPA Method 6010B and 7470A, as per SCDHS protocols.

Potential ACM – Suspect Areas

Small broken pieces of remnant construction debris containing suspect ACM (i.e. transite) was observed by CA in some areas of the former, demolished buildings. Two bulk samples of the suspect ACM were collected and analyzed for asbestos content. In addition, CA collected five surface soil samples in the vicinity of the demolished buildings and observed ACM debris to determine if asbestos potentially associated with former building materials is present in the soils. The bulk and soil samples were submitted to EMSL Analytical, Inc. (Cinnaminson, New Jersey) and analyzed for asbestos content by Polarized Light Microscopy (PLM) via EPA 600/R-93/116 Method with CARB 435 Prep (Milling), Level A.

Test Pit Excavations

Test pit excavations were performed at the locations of the three former sumps to assess subsurface conditions. Test pits were performed by Eastern Environmental Solutions, Inc. with a backhoe to a depth of approximately 15 feet. Endpoint samples collected from the base of each test pit were submitted to EcoTest Laboratories, Inc. and analyzed for the presence of VOCs via EPA Method 8260 and heavy metals (Suffolk County List) via EPA Method 6010B and 7470A, as per SCDHS protocols. Soil samples were field screened using a photoionization detector (PID) prior to sampling. Test pits were checked for visible or olfactory evidence of residue sludge, discolored soils or other indications of possible contamination. A SCDHS representative was present at the site with CA personnel during the excavation process.

Groundwater Samples from Borings

Although groundwater conditions beneath the site were analyzed during the previous Limited Phase II Assessment conducted in 2003, it was recommended that the site's groundwater conditions be re-analyzed as an update on the present conditions at the site. Groundwater samples were collected at three locations on the subject property; one upgradient and two downgradient, with respect to groundwater flow. Eastern Environmental Solutions, Inc. of Manorville, New York, as a subcontractor to CA, utilized a Geoprobe Systems 6610DT device to advance soil borings on the subject property, as directed by CA. Groundwater samples were collected by CA from approximately 25 feet below grade (groundwater interface) from each boring. The groundwater samples were submitted to EcoTest and analyzed for the presence of VOCs via EPA 8260, total metals (*unfiltered*) via EPA 6010B and 7470A, and dissolved (filtered) metals via EPA 6010B and 7470A. A SCDHS representative was present at the site with CA personnel during groundwater sampling.

Soil Vapor Samples

In order to determine the potential of vapor intrusion from the nearby solvent groundwater plume, three temporary soil probes were installed on the subject property; one upgradient and two downgradient, with respect to groundwater flow. Soil vapor sampling was conducted in conformance with the New York State Department of Health (NYSDOH) Soil Vapor Intrusion Guidance¹. At each sampling location, a soil boring was installed using a hand auger to a depth of approximately three feet below land surface. Dedicated Teflon® tubing was inserted into

¹ NYSDOH. October 2006. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Center for Environmental Health, Bureau of Environmental Exposure Investigation. Accessed May 2010 from http://www.health.state.ny.us/environmental/indoors/vapors_intrusion

each boring and connected to a certified clean Summa® canister. Borings were sealed to prevent dilution of the vapor sample from ambient air. A tracer gas (helium) was used at each location to serve as a quality assurance/quality control measure to verify the integrity of the soil vapor probe seal. The soil vapor sampling apparatus at each location was enclosed within a plastic bag, enriched with the tracer gas, for the entire duration of the soil vapor testing.

All soil vapor samples were submitted to EcoTest and analyzed for the presence of VOCs in accordance with USEPA Method TO-15. Helium was included on the list of target analytes to be reported by the laboratory. A high reported concentration of the tracer gas (helium) would indicate that the sample had been diluted by ambient air.

All sampling locations are indicated in the Phase II Site Plan provided in Appendix I. All laboratory analytical results and applicable standards/guidelines are presented in the Sampling Tables provided in Appendix I. Copies of all sample laboratory analytical results and chain-of-custody documents are enclosed in Appendix II.

Property File Reviews

For the purpose of reviewing the public record and obtaining relevant site information, CA performed file reviews of available property documents at the following municipal departments and agencies: NYSDEC, SCDHS and Town of Southampton.

CA contacted NYSDEC to obtain a copy of the site characterization report for the Speonk Solvent Plume, but was informed that the report has not yet been completed (R. DeCandia,

NYSDEC, pers. comm., June 8, 2010). However, analytical data pertaining to groundwater and soil vapor samples collected as part of the investigation was forwarded to CA by NYSDEC. According to NYSDEC's data, VOC concentrations were detected at elevated levels in groundwater samples ranging from 65 – 85 feet below land surface (bls). Shallower groundwater samples (31-46 feet bls) had no VOC detections. Groundwater samples were taken along the North Phillips Avenue, adjacent to the eastern boundary of the Serenity Estates property and on the adjacent property to the south of the Serenity Estates property. The soil vapor results from NYSDEC detected VOCs, including chloroform and toluene. The soil vapor samples were collected adjacent to the eastern boundary of the Serenity site along North Phillips Avenue, and further south on North Phillips Avenue. None of the samples collected as part of NYSDEC's plume investigation were collected on the Serenity Estates property.

FINDINGS AND CONCLUSIONS

Standards and Guidelines

Laboratory analytical results for soil, groundwater, and vapor samples were compared to the following standards, guidelines and criteria:

VOCs in Soil - Action Levels put forth in Article 12 of the Suffolk County Sanitary Code, SOP No. 9-95 – Pumpout and Soil Cleanup Criteria (January 7, 2009).

Metals in Soil – Action Levels put forth in Article 12 of the Suffolk County Sanitary Code, SOP No. 9-95 – Pumpout and Soil Cleanup Criteria (January 7, 2009).

Groundwater Results (all analytes) – NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) Section 1.1.1.

Soil Vapor Samples - New York State currently does not have any standards, criteria or guidance values for concentrations of compounds in soil vapor (NYSDOH, 2006). Vapor concentrations were compared to the following air quality guidances: the Occupational Health and Safety Act's (OSHA) Permissible Exposure Limits (PEL) (8-hour time-weighted average) as per 29 CFR 1910.1000, Tables Z-1 through Z-3; National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL) (8-hour time-weighted average values); and NYSDEC Annual Guidance Concentrations (AGC).

A summary of the analytical results for the Phase II work is given below.

1) Soil Sampling

Surface and Sub-surface Soil Samples: No metals above Suffolk County Action Levels were detected in any of the samples. One VOC, p-isopropyltoluene, was detected in one sub-surface sample (SB-4) at a concentration below the Clean-Up/Action Level. No VOCs were detected in any other surface or sub-surface soil samples. No staining or odors were detected by CA personnel during soil sampling and no significant PID concentrations were detected.

Test Pit End Point Samples: No metals above Suffolk County Action Levels were detected in any of the samples. No VOCs were detected in any end point samples. No staining or odors indicating residual sludge-like material were detected by CA personnel during soil sampling and no significant PID concentrations were detected. The soil appeared to consist of clean sands in all test pits.

Conclusions: Metal concentrations detected in surface and sub-surface soils throughout the subject property are consistent with NYSDEC's Eastern United States Background Levels (TAGM 4046) (see Table 1 in Appendix I). Furthermore, there was no residual contamination detected in the former sludge pits. These results do not indicate evidence that on-site soils have been adversely impacted by former site operations.

2) Potential ACM – Suspect Areas

Bulk samples: The two bulk samples of potential asbestos-containing material (ACM-1 and ACM-2) collected in at the location of the former, demolished buildings were reported containing 21.1% and 26.7% of asbestos (Chrysotile) content, respectively. The material appears to be pieces of ACM transite or similar material.

Surface soil: Five surface soil samples (AB-1 through AB-5) were collected at the location of the former, demolished buildings and analyzed for asbestos content. None of the five soil samples were reported having asbestos (Chrysotile) content.

Conclusions: Soil analyses indicate that asbestos is not present in the surface soils in the vicinity of the former, demolished buildings. However, small pieces of remnant construction debris containing suspect ACM observed on the subject property have tested positive for asbestos.

3) Groundwater Sampling

One metal (chromium) was detected in *unfiltered* groundwater samples at upgradient (GW-3) and down-gradient (GW-1 and GW-2) locations at concentrations slightly above the Standard/Guidance Value. Other metals were also reported in *unfiltered* samples at these locations, but at concentrations below the Standards/Guidance Values. No elevated levels of dissolved metals were detected in any of the filtered groundwater samples. Chloroform was the only VOC detected, reported at downgradient sample GW-1 only, at a concentration below the NYSDEC Ambient Water Quality Standard.

Conclusions: The absence of detectable metals in filtered groundwater samples suggests that the elevated chromium detections may be due to suspended material or sediment in the *unfiltered* samples. This is consistent with the low level detections of chromium found in the soil samples throughout the site (all of which were at concentrations below the Standard/Guidance Value for chromium in soil). The contamination level of chromium in groundwater (Appendix I, Table 4) in unfiltered samples does not appear to indicate that mitigation/remediation measures need to be considered.

The chloroform (VOC) detection in the downgradient groundwater sample (GW-1) may suggest that trace contamination from the nearby solvent groundwater plume is present near the southeastern boundary of the site. Chloroform was detected at a concentration below the NYSDEC Ambient Water Quality Standard and was not reported in other groundwater samples. The groundwater plume is from an off-site source and is being monitored by NYSDEC and SCDHS as a spill site (CERCLIS EPA ID: NYN000204391).

4) Soil Vapor Sampling

Downgradient soil vapor sample SV-1 (located in the vicinity where chloroform was detected in groundwater) was reported with detections of acetone, chloroform and toluene. Acetone was also detected in soil vapor samples SV-2 (downgradient) and SV-3 (upgradient). The reported soil vapor detections were all well below NYSDEC's Division of Air Resources indoor air quality AGC screening values and the federal guidelines (OSHA and NIOSH) (see Table 5 of Appendix I), which are based directly on health risk criteria for indoor air quality.

Conclusions:

NYSDOH recommends that soil vapor results are reviewed “as a whole,” in conjunction with the results of other environmental sampling and the site conceptual model. Appropriate mitigation methods are dependant upon the proposed land use. NYSDOH recommends that if vapor sampling results indicate a mitigation system is recommended to address exposures in buildings that may be constructed on an undeveloped parcel, then a sub-slab depressurization system (SSDS) with sealing, or a sub-membrane depressurization (SMD) system with a soil vapor retarder, or a combination of these methods should be used, as appropriate to the design of the proposed buildings.

Acetone has not been recorded as a contaminant in the Speonk Plume and was not found in groundwater samples performed at the subject property; therefore, the source of this vapor contaminant does not appear to be the groundwater. Acetone is known to occur naturally in sub-surface soils as the result of biodegradation of natural organic matter in soil (NYSDOH, 2006). Acetone is also a common laboratory contaminant, so its presence in a sample does not always indicate its presence in the environment.

RECOMMENDATIONS

The findings of this Phase II investigation indicate that mitigation measures should be considered to address environmental conditions pertaining to the following: the presence of small scattered pieces of remnant construction/demolition debris tested positive for ACM. Recommended measures regarding the potential migration of the Speonk Solvent Plume are also discussed. Mitigation measures are recommended based on the proposed future commercial/residential use of the site.

CA does not recommend additional site investigation pertaining to on-site soils or groundwater at this time. There is no evidence of residual contamination in the former sludge areas, and there is no evidence that the soils or groundwater have been affected by previous site operations.

On-Site Groundwater: No elevated levels of dissolved metals were detected in any of the filtered groundwater samples. One metal (chromium) was present in *unfiltered* groundwater samples at concentrations above the Ambient Water Quality Standard at upgradient and downgradient groundwater sample locations. Concentrations were highest in the upgradient sample, located near the northern boundary of the subject property. CA recommends that any future development of the site be serviced by the municipal water supply and that the groundwater on-site not be utilized.

Asbestos Containing Debris: CA recommends that the confirmed ACM construction/demolition debris remnants observed on some areas of the subject property be

properly removed and disposed of by a qualified contractor.

Speonk Solvent Plume: The Speonk Solvent Plume (reportedly consisting of chloroform, tetrachloroethylene, trichloroethene, 1,1,1-trichloroethane, and carbon tetrachloride) is located in the vicinity of North Phillips Avenue. In order to mitigate possible exposures from the migration or intrusion of soil vapors from the plume to the subject property, CA recommends that any future buildings developed on the subject property be equipped with a system to prevent potential vapor intrusion into the subject buildings.

APPENDIX I

Analytical Data Tables and Site Plan

Table 1. Soil Sample Results
Serenity Estates
May 20, 2010

Sample ID	SS-1	SB-2	SS-3	SB-4	SS-5	SB-6	SS-7	SS-8	SB-9	SS-10	SB-11	SS-12	SB-13
Sample Depth	0-3"	3'	0-3"	3'	0-3"	3'	0-3"	0-3"	3'	0-3"	3'	0-3"	1.5'
Methyl Ethyl Ketone	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Methylene Chloride	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Methylisobutylketone	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
n-Butylbenzene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
n-Propylbenzene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Naphthalene(V)	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
o-Xylene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
p-Diethylbenzene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
p-Ethyltoluene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
p-Isopropyltoluene	<5.9	<5.3	<5.7	33	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
sec-Butylbenzene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Styrene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
1,1,2-Dichloroethene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
1,1,3-Dichloropropene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
tert-ButylMethylEther	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
tert-Butylbenzene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Tetrachloroethene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Toluene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Trichloroethene	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Trichlorofluoromethane	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7
Vinyl Chloride	<5.9	<5.3	<5.7	<5.2	<6.9	<5.4	<5.3	<5.8	<5.3	<6.9	<5.2	<5.7	<5.7

METALS

Analyte	Article 12 Suffolk County Sanitary Code Action Level	Eastern USA Background (ppm)	Unit	SS-1	SB-2	SS-3	SB-4	SS-5	SB-6	SS-7	SS-8	SB-9	SS-10	SB-11	SS-12	SB-13
Arsenic as As	25	3-12**	mg/Kg	1.8	<1.1	1.8	<1	<1.4	1.3	1.1	7.8	<1.1	2.5	<1	1.1	2.4
Beryllium as Be	8	0-1.75	mg/Kg	<0.12	<0.11	<0.11	<0.1	<0.14	<0.11	<0.11	0.24	<0.11	<0.14	<0.1	<0.11	0.26
Cadmium as Cd	10	0-1-1	mg/Kg	<0.59	<0.53	<0.57	<0.52	<0.69	<0.54	<0.53	0.86	<0.53	<0.69	<0.52	<0.57	<0.57
Chromium as Cr	100	1.5-40**	mg/Kg	5.5	2.7	5.3	1.5	2.4	9	4.1	7.7	3.2	14	2.1	8.3	14
Copper as Cu	500	1-50	mg/Kg	9.5	1.4	4.3	<1	5.4	17	1.8	28	1.3	49	<1	31	3.8
Lead as Pb	400	****	mg/Kg	67	2.7	14	0.76	18	110	6.9	110	1.5	120	0.99	82	5.6
Mercury as Hg	2	0.001-0.2	mg/Kg	0.019	<0.0053	0.021	<0.0052	0.035	0.018	0.0064	0.017	<0.0053	0.067	<0.0052	0.044	0.024
Nickel as Ni	1000	0.5-25	mg/Kg	2.7	1.4	2.1	1	1.4	3.5	2	10	1.8	2.2	<1	<1.1	6.6
Silver as Ag	100	N/A	mg/Kg	<0.59	<0.53	<0.57	<0.52	<0.69	<0.54	<0.53	<0.58	<0.53	<0.69	<0.52	<0.57	<0.57
% Solids				85	94	87	96	72	92	95	86	94	72	96	88	87

Notes:

Bold indicates concentration is at or exceeds Action Level put forth in Article 12 of the Suffolk County Sanitary Code

** New York State background

**** Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

Table 2. Test Pit End Point Samples
Serenity Estates
May 18, 2010

Sample ID	TP-1	TP-2	TP-3	TP-4	TP-5	TP-6	TP-7	TP-8
Sample Depth	15'	15'	15'	15'	15'	15'	15'	15'
VOCs								
Analyte	Article 12 Suffolk County Sanitary Code Action Level							
	Unit							
1,1 Dichloroethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,1 Dichloroethene	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,1-Dichloropropene	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,2 Dibromoethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,2 Dichlorobenzene (V)	15000	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,2 Dichloroethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,2 Dichloropropane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,3 Dichlorobenzene (V)	600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,3-Dichloropropane	3200	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,4 Dichlorobenzene (V)	15000	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1,11 Trichloroethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1112Tetrachloroethane	600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
112 Trichloroethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1122Tetrachloroethane	600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
123-Trichlorobenzene	1200	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
123-Trichloropropane	6800	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
124-Trichlorobenzene (V)	800	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
124-Trichloropropane	6800	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
124-Trimethylbenzene	4800	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
1245 Tetramethylbenz	15000	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
135-Trimethylbenzene	5200	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
2,2-Dichloropropane	600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
2-Chlorotoluene	3600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
4-Chlorotoluene	3600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Acetone	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Benzene	120	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Bromobenzene	1600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Bromochloromethane	400	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Bromodichloromethane	600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Bromoform	1000	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Bromomethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
c-1,2-Dichloroethane	600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
c-1,3Dichloropropene	600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Carbon Tetrachloride	1200	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Chlorobenzene	3400	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Chlorodibromomethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Chlorodifluoromethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Chloroethane	400	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Chloroform	600	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Chloromethane	ug/Kg	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Dibromochloropropane	1000	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2

Table 2. Test Pit End Point Samples
Serenity Estates
May 18, 2010

Sample ID	TP-1	TP-2	TP-3	TP-4	TP-5	TP-6	TP-7	TP-8
Dibromomethane	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Dichlorodifluoromethane	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Ethyl Benzene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Freon 113	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Hexachlorobutadiene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Isopropylbenzene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
m + p Xylene	<10	<10	<10	<10	<10	<11	<10	<10
Methyl Ethyl Ketone	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Methyl Chloride	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Methylisobutylketone	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
n-Butylbenzene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
n-Propylbenzene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Naphthalene(v)	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
o Xylene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
p Diethylbenzene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
p-Ethyltoluene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
p-Isopropyltoluene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
sec-Butylbenzene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Styrene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
t-1,2-Dichloroethene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
t-1,3Dichloropropene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
ter-ButylMethylEther	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
tert-Butylbenzene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Tetrachloroethene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Toluene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Trichloroethene	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Trichlorofluoromethane	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2
Vinyl Chloride	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.2	<5.2

METALS

Analyte	Article 12 Suffolk County Sanitary Code Action Level	Eastern USA Background (ppm)	Unit
Arsenic as As	25	3-12**	mg/Kg
Beryllium as Be	8	0-1.75	mg/Kg
Cadmium as Cd	10	0.1-1	mg/Kg
Chromium as Cr	100	1.5-40**	mg/Kg
Copper as Cu	500	1-50	mg/Kg
Lead as Pb	400	****	mg/Kg
Mercury as Hg	2	0.001-0.2	mg/Kg
Nickel as Ni	1000	0.5-25	mg/Kg
Silver as Ag	100	N/A	mg/Kg
% Solids			

Notes: **Bold** indicates concentration is at or exceeds Action Level put forth in Article 12 of the Suffolk County Sanitary Code

Table 3. Potential Asbestos Samples
Serenity Estates
May 20, 2010

Sample ID:	ACM-1	ACM-2
Sample Type:	Bulk Potential ACM	Bulk Potential ACM
Non-Asbestos		
% Fibrous	-	-
% Non-Fibrous	78.90%	73.30%
Asbestos		
% Type	21.10%	26.70%
Type	Chrysotile	Chrysotile

Sample ID:	AB-1	AB-2	AB-3	AB-4	AB-5
Sample Type:	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil
Non-Asbestos					
% Fibrous	<0.25% Cellulose 1.0% Fibrous (other)	<0.25% Cellulose <0.25% Fibrous (other)	<0.25% Cellulose <0.25% Fibrous (other)	<0.25% Cellulose <0.25% Fibrous (other)	<0.25% Cellulose <0.25% Fibrous (other)
% Non-Fibrous	99.0% Non-Fibrous (other)	100.00% Non-Fibrous	100.00% Non-Fibrous	100.00% Non-Fibrous	100.00% Non-Fibrous
Asbestos					
% Type	None Detected	None Detected	None Detected	None Detected	None Detected
Type	-	-	-	-	-

Table 4. Groundwater Sample Results
Serenity Estates
May 18, 2010

Sample ID:			GW-1	GW-2	GW-3
Depth to Water (ft):			25'	25'	25'
Analyte	NYSDEC TOGS Standard / Guidance	Unit			
VOCs					
1,1 Dichloroethane	5	ug/L	<1	<1	<1
1,1 Dichloroethene	5	ug/L	<1	<1	<1
1,1-Dichloropropene	5	ug/L	<1	<1	<1
1,2 Dibromoethane	5	ug/L	<1	<1	<1
1,2 Dichlorobenzene (v)	3	ug/L	<1	<1	<1
1,2 Dichloroethane	0.6	ug/L	<1	<1	<1
1,2 Dichloropropane	1	ug/L	<1	<1	<1
1,3 Dichlorobenzene (v)	3	ug/L	<1	<1	<1
1,3-Dichloropropane	5	ug/L	<1	<1	<1
1,4 Dichlorobenzene (v)	3	ug/L	<1	<1	<1
111 Trichloroethane	5	ug/L	<1	<1	<1
1112Tetrachloroethane	5	ug/L	<1	<1	<1
112 Trichloroethane	1	ug/L	<1	<1	<1
1122Tetrachloroethane	5	ug/L	<1	<1	<1
123-Trichlorobenzene	5	ug/L	<1	<1	<1
123-Trichloropropane	0.04	ug/L	<1	<1	<1
124-Trichlorobenzene (v)	5	ug/L	<1	<1	<1
124-Trimethylbenzene	5	ug/L	<1	<1	<1
1245 Tetramethylbenz	5	ug/L	<1	<1	<1
135-Trimethylbenzene	5	ug/L	<1	<1	<1
2,2-Dichloropropane	5	ug/L	<1	<1	<1
2-Chlorotoluene	5	ug/L	<1	<1	<1
4-Chlorotoluene	5	ug/L	<1	<1	<1
Acetone	50	ug/L	<10	<10	<10
Benzene	1	ug/L	<1	<1	<1
Bromobenzene	5	ug/L	<1	<1	<1
Bromochloromethane	5	ug/L	<1	<1	<1
Bromodichloromethane	50	ug/L	<1	<1	<1
Bromoform	50	ug/L	<1	<1	<1
Bromomethane	5	ug/L	<1	<1	<1
c-1,2-Dichloroethene	5	ug/L	<1	<1	<1
c-1,3Dichloropropene	0.4	ug/L	<1	<1	<1
Carbon Tetrachloride	5	ug/L	<1	<1	<1
Chlorobenzene	5	ug/L	<1	<1	<1
Chlorodibromomethane	50	ug/L	<1	<1	<1
Chlorodifluoromethane	5	ug/L	<1	<1	<1
Chloroethane	5	ug/L	<1	<1	<1
Chloroform	7	ug/L	3	<1	<1
Chloromethane	5	ug/L	<1	<1	<1
Dibromochloropropane	0	ug/L	<1	<1	<1
Dibromomethane	5	ug/L	<1	<1	<1
Dichlorodifluoromethane	5	ug/L	<1	<1	<1
Ethyl Benzene	5	ug/L	<1	<1	<1
Freon 113	5	ug/L	<1	<1	<1
Hexachlorobutadiene	1	ug/L	<1	<1	<1
Isopropylbenzene	5	ug/L	<1	<1	<1

**Table 4. Groundwater Sample Results
Serenity Estates
May 18, 2010**

Sample ID:			GW-1	GW-2	GW-3
m + p Xylene	5	ug/L	<2	<2	<2
Methyl Ethyl Ketone	50	ug/L	<10	<10	<10
Methylene Chloride	5	ug/L	<1	<1	<1
Methylisobutylketone		ug/L	<10	<10	<10
n-Butylbenzene	5	ug/L	<1	<1	<1
n-Propylbenzene	5	ug/L	<1	<1	<1
Naphthalene(v)	10	ug/L	<1	<1	<1
o Xylene	5	ug/L	<1	<1	<1
p Diethylbenzene	5	ug/L	<1	<1	<1
p-Ethyltoluene	5	ug/L	<1	<1	<1
p-Isopropyltoluene	5	ug/L	<1	<1	<1
sec-Butylbenzene	5	ug/L	<1	<1	<1
Styrene	5	ug/L	<1	<1	<1
t-1,2-Dichloroethene	5	ug/L	<1	<1	<1
t-1,3Dichloropropene	0.04	ug/L	<1	<1	<1
ter-ButylMethylEther	10	ug/L	<1	<1	<1
tert-Butylbenzene	5	ug/L	<1	<1	<1
Tetrachloroethene	5	ug/L	<1	<1	<1
Toluene	5	ug/L	<1	<1	<1
Trichloroethene	5	ug/L	<1	<1	<1
Trichlorofluoromethane	5	ug/L	<1	<1	<1
Vinyl Chloride	2	ug/L	<1	<1	<1

METALS					
Arsenic as As	0.025	mg/L	<0.005	0.007	0.01
Beryllium as Be	0.003	mg/L	<0.001	<0.001	<0.001
Cadmium as Cd	0.005	mg/L	<0.005	<0.005	<0.005
Chromium as Cr	0.05	mg/L	0.052	0.097	0.26
Copper as Cu	0.2	mg/L	0.01	0.02	0.07
Lead as Pb	0.25	mg/L	0.006	0.008	0.021
Mercury as Hg	0.0007	mg/L	<0.00025	<0.00025	<0.00025
Nickel as Ni	0.1	mg/L	0.03	0.03	0.08
Silver as Ag	0.05	mg/L	<0.005	<0.005	<0.005

DISSOLVED METALS					
Arsenic as As	0.025	mg/L	<0.005	<0.005	<0.005
Beryllium as Be	0.003	mg/L	<0.001	<0.001	<0.001
Cadmium as Cd	0.005	mg/L	<0.005	<0.005	<0.005
Chromium as Cr	0.05	mg/L	<0.005	<0.005	<0.005
Copper as Cu	0.2	mg/L	<0.01	<0.01	<0.01
Lead as Pb	0.25	mg/L	<0.005	<0.005	<0.005
Mercury as Hg	0.0007	mg/L	<0.00025	<0.00025	<0.00025
Nickel as Ni	0.1	mg/L	0.01	<0.01	0.01
Silver as Ag	0.05	mg/L	<0.005	<0.005	<0.005

Note: **Bold** indicates concentration is at or exceeds NYSDEC Ambient Water Quality Standard or Guidance Value

Table 5. Soil Vapor Sample Results
Serenity Estates
May 20, 2010

Sample ID:	Laboratory Reporting Limits		SV-1		SV-2		SV-3	
	PPBV	UG/M3	ppbv	ug/m ³	ppbv	ug/m ³	ppbv	ug/m ³
1,1 Dichloroethane	0.2	0.81	< 0.2	< 0.81	< 0.2	< 0.81	< 0.2	< 0.81
1,1 Dichloroethane	0.1	0.40	< 0.1	< 0.40	< 0.1	< 0.40	< 0.1	< 0.40
1,2 Dibromofluoromethane	0.2	1.54	< 0.2	< 1.54	< 0.2	< 1.54	< 0.2	< 1.54
1,2 Dichlorobenzene (v)	0.5	3.01	< 0.5	< 3.01	< 0.5	< 3.01	< 0.5	< 3.01
1,2 Dichloroethane	0.5	2.03	< 0.5	< 2.03	< 0.5	< 2.03	< 0.5	< 2.03
1,2 Dichloropropane	0.5	2.31	< 0.5	< 2.31	< 0.5	< 2.31	< 0.5	< 2.31
1,2-Dichlorotetrafluoroethane	0.2	1.40	< 0.2	< 1.40	< 0.2	< 1.40	< 0.2	< 1.40
1,3 Butadiene	1	2.21	< 1	< 2.21	< 1	< 2.21	< 1	< 2.21
1,3 Dichlorobenzene (v)	0.2	1.20	< 0.2	< 1.20	< 0.2	< 1.20	< 0.2	< 1.20
1,4 Dichlorobenzene (v)	0.5	3.01	< 0.5	< 3.01	< 0.5	< 3.01	< 0.5	< 3.01
1,4-Dioxane	1	3.60	< 1	< 3.60	< 1	< 3.60	< 1	< 3.60
111 Trichloroethane	0.2	1.09	< 0.2	< 1.09	< 0.2	< 1.09	< 0.2	< 1.09
112 Trichloroethane	0.2	1.09	< 0.2	< 1.09	< 0.2	< 1.09	< 0.2	< 1.09
1122Tetrachloroethane	0.2	1.37	< 0.2	< 1.37	< 0.2	< 1.37	< 0.2	< 1.37
124-Trimethylbenzene	0.5	2.46	< 0.5	< 2.46	< 0.5	< 2.46	< 0.5	< 2.46
135-Trimethylbenzene	0.5	2.46	< 0.5	< 2.46	< 0.5	< 2.46	< 0.5	< 2.46
2,2,4-Trimethylpentane	0.5	2.33	< 0.5	< 2.33	< 0.5	< 2.33	< 0.5	< 2.33
2-Hexanone	0.5	2.05	< 0.5	< 2.05	< 0.5	< 2.05	< 0.5	< 2.05
3-Chloropropene	0.5	1.57	< 0.5	< 1.57	< 0.5	< 1.57	< 0.5	< 1.57
Acetone	1	2.38	6.4	15.22	2.5	5.95	3.6	8.56
Acrylonitrile	1	2.17	< 1	< 2.17	< 1	< 2.17	< 1	< 2.17
Benzene	0.2	0.64	< 0.2	< 0.64	< 0.2	< 0.64	< 0.2	< 0.64
Benzyl Chloride	0.2	1.04	< 0.2	< 1.04	< 0.2	< 1.04	< 0.2	< 1.04
Bromodichloromethane	0.2	1.33	< 0.2	< 1.33	< 0.2	< 1.33	< 0.2	< 1.33
Bromoform	0.2	2.07	< 0.2	< 2.07	< 0.2	< 2.07	< 0.2	< 2.07
Bromomethane	0.2	0.78	< 0.2	< 0.78	< 0.2	< 0.78	< 0.2	< 0.78
c-1,2-Dichloroethene	0.2	0.79	< 0.2	< 0.79	< 0.2	< 0.79	< 0.2	< 0.79
c-1,3-Dichloropropene	0.5	2.27	< 0.5	< 2.27	< 0.5	< 2.27	< 0.5	< 2.27
Carbon disulfide	0.5	1.56	< 0.5	< 1.56	< 0.5	< 1.56	< 0.5	< 1.56
Carbon Tetrachloride	0.4	2.52	< 0.4	< 2.52	< 0.4	< 2.52	< 0.4	< 2.52
Chlorobenzene	0.2	0.92	< 0.2	< 0.92	< 0.2	< 0.92	< 0.2	< 0.92
Chlorodibromomethane	0.2	1.69	< 0.2	< 1.69	< 0.2	< 1.69	< 0.2	< 1.69
Chloroethane	1	2.64	< 1	< 2.64	< 1	< 2.64	< 1	< 2.64
Chloroform	0.2	0.97	4.8	23.38	< 0.2	< 0.97	< 0.2	< 0.97
Chloromethane	1	2.07	< 1	< 2.07	< 1	< 2.07	< 1	< 2.07
Cyclohexane	0.2	0.69	< 0.2	< 0.69	< 0.2	< 0.69	< 0.2	< 0.69
Dichlorodifluoromethane	0.2	0.99	< 0.2	< 0.99	< 0.2	< 0.99	< 0.2	< 0.99
Ethyl Acetate	5	18.01	< 5	< 18.01	< 5	< 18.01	< 5	< 18.01
Ethyl alcohol	2	3.77	< 2	< 3.77	< 2	< 3.77	< 2	< 3.77
Ethyl Benzene	0.2	0.87	< 0.2	< 0.87	< 0.2	< 0.87	< 0.2	< 0.87
Freon 113	0.1	0.77	< 0.1	< 0.77	< 0.1	< 0.77	< 0.1	< 0.77
Heptane	0.5	2.05	< 0.5	< 2.05	< 0.5	< 2.05	< 0.5	< 2.05
Hexachlorobutadiene	0.5	5.34	< 0.5	< 5.34	< 0.5	< 5.34	< 0.5	< 5.34
Hexane	0.5	1.76	< 0.5	< 1.76	< 0.5	< 1.76	< 0.5	< 1.76

Table 5. Soil Vapor Sample Results
Serenity Estates
May 20, 2010

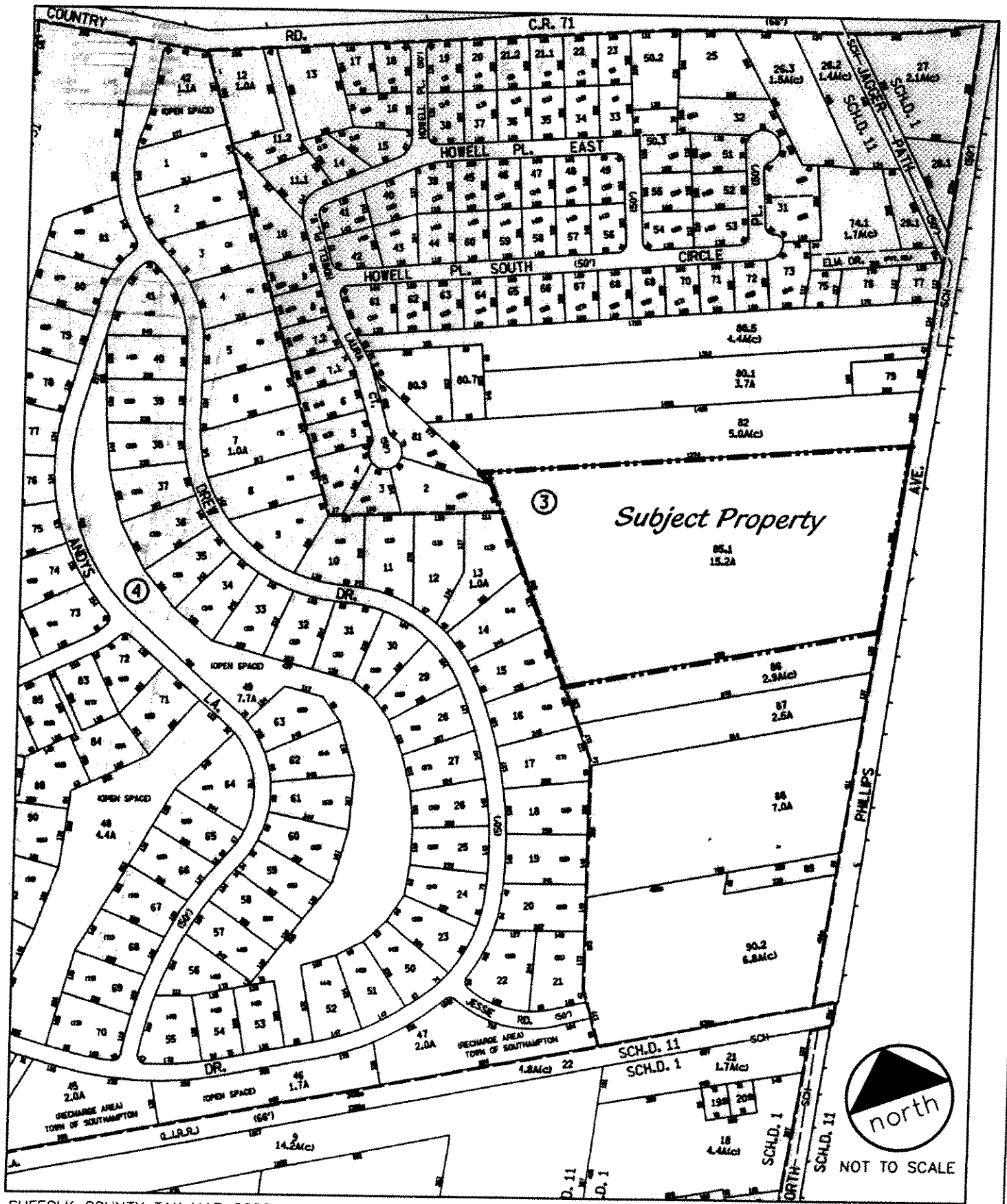
Sample ID:	SV-1			SV-2			SV-3		
	Laboratory Reporting Limits			Reported Concentration			Reported Concentration		
	PPBV	UG/M3		ppbv	ug/m ³		ppbv	ug/m ³	
Analyte									
Isopropyl Alcohol	5	12.28		< 5	< 12.28		< 5	< 12.28	
m + p Xylene	0.5	2.17		< 0.5	< 2.17		< 0.5	< 2.17	
Methyl Ethyl Ketone	1	2.95		< 1	< 2.95		< 1	< 2.95	
Methylene Chloride	0.2	0.69		< 0.2	< 0.69		< 0.2	< 0.69	
Methylisobutylketone	1	4.10		< 1	< 4.10		< 1	< 4.10	
o Xylene	0.2	0.87		< 0.2	< 0.87		< 0.2	< 0.87	
p-Ethyltoluene	0.5	2.46		< 0.5	< 2.46		< 0.5	< 2.46	
Propylene	0.5	0.86		< 0.5	< 0.86		< 0.5	< 0.86	
Styrene	0.2	0.85		< 0.2	< 0.85		< 0.2	< 0.85	
t-1,2-Dichloroethene	0.2	0.79		< 0.2	< 0.79		< 0.2	< 0.79	
t-1,3Dichloropropene	0.2	0.91		< 0.2	< 0.91		< 0.2	< 0.91	
tert-ButylMethylEther	0.2	0.70		< 0.2	< 0.70		< 0.2	< 0.70	
tert-Butyl Alcohol	2	6.06		< 2	< 6.06		< 2	< 6.06	
Tetrahydroethene	0.2	1.36		< 0.2	< 1.36		< 0.2	< 1.36	
Tetrahydrofuran	0.5	1.47		< 0.5	< 1.47		< 0.5	< 1.47	
Toluene	0.2	0.75		0.21	0.79		< 0.2	< 0.75	
Trichloroethene	0.2	1.07		< 0.2	< 1.07		< 0.2	< 1.07	
Trichlorofluoromethane	0.2	1.12		< 0.2	< 1.12		< 0.2	< 1.12	
Vinyl Acetate	0.5	1.76		< 0.5	< 1.76		< 0.5	< 1.76	
Vinyl Bromide	0.2	0.88		< 0.2	< 0.88		< 0.2	< 0.88	
Vinyl Chloride	0.2	0.51		< 0.2	< 0.51		< 0.2	< 0.51	
Helium	1%			< 1%			< 1%		

State and Federal Air Quality Guidance Values

Analyte	Unit	OSHA PEL	NIOSH REL	NYSDEC AGC
Acetone	ug/m ³	2,400,000	590,000	28,000
Chloroform	ug/m ³	240,000	9,780	4.3E-02
Toluene	ug/m ³	754,000	375,000	5,000

Notes:

OSHA PEL = OSHA's Permissible Exposure Limits (8hr time-weighted average) as per 29 CFR 1910.1000, Tables Z-1 - Z-3.
 NIOSH/REL = Recommended Exposure Limits (8hr time-weighted average) found in the US Dept. of Health and Human Services, National Institute for Occupational Safety and Health, NIOSH POCCKET GUIDE TO CHEMICAL HAZARDS, NIOSH Publication No. 2005-149 (Third Printing, September 2007).
 NYSDEC AGC = The New York State Department of Conservation, Division of Air Resources, DAF-1 AGC/SGC Tables (September 10, 2007).
 ppbv = parts per billion per volume
 ug/m³ = micrograms per cubic meter (of air)



SUFFOLK COUNTY TAX MAP 2002

FIGURE 1

TAX MAP
0900-350-3-85.1
95 North Phillips Avenue
Speonk, New York

Cashin Associates, P.C.
 ENGINEERING · PLANNING · CONSTRUCTION MANAGEMENT





LEGEND

- SOIL BORING LOCATION
- X ASBESTOS SAMPLE LOCATION
- ⊙ SOIL VAPOR AND GROUNDWATER SAMPLE LOCATION

SITE MAP AND SAMPLE LOCATIONS

95 North Phillips Avenue
Speonk, New York