ENVIRONMENTAL MANAGEMENT, LTD.
On the Lake @ 41 Franck Road, Stony Point, New York 10980
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June 17, 2009

Carl Obermeyer
New York State Department of Health
50 North Street, Suite 2
Monticello, New York 12701

Re: 2008 Soil Vapor Sampling at DPW, 15 Marbledale Road
NYSDEC Site #V00237-3
Kings Electronics Co., Inc./Weissman Holdings, LLC(Kings)
40 Marbledale Road
Tuckahoe, Westchester County, New York

Dear Mr. Obermeyer:

On behalf of Weissman Holdings, LLC, formerly Kings Electronics Co., Inc. (Kings), Environmental Management, Ltd. (EML) is providing a Soil Vapor Intrusion (SVI) Evaluation Report for its 2009 soil vapor investigation at the Tuckahoe Department of Public Works, 15 Marbledale Road (DPW). EML is also submitting a draft transmittal letter, addressed to the Village of Tuckahoe, for your review.

As you can glean from Table II of the attached report, trichloroethylene (TCE) is continuing to decrease within the sub-slab of DPW and the indoor air concentration has remained below 1.0 µg/m³ for a third consecutive year. Based on NYSDOH decision matrices, no soil vapor mitigation was required in the past and, as a result of the continued downward trend within the sub-slab, no mitigation is required now. With respect to PCE, based on the sampling results and the NYSDOH PCE decision matrix, no further action is required (as in the past).

Prior to this year's investigation, we had discussed discontinuing SVI activities at DPW based on the 2008-2009 heating season results. As you can see, there is a decreasing trend of sub-slab vapor concentrations at DPW. In addition, TCE concentration remains below 0.7 µg/m³ within the indoor air and the sub-slab concentrations will soon be below 50 µg/m³. Based on these findings, EML recommends that no additional actions are needed to address human exposures at this property. In addition to being a costly endeavor for Kings, it has been disruptive to the daily routine at DPW.

Please review the attached report and advise us if the draft transmittal letter is approved. Once approved, EML will send the Village of Tuckahoe the approved letter with applicable attachments.

Please call me after your review of this submittal if you have any questions or need to further discuss discontinuing SVI activities at DPW.

Yours truly,

Environmental Management, Ltd.

Donald J. Wanamaker

Donald J. Wanamaker
President

encl. Soil Vapor Intrusion Evaluation Report, 2009
Draft June 23, 2009 letter to Village of Tuckahoe Building Dept.

cc: Nicole M. Bonsteel P.E., NYSDEC

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Soil Vapor Intrusion Evaluation Report - 2009
Tuckahoe Department of Public Works (DPW)
15 Marbledale Road
Tuckahoe, New York

On behalf of Weissman Holdings, Inc. (formerly Kings Electronics Co., Inc.-NYSDEC Site #V00237-3), Environmental Management, Ltd. (EML) conducted a soil vapor intrusion (SVI) evaluation pursuant to an Off-Site Investigation Work Plan, revised in December 2005 (OSIWP). The OSIWP was conditionally approved by the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), collectively the "State", on February 13, 2006. In the OSIWP, Kings agreed to conduct SVI evaluations at the Village of Tuckahoe Department of Public Works (DPW), commercial property located at 15 Marbledale Road. SVI evaluations were conducted in March 2006, March 2007 and March 2008. A May 28, 2008 SVI Evaluation Report was provided to NYS DOH and NYS DEC summarizing the March 26, 2008 SVI evaluation. Based on results of that report, re-sampling of DPW was to be conducted during the next (i.e.; 2008-2009) heating season. This report summarizes the February 19 inspection and March 12, 2009 SVI evaluation and its results.

A. DPW Facility Description

A floor diagram of this facility is included in Attachment A. The employee occupied space at the facility consists of a single level masonry building with a concrete floor. The primary entrance is located at the southern side within the DPW property yard. Upon entering the building, there is a corridor that is lined with employee lockers and which leads to the common bathroom and lounge area to the back (i.e.; to the north). Immediately to the right of the main entrance, south side of the building, is the interior entrance door to the main office. The main office consists of a central area, containing the foreman's desk and a coffee station. The Superintendent's office is on the left (north side of this area), and a bathroom and closed utility/storage room to the east towards Marbledale Road. Located within the northern half of the DPW building is a common bathroom and employee break/lounge area. At the northwest corner of the lounge area there is a utility closet that includes the gas-fired boiler, hot water heater, and incidental storage space. There is an exit door in the lounge area that opens to the east side of the building, allowing access to Marbledale Road.

The main office area is primarily occupied by the foreman, when he is not in the field during the work day. Employees typically meet in this area at the beginning and the end of the work shift. The work shift is generally 6:30 a.m. to 3:00 p.m.

B. Preparation for Sub-Slab Vapor and Indoor/Outdoor Air Sampling

On February 19, 2009, EML conducted a pre-sampling inspection and inventory. The standard "New York State Department of Health Indoor Air Quality Questionnaire and Building Inventory" prescribed by the Center for Environmental Health was completed (included as Attachment A). A visual inspection of the utility/storage room was performed and it was noted

that the room contained the following: light bulbs/fixtures, "ready for use" fuel-powered tree cutting equipment and a supply of pesticides/herbicides, caulks/sealers, spray paints, cleaners, lubricants and fuel additives (all sealed and unused). A representative inventory was recorded, and photographs of the room's contents taken. According to the foreman, the utility room door is normally closed throughout the work day. The DPW building was surveyed for volatile organic compounds (VOCs) by the use of a "ppb Rae" photo ionization detector (PID) instrument that measures both in the ppb and ppm range. Measurements were in the range of 50 to 350 ppb VOC. The highest levels, 250 to 350 ppb, were recorded within the utility/storage room when the door was initially opened. See Floor Plan, for field instrument readings, on page 6 of Attachment A. A survey of the common office area indicated 50 to 70 ppb VOC. A survey of the gas furnace area indicated 140 to 160 ppb VOC. Readings of 110 ppb VOC were obtained within a floor drain in the break/lounge area, both with and without a humidity filtering tube. The employee break/lounge area readings ranged from 120 to 130 ppb VOC; the side exit door was partially open for most of the day.

The Superintendent and foreman were informed of the procedures and requirements for indoor air quality sampling and were instructed to please keep all doors and windows closed the day of monitoring.

The following floor penetrations were noted and recorded in the IAQ Questionnaire (Attachment A): 3' x 4' x 2' sewer cleanout box and two circular floor drains in the employee break/lounge area. Both bathrooms were finished with ceramic tile; the water supply and drain penetrations were well sealed. The gas supply line for the furnace is above ground. No cracks or floor penetrations were observed in the supervisor office area.

In preparation for sampling, 6-liter Summa canisters (certified clean and each having a vacuum pressure of -30 inches Hg) and flow controllers calibrated for 8-hour collection periods, were obtained from Columbia Analytical Services, Inc. Air Quality Laboratory (CAS), located in Simi Valley, California (NELAP NY lab ID No:11221). A Radiodetection Model MGD-2002 helium leak detector was also obtained for use in determining the seal integrity of the vapor probe. A 5-gallon bucket was prepared as a gas-tight enclosure for testing the probe seal integrity for the duration of the sub slab vapor sampling period.

C. Sampling Procedures: Sub-Slab Air Sampling

On March 12, 2009, EML's CIH and field manager, as well as a technician from Geovation Engineering, P.C. arrived at the DPW facility at 6:30 a.m. to commence sub slab vapor sampling concurrently with office indoor air and representative outdoor air sampling. The DPW Superintendent and foreman were again advised of all activities that could potentially impact the sampling results and were asked to keep all doors/windows closed. At the commencement of sampling (approximately 7:40 a.m.) the outdoor temperature was 45° F (relative humidity 27 %), indoor temperature was 65-70° F (relative humidity 30%), and the heating system was operating. It was a clear day, no precipitation, with a fresh wind from the northeast.

The DPW building was surveyed for volatile organic compounds (VOCs) by the use of a "ppb Rae" PID instrument. Measurements were in the range of 150 to 900 ppb VOC. The higher levels, 500 to 900 ppb, were within the utility/storage room, elsewhere 150 to 250 ppb VOC. See Floor Plan, for field instrument readings, on page 6 of Attachment A.

The main office area was closely inspected to confirm that the prior year (i.e.; March 26, 2008) temporary sub-slab vapor probe position could be replicated. It was determined that the concrete floor area within the main office, near the Superintendent's office entry, remained the best choice

for a temporary probe installation. The sampling location is indicated on the DPW facility floor plan on page 6 of Attachment A.

At this location, Geovation drilled a 3/8" diameter hole through the concrete floor into the sub-slab aggregate. Teflon-lined polyethylene tubing of ¼" diameter (the probe line) was inserted into the hole, extending 2" into the sub-slab material. Permagum was used to seal the tubing in the hole. The tubing was then passed through a predrilled hole in the bottom of the inverted 5-gallon bucket, and sealed in place with Permagum. The bucket was then placed over the sampling hole and the rim circumference sealed to the concrete floor with Permagum in order to create an air tight seal and limit the intrusion of ambient air to the sampling point. Immediately thereafter, a PID (Thermo Electron Model 580B OVM) was attached to the probe line and the line was purged for approximately 5-minutes until a 1 liter tedlar bag was full. The bucket was filled with Helium gas through a fitting preinstalled in the side of the bucket, near its bottom. The probe line was then connected to the MGD 2002 helium leak detector to determine the efficacy of the seal where it penetrated the floor. No Helium was detected, demonstrating that the probe line was well sealed. Directly after the Helium measurement, the probe line was connected to a Summa canister and the associated flow controller (pre-calibrated by the lab for an 8-hour sampling period, approximately 0.01 liters per minute). The flow controller valve was opened and the sample start time was recorded. The sample ID for the temporary sub-slab vapor point was labeled DPW-1 and the corresponding Canister ID and Flow Controller ID were AC00948 and FC00587, respectively. Sampling start time was approximately 7:40 a.m. and stop time was approximately 3:15 p.m. on 3/12/2009. Although DPW closes at 3:00 p.m., the Superintendent stayed until sampling was completed.

At the end of the sampling period, the canister flow valve was closed, flow controller removed, and shipping cap reinstalled at threaded inlet to canister. All data was recorded on the Field Log and the Chain of Custody. The probe hole was sealed with "quick-drying" cement and smoothed over.

D. Indoor and Outdoor Ambient Air Sampling

Indoor sampling of the main office was performed in the area between the supervisor's desk and the Utility/Storage room. A 6-liter Summa canister, equipped with a flow controller that was lab-calibrated for 8-hour sampling, was set in this area and the sampling intake was at approximately 31/2 to 4 ft. height (within the "living/breathing zone"). Sampling in this area started at the same time as the sub-slab vapor sampling commenced. The sample ID was designated DPW-2 (Canister ID AC01164/Flow Controller FC00355). Sample start time was approximately 7:40 a.m. and stop time was approximately 3:15 p.m. on 3/12/2009. At the end of the sampling period, the canister valve was closed, the flow controller removed and shipping cap reinstalled at threaded inlet to canister. All data was recorded on the field log and the Chain of Custody. The sampling location is indicated on the DPW floor plan on page 6 of Attachment A.

On this same sampling date, a 5½-hour outdoor air sample was obtained at the northeastern side of the DPW property, on the west side of Marbledale Road, and just north of the exit from the DPW break/lounge area. A 6-liter Summa canister, equipped with a lab-calibrated 8-hour flow controller, was placed atop a stool and the canister inlet was at approximately 3 to 4 feet height. The sample ID was designated DPW-3 (Canister ID AC01103/Flow Controller FC00492). Sample start time was approximately 7:45 a.m. and stop time was approximately 1:15 p.m. on 3/12/2009. Sampling time was ended sooner than anticipated due to canister pressure at -1.5" Hg. At the end of the sampling period, the canister valve knob was closed, the flow controller removed, and shipping cap reinstalled at threaded inlet to canister. All data was recorded on the

field log and the Chain of Custody form. The sampling location is indicated on the floor plan of the DPW facility on page 6 of Attachment A.

At the conclusion of sample collection, the foreman's office was resurveyed with the "ppb RAE" PID. VOC measurements ranged from 80 to 120 ppb. Within the utility/storage room (which door had been closed) measurements from 600 to 1100 ppb VOC were obtained.

E. Laboratory Analysis

All Summa canister samples and the field/trip blank from the March 12, 2009 sampling event were shipped with Chain of Custody, via Federal Express, to Columbia Analytical Services (CAS) at their facility in Simi Valley, California (NELAP NY Lab ID No. 11221). A seal was placed at the closure points on the outside of the box used for shipping to CAS. The package was securely taped for shipping.

All samples were analyzed for volatile organic compounds (VOCs) utilizing USEPA Method TO-15 (full parameter list) and in accordance with the Quality Assurance Program of CAS. A summary of the analytical results for DPW is reported in Table I.

TABLES AND ATTACHMENTS

The following tables and attachments are included as part of this report.

Table I – Findings, March 2009 Air Sampling
Table II – Results from March 2006 through March 2009 Air Sampling

Attachment A –New York State Department of Health Indoor Air Quality Questionnaire and Building Inventory for DPW prepared by EML 2/19 to 3/12/09.

Personnel:

Name	Title	Organization
Donald Wanamaker	President	Environmental Management, Ltd.
Melinda Horan	Certified Industrial Hygienist	Environmental Management, Ltd.
Bruce Munson	Project Manager	Environmental Management, Ltd.
Matt Mordas	Field Operations Manager	Geovation Engineering, PC

TABLE I

TABLE I

Findings, March 2009 Air Sampling
Village of Tuckahoe Department of Public Works (**DPW**)
15 Marbledale Road, Tuckahoe, Westchester County, New York

Results are reported in micrograms per cubic meter (µg/m³ or mcg/m³)

	Indoor Air, Office	**Sub-Slab, Office**	**Outdoor Air**
Compound	March 2009 **DPW-2** AC01164	March 2009 **DPW-1** AC00948	March 2009 **DPW-3** AC01103
Trichloroethene	0.68	85	--
Tetrachloroethene	--	26	--
1,1,1-Trichloroethane	--	14	--
cis-1,2-Dichloroethene	--	--	--
Acetone	37	31	--
Benzene	4.4	3.2	1.0
Carbon Disulfide	--	2.4	--
Chloroform	--	39	--
Ethylbenzene	4.7	18	--
m&p-Xylenes	17	73	0.94
2-Butanone (MEK)	1.9	8.5	0.95
4-Methyl-2-pentanone (MIBK)	--	--	--
Methylene chloride	--	--	--
o-Xylene	6.8	27	
Toluene	30	60	2.2
Trichlorotrifluoroethane	0.72	0.83	0.72
Trichlorofluoromethane	1.7	1.6	1.7
1,4-Dichlorobenzene	--	2.9	--
2-Hexanone	--	1.8	--
Vinyl Acetate	--	--	--
Carbon Tetrachloride	0.56	0.69	0.62

-- Not detected above quantification limit

	Indoor Air, Office	**Sub-Slab, Office**	**Outdoor Air**
Compound	March 2009 **DPW-2** AC01164	March 2009 **DPW-1** AC00948	March 2009 **DPW-3** AC01103
Additional, 2009:			
Propene	16	2.6	0.82
CFC-12	3.3	4.9	3.3
Chloromethane	0.86	--	0.82
Ethanol	86	48	--
Acrolein	0.72	0.89	--
2-Propanol	67	8.5	0.83
MTBE	--	1.9	--
Ethyl Acetate	2.8	12	1.0
n-Hexane	10	2.7	--
Tetrahydrofuran (THF)	--	--	--
Cyclohexane	3.0	2.4	--
n-Heptane	6.1	7.2	--
n-Butyl Acetate	--	28	--
n-Octane	2.6	6.7	--
Styrene	--	6.0	--
n-Nonane	2.8	14	--
Cumene	0.65	1.8	--
alpha-Pinene	2.4	3.1	--
n-Propylbenzene	4.3	8.0	--
4-Ethyltoluene	8.3	16	--
1,3,5-Trimethylbenzene	8.2	15	--
1,2,4-Trimethylbenzene	30	55	--
d-Limonene	40	17	--
Naphthalene	1.4	5.6	--

-- Not detected above quantification limit

TABLE II

TABLE II

Results of 2006 through 2009 Soil Vapor Sampling -- DPW

Village of Tuckahoe Department of Public Works - 15 Marbledale Road, Tuckahoe, Westchester County, New York

Results are reported in micrograms per cubic meter (µg/m³ or mcg/m³)

	DPW-2 Indoor Air, Office				**DPW-1 Sub-Slab, Office**				**DPW-3 Outdoor Air**			
Compound	March 2006	March 2007	March 2008	March 2009	March 2006	March 2007	March 2008	March 2009	March 2006	March 2007	March 2008	March 2009
Trichloroethene	1.6	0.95	0.62*	0.68	170	160	130*	85	1	0.43	0.35*	ND
Tetrachloroethene	1.2	1.0	0.51	ND	30	26	32	26	0.96	0.77	0.27	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	23	19	16	14	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone[1]	ND	ND	25	37	ND	ND	16 [2]	31	ND	ND	7.9	ND
Benzene	5.5	3.4	3.0	4.4	0.73	ND	1.1	3.2	2.7	1.5	1.0	1.0
Carbon Disulfide	ND	ND	ND	ND	12	4.6	2.9	2.4	0.78	ND	ND	ND
Chloroform	ND	ND	ND	ND	7	53	61	39	ND	ND	ND	ND
Ethylbenzene	6.7	4.5	4.2	4.7	ND	ND	5.2	18	1.5	ND	ND	ND
m&p-Xylenes	23	19	18	17	1.5	2.9	20	73	5.2	2.6	1.3	0.94
2-Butanone (MEK) [3]	ND	14	2.1	1.9	ND	ND	3.0	8.5	ND	ND	1.7	0.95
4-Methyl-2-pentanone (MIBK)	ND	ND	4.0	ND	ND	ND	2.9	ND	ND	ND	ND	ND
Methylene chloride	0.93	ND	ND	ND	ND	ND	ND	ND	0.89	ND	ND	ND

* Trichloroethene was detected within the trip blank at 0.40 µg/m³

[1] Due to acetone detected in the trip blank in 03/06 sampling, the general reporting limit of acetone was revised to 73 µg/m³. Acetone detected in trip blank during the 03/07 sampling resulted in a revised reporting limit of 89 µg/m³.

[2] Matrix interference due to coelution with a non-target compound; results may be biased high.

[3] Due to methyl ethyl ketone (MEK) detected in the trip blank in the 03/06 sampling, the general reporting limit of MEK was revised to 9 µg/m³. MEK detected in trip blank during the 03/07 sampling resulted in a revised reporting limit of 10 µg/m³.

o-Xylene	7.9	6.3	5.9	6.8	ND	1.4	17	27	1.9	ND	ND	
Toluene	32	21	22	30	6.0	1.8	7.5	60	9.3	6.8	2.3	2.2
Trichlorotrifluoroethane	ND	ND	ND	0.72	0.87	0.71	ND	0.83	ND	ND	ND	0.72
Trichlorofluoromethane	1.4	1.3	1.2	1.7	1.4	1.2	1.2	1.6	1.4	1.4	1.2	1.7
1,4-Dichlorobenzene	45	1.2	ND	ND	ND	ND	ND	2.9	2	ND	ND	ND
2-Hexanone	0.94	ND	ND	ND	3	ND	ND	1.8	ND	ND	ND	ND
Vinyl Acetate[4]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	0.91	ND	0.56	ND	ND	ND	0.69	ND	ND	ND	0.62
Additional - 2009:												
Propene				16				2.6				0.82
CFC-12				3.3				4.9				3.3
Chloromethane			ND	0.86			ND	ND			ND	0.82
Ethanol				86				48				ND
Acrolein				0.72				0.89				ND
2-Propanol				67				8.5				0.83
MTBE			ND	ND			ND	1.9			ND	ND
Ethyl Acetate				2.8				12				1.0
n-Hexane				10				2.7				ND
Tetrahydrofuran (THF)				ND				ND				ND
Cyclohexane				3.0				2.4				ND
n-Heptane				6.1				7.2				ND
n-Butyl Acetate				ND				28				ND
n-Octane				2.6				6.7				ND
Styrene			ND	ND			ND	6.0			ND	ND
n-Nonane				2.8				14				ND
Cumene				0.65				1.8				ND

[4] Due to vinyl acetate detected in the trip blank during the 03/07 sampling, the general reporting limit of vinyl acetate was revised to 26.5 µg/m³.

alpha-Pinene				2.4				3.1				ND
n-Propylbenzene				4.3				8.0				ND
4-Ethyltoluene				8.3				16				ND
1,3,5-Trimethylbenzene				8.2				15				ND
1,2,4-Trimethylbenzene				30				55				ND
d-Limonene				40				17				ND
Naphthalene				1.4				5.6				ND

ND Not detected above quantification limit

ATTACHMENT A

DPW Pre-Insp. 2/19/09

OSR - 3

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Bruce M. Munson Date/Time Prepared 2/19/09 - 3/12/09

Preparer's Affiliation Environmental Mgt. Ltd Phone No. 845-429-1141

Purpose of Investigation SVI Investigation - 4th year

1. OCCUPANT: Superintendent of Public Works DPW office at yard

Interviewed: (Y) N

Last Name: DiMarco First Name: Frank

Address: 15 Marbledale Road, Tuckahoe, NY 10707

County: Westchester

Home Phone: _____ Office Phone: 914-961-3100, #3

Number of ~~Occupants~~/persons at this location 2-5 Age of Occupants —
constant turnover during work day 6:30am - 3:00pm

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y (N) Village of Tuckahoe

Last Name: _____ First Name: _____

Address: 65 Main Street, Tuckahoe, NY 10707

County: Westchester

Home Phone: _____ Office Phone: 914-961-3100

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial)/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Department of Public Works - Yard office & employee facilities

Does it include residences (i.e., multi-use)? Y (N) If yes, how many? _____

Other characteristics:

Number of floors 1 Building age 1957, approx.

Is the building insulated? Y (N) How air tight? Tight / Average / (Not Tight)

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

NA

Airflow near source

NA - No known source

Outdoor air infiltration

Exit door from "Break Area" ajar. Hallway entrance door from yard opened/closed by DPW employees continually. All windows & skylight closed.

Infiltration into air ducts

NA

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

One floor, on-grade concrete slab.

a. Above grade construction:	wood frame	(concrete)	stone	brick
b. Basement type: NA	full	crawlspace	slab	other _____
c. Basement floor: NA	concrete	dirt	stone	other _____
d. Basement floor: NA	uncovered	covered	covered with _____	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls:	poured	(block)	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is: NA	wet	damp	dry	moldy
i. The basement is: NA	finished	unfinished	partially finished	
j. Sump present?	Y (N)			
k. Water in sump?	Y / N / (not applicable)			

Basement/Lowest level depth below grade: — (feet) on-grade

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Sewer cleanout, 3' x 4' x 2½' deep, below floor @ NE corner of "Break Room". Two floor drains in "Break Room" area.

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	(Hot water baseboard)	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural Gas

Boiler/furnace located in:	Basement	Outdoors	(Main Floor)	Other _____
Air conditioning:	Central Air	(Window units)	Open Windows	None

Are there air distribution ducts present? Y (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)
Basement	NA
1st Floor	Foreman office, Superintendent office, Break Area, storage, 2 bathrooms, furnace room.
~~2nd Floor~~	
3rd Floor	NA
4th Floor	1

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? (Y) N

b. Does the garage have a separate heating unit? Y / N (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) (Y) / N / NA
Please specify DPW trucks etc.

d. Has the building ever had a fire? Y / N When? _____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where? _____

f. Is there a workshop or hobby/craft area? (Y) N Where & Type? _____

g. Is there smoking in the building? (Y) N How frequently? _____

h. Have cleaning products been used recently? (Y) N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? (Y) N When & Type? _____

m. Is there a kitchen exhaust fan? NA Y / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? (Y) N If yes, where vented? _____

o. Is there a clothes dryer? Y (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y (N) When & Type? Storage on-site

Are there odors in the building? (Y) N
If yes, please describe: Gasoline/oil/exhaust, trucks, gas tree pruner in storage

Do any of the building occupants use solvents at work? (Y) N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? Petroleum based and other VOCs routine to Public Works operations / maintenance
If yes, are their clothes washed at work? Y (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)
Yes, use dry-cleaning infrequently (monthly or less)
Yes, work at a dry-cleaning service
No
(Unknown)

Is there a radon mitigation system for the building/structure? Y (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	(Public Water)	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	(Public Sewer)	Septic Tank	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

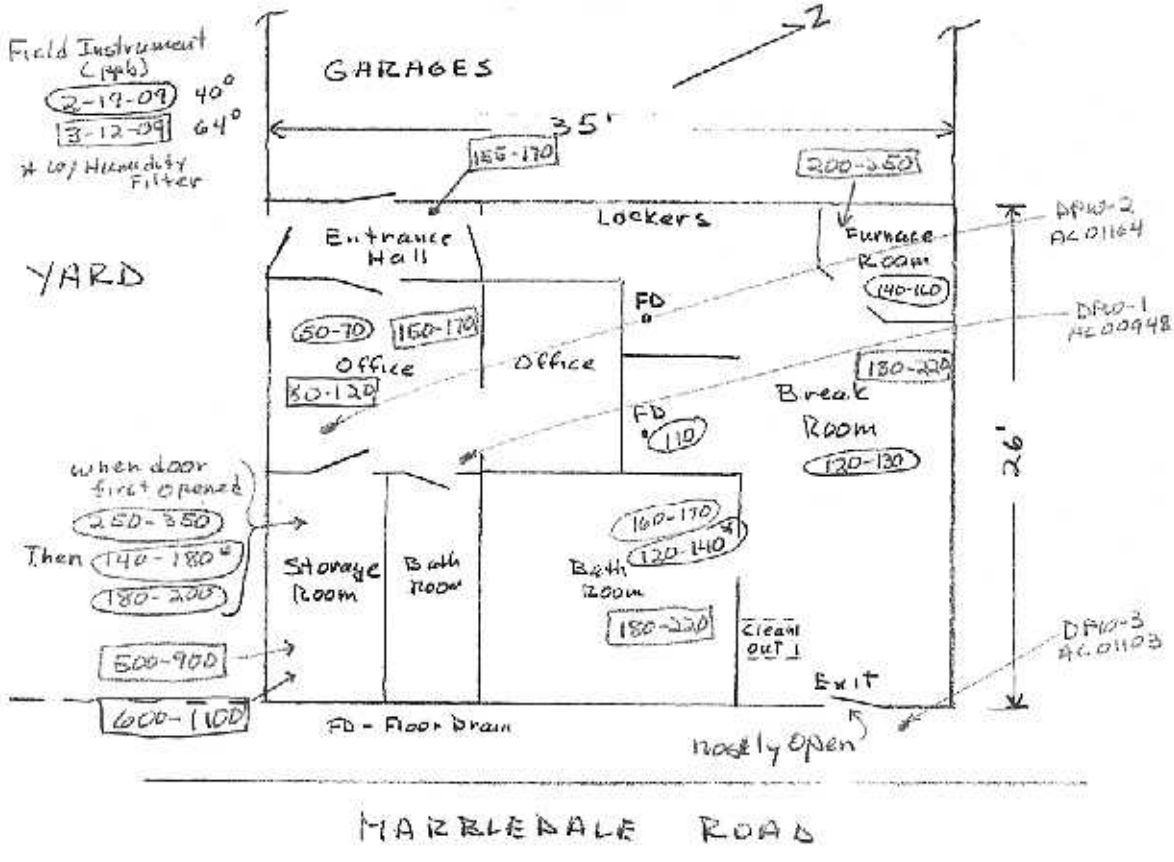
Basement: NA

2/19/09 Initial field reading in Storeroom ↓

8:50 Office storeroom closed
opened door - 2 50 - 350
repeat w/ humidity 140 - 180
" w/o " 180 - 200
i.e. aired out
PID zeroed w/ VOC tube supplied

8:30 weather 40°
clearing
snow/rain overnight
ground + streets
still wet

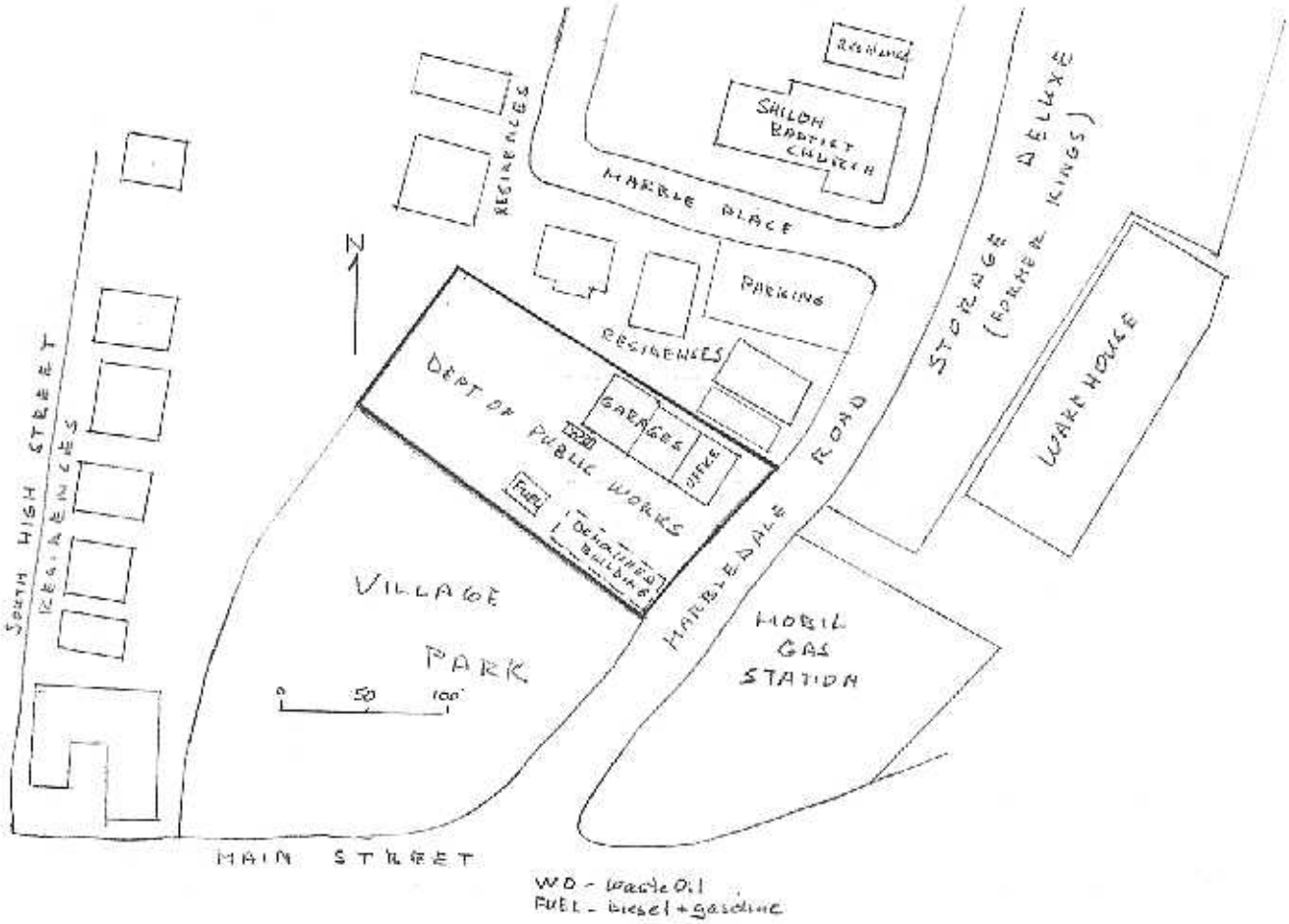
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE Model PGM 7240

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
office	Closet storage					
	zero-in 50K Flying Insect Killer	12x 16.5oz	UO	Resmethyin Propane-isotuolane		Y
	Impact zone Detergent Disinfectant	3 gal.	UO	Alkyl dimethylethyl benzyl ammonium chloride		N
	CLR Emulsified Window glass cleaner	11x 17¾oz	UO	2 butoxyethanol, isobutane propane		Y
	Kibosh Wasp, Hornet, Bee Killer	12x 14oz.	UO	Tetramethrin Pyremethrin		Y
	Prestige 1K-221 Flying Insect Killer	6x 14oz.	UO	Tetramethrin		N
	Aervoe construction marking paint	24x 17oz.	UO	Xylene, petroleum naptha n-hexane		Y
	Designate Marking Paint	24x 17oz.	UO	Propane, n-butane toluene, xylene		Y
	Zero-in WAS Wasp + Hornet Killer	19x 14oz.	UO	Tetramethrin		Y
	Aervoe striping paint	20x 18oz	UO	Xylene, acetone, petroleum naptha, mineral spirits		Y
	3M spray adhesive	2x 17oz.	UO	Dimethyl ether, methyl acetate		Y
	Prestige Ultra coat rubberized coating	6x 16oz.	UO	calcium carbonate, asphalt, toluene, propane, mineral sp		Y
	Bloom + Doom Weed + Feed	4x ½ gal.	UO	2,4-D, mecoprop, Dichloropro		Y
	Thuricide Concentrate	12x 16oz.	UO	Bacillus Thuringiensis		Y
	Drummond Impervious		UO	crack & joint sealant ½" x 75' sealant cord		N
	Gas/oil tree trimmer	-	-	gasoline, motor oil		N
	Poulan Pro Bar + chain oil	1Qt.	O	W. Red dye		
	Drummond Conjure Plumeria	3Qt.				
	Scram Liquid Drain Opener	11Qt.	UO	Sulfuric Acid 7664-93-9 Corrosion Inhibitor 109-16-6		

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE Model PGM 7240

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
OFFICE						
	Antibacterial moist towelettes	120 5x8"	U	Benzalkonium chloride SD Alcohol 0.13%		
	sore throat lozenges		U	hexyresorcinol	RECORDED ON FLOOR PLAN pg. 6	
	Robitussin Max. Strength cough		U			
	Poisin ivy oil remover Tecnu		U	mineral spirits, propylene glycol, mixed fatty acid soap		
	Itchy cool Ivy itch relief		U	Benzalkonium chloride		
	Antiseptic wipes		U			
	Clear Eye		U			
	Blood clotting spray		U			
	Can't bite me swabs		U	Deet 30%		
	3 in 1 First Aid Ointment		U			
	Hydrocortizone Anti itch		U			
OFFICE Bathroom						
	Zoftig Hand Cleaner	1 g.	U	polyvinylchloride, propylene glycol, fragrance		
	Tractite Instant concrete repair	5g.	U			
	"Mystic" Prestige concentrated cleaner degreaser	5 x 1QT	UO	NaOH, sodium metarylicate		
	Mystic Conjure Apple Blossom	1QT.	U	Isopropanol, 2 butylethanol hydrous magnesium sylicate		
	Flash Antimicrobial Cleaner	3 x 18oz.	U	Chemsearch div of NCH Corp. kills HIV-1 on surface		
	Breath O'Pine	~8oz				

* Describe the condition of the product containers as **Unopened (UO), Used (U), or Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE Model PGM 7240

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Office Bathroom - continued						
	Fantastic spray	1QT.	U			
	Ajax W. bleach	21oz.	U			
Employee Bathroom, Large						
	Zoftig lotion hand cleaner - grit scrubbers	1g.	7 UO 1 U	polyvinyl chloride, propylene glycol, fragrance		
	Breath O'Pine	28oz.	3 UO 2 U	In carton (Brendow Inc., Tuchahoe)		
	Clean & Fresh All purpose	28oz.				
	Cleaner Lavender					
	Prestige Mystic concentrated cleaner	1QT.				
Furnace Room						
	Slip N Slide Asphalt Release Agent		UO			
	Drummond American	5g.	steel drum			

RECORDED ON FLOOR PLAN Pg. 6

* Describe the condition of the product containers as **Unopened (UO), Used (U), or Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Tuckahoe DPW Photos – March 2009

Office Storeroom


MED+TECH
LATEX EXAMINATION GLOVES
MED+TECH
LATEX EXAMINATION GLOVES
Premium Construction Adhesive
Removable Weather Stripping
WH-40
Wasp & Hornet
IMPERVIOUS
Rubberized
Crack and Joint Sealant
Wood Bleach


STRIPING PAINT
Construction Marking Paint
Construction Marking Paint
3M
Hi-Strength
90
Spray Adhesive
Spray Adhesive
EVERCOAT
Professional
SEALANT FOAM

Employee Bathrooms

Furnace Room-Break Room

DPW-1, Sub-Slab 2009

DPW-2, Indoor 2009

DPW-3, Outdoor Ambient 2009

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Email: info@emlweb.com

June 23, 2009

Mr. Bill Williams
Village of Tuckahoe Building Department
65 Main Street
Tuckahoe, New York 10707

Re: Soil Vapor Intrusion (SVI) Evaluation
Indoor Air Sampling Results-March 2009
15 Marbledale Road, Tuckahoe, Westchester County

Dear Mr. Williams:

On March 12, 2009, Environmental Management, Ltd (EML), on behalf of Weissman Holdings, LLC, formerly Kings Electronics Co., Inc. (Kings), collected three air samples (the 2009 Sampling) from the Village of Tuckahoe's Department of Public Works, located at 15 Marbledale Road in Tuckahoe (the Building). These samples were taken at the request of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), collectively the "State," and were a follow-up to sub-slab soil vapor sampling that occurred on March 10, 2006, and then yearly soil vapor intrusion sampling on March 30, 2006 (the 2006 Sampling), March 22, 2007 (the 2007 Sampling), and March 26, 2008 (the 2008 sampling). The results of the prior sampling were reported to you in my letters of March 23, 2006, July 19, 2006, November 7, 2007, and July 3, 2008.

The current sampling included one sub-slab soil vapor sample, one indoor air sample from the Building's office area and one outdoor air sample. The air samples were sent to a NYS ELAP certified laboratory to test for trichloroethene (TCE), tetrachloroethene (PCE) and other volatile organic compounds (VOCs). TCE is a VOC commonly used as a solvent to remove grease from metal. PCE is a manufactured chemical that is widely used in the dry-cleaning of fabrics, including clothes. It is also used for degreasing metal parts and in manufacturing of other chemicals. These samples were collected as part of an on-going investigation of "soil vapor intrusion" of VOCs (see enclosed titled *Soil Vapor Intrusion: Frequently Asked Questions* for more information) in the area surrounding the former Kings building.

We have evaluated the sample results and have attached a table that sets forth the results of the 2009 Sampling, as well as the 2006, 2007, and 2008 Sampling. TCE is trending downward in indoor air (from 1.6 µg/m^3 in 2006, to 0.95 in 2007 to 0.62 in 2008 and leveling there at 0.68 in 2009) and in the sub-slab (from 170 to 160 to 130 to 85 respectively). The 2009 TCE sampling results fall into a range where NYSDOH allows either no further air sampling or further monitoring. (PCE soil vapor is not a concern as, based on all yearly PCE results, no further action would be required). Kings is recommending that no

further air sampling at DPW is required based on this decreasing trend in TCE. The concentration detected in the sub-slab is not expected to significantly affect indoor air quality.
A more detailed evaluation of the sampling results follows.

SAMPLING RESULTS

Chemicals are part of our everyday life. They are found in the many products we use such as cleaners, glues and paints. They are also found in new furniture, carpet or freshly dry-cleaned clothing. Similarly, chemicals are also found in outdoor air because of gasoline stations, dry cleaners or other commercial/industrial facilities. Commonly found concentrations of these chemicals in indoor air and outdoor air are referred to as "typical background levels." These levels are determined from the results of samples collected in homes, offices and outdoor areas not near known sources of VOCs (for example, a home not known to be near a chemical spill, a hazardous waste site, a dry-cleaner, or a factory).

To help assess the type of VOCs suspected to be in the air in and around your Building, EML collected three air samples. In addition, in February and March of 2009, an indoor air quality questionnaire and building inventory were completed. A copy of the completed questionnaire and inventory form is enclosed. It includes a list of products present in your Building that might contain VOCs.

During the inventory, the investigation also used a real-time vapor meter (also known as a photoionization detector, PID) that detects many VOCs that may be in the air. This instrument was used to help determine if products containing VOCs and stored or used in your Building might be contributing to the levels detected in the air samples. The PID readings recorded on the DPW office floor plan (labeled "Field Instrument Reading" on page 6 of the inventory form) indicate whether VOCs are being released from the stored products used within your indoor air.

We have summarized the results of the three air samples in the enclosed Table I, as well as a comparison in Table II of the 2009 results with 2006, 2007, and 2008 results. We are also enclosing the laboratory report for each sample collected in 2009. The sample identification number is found on each report following "Container ID."

Indoor Air in Office – *Sample ID DPW-2*; *Container ID AC01164*

TCE was detected at a concentration of 0.68 micrograms per cubic meter (µg/m³) in your office indoor air, which is similar to last year (at 0.62) and down from 1.6 in 2006 and 0.95 in 2007. NYSDOH's guideline for TCE in air is 5.0 µg/m³. This level is lower than the levels that have caused health effects in animals and humans. The guideline is based on the assumption that people are exposed to TCE in air all day, every day for as long as a lifetime. This is rarely true for most people, who are exposed for only part of the day and part of their lifetime. The concentrations in your office indoor air sample are lower than this guideline.

PCE was reported as "not detected" this year.

As a maintenance and repair garage for vehicles, equipment and small engine repair, and as detailed in your product inventory, many of the products used and stored in the Building are sources of chemicals found in your samples. In other words, some of the chemicals that were in your indoor air are present in products you store and use in your Building. For example, m&p xylenes (which is unrelated to the Kings investigation) was detected at concentrations above typical background concentrations for indoor air. M&p xylenes are found in gasoline and oils. If you have any questions about this compound, or any other, you can contact the NYSDOH, as detailed at the end of this letter.

Sub-slab Vapor – *Sample ID DPW-1; Container ID AC00948*
A number of VOCs, including TCE at a concentration of 85 µg/m³ (down from 170 on 2006, 160 in 2007, and 130 in 2008), and PCE at a concentration of 26 µg/m³, were detected in the sub-slab vapor sample beneath the Building.

Outdoor Air – *Sample ID DPW-3; Container ID AC01103*
TCE and PCE were not detected this year.

Overall, based on the data, soil vapor may be impacting your indoor air, however at levels below NYSDOH guidelines. As a result of the decreasing trend in sub-slab soil vapor concentrations over the past four years, Kings is recommending that no further air sampling at DPW is warranted as the concentration detected in the sub-slab is not expected to significantly affect indoor air quality.

ENCLOSURES
In addition to the tables summarizing your sample results and a copy of the product inventory for your property, we are enclosing the following fact sheets:

1. What is Exposure? Information Sheet, which describes how a person may come into contact with chemicals in the environment;
2. Soil Vapor Intrusion: Frequently Asked Questions Sheet, which describes the process referred to as "soil vapor intrusion;"
3. Tetrachloroethene (PERC) Fact Sheet, which provides additional information on PCE and the NYSDOH guideline for PCE in air; and
4. Trichloroethene (TCE) Fact Sheet, which provides additional information on TCE and the NYSDOH guideline for TCE in the air.

On behalf of Kings, I thank you for your permission to sample the Building. In conclusion, if you have any questions regarding the sampling results, please feel free to contact me by phone at 845-429-1141, or to call Nicole Bonsteel from NYSDEC at toll free number 888-459-8667. If you have questions regarding any results or compounds not discussed in this letter or any health questions or concerns, you may call Carl Obermeyer at NYSDOH at 845-794-2045 or email him at cjo01@health.state.ny.us.

Very truly yours,
Environmental Management, Ltd.

Donald J. Wanamaker

Donald J. Wanamaker
President

Enclosures
cc: Nicole M. Bonsteel, NYSDEC
Carl Obermeyer, NYSDOH