

Geology

Hydrology

Remediation

Water Supply

December 21, 2005

Mr. Ramanand Pergadia, P.E. NYSDEC Region 3 21 South Putt Corners Road New Paltz, New York 12561-1696

Re: Sub-slab Vapor Sampling

Revonak Dry Cleaner Site 356021

Cinema Building

Dear Mr. Pergadia:

This letter presents the results of a sub-slab soil vapor sample collected beneath the Cinema building at New Paltz Plaza on December 7, 2005 by Alpha Geoscience (Alpha). The purpose of the sample was to determine the quality of the soil gas beneath the Cinema building located approximately 300 feet south (upgradient) of the dry cleaner facility.. The sample was collected in accordance with the sampling plan submitted to you on December 5, 2005, as modified to address comments received via email from the New York State Department of Health (NYSDOH) on December 6, 2005. The following variations from the procedures presented in the sampling plan were implemented during collection of the sample, as requested by the NYSDOH.

- Bees Wax was used to seal around the sample tubing to avoid effects of any potential volatiles that may be present in modeling clay.
- York Laboratory provided a 6-liter Summa canister with a flow control valve set for 0.1 liters per minute.

The sample collection procedure was based on the NYSDOH Draft Guidance for Evaluating Soil Vapor Intrusion in the State of New York. A concrete bit was used to drill a 5/8-inch diameter hole through the concrete floor. One-quarter inch polyethylene tubing was inserted into the hole slightly below the base of the concrete slab. The annulus between the tubing and the concrete was sealed with bees wax. The upper end of the tubing was attached to one side of a valve to close the tubing from the atmosphere. The other side of the valve was attached to a separate section of polyethylene tubing and a hand pump was used to evacuate a minimum of four volumes of air from the sample tubing. The tubing then was connected to a 6-liter Summa canister with a flow control valve set at a sampling at a rate of approximately 0.1 liters per

Mr. Ramanand Pergadia Page 2 December 21, 2005

minute, which is one-half the maximum rate of 0.2 liters per minute referenced in the NYSDOH Draft Guidance document. The sample location is shown on the attached figure.

Information regarding the soil gas sample was recorded to document sampling conditions. A copy of the Soil Vapor Sampling Record is attached. An inventory of on-site storage areas revealed that the following materials are stored.

• Ammonia (7 x 1 gal.), Bleach (5 x 1 gal.), Hand Soap (8 x 1 gal.), "409" cleaner (3 x 1 gal.), Windex (4 x 1 gal.), Pine Sol cleaner (1 qt.), Paint Thinner (1 qt.), Varnish remover (1 qt.), Spray Paint (4 cans), wall paint (2-3 qts.) Scotch Guard (1 can), and Ant & Roach Spray (2 cans).

The soil gas sample was submitted to York Laboratory, a New York State Department of Health (NYSDOH)-approved laboratory for analysis of volatile organic compounds by Method TO-15. The analytical laboratory report of the sample analysis is attached. The results indicate that no tetrachloroethylene (PCE) or related degradation compounds were present in the sample at or above the method detection limit. Several non-PCE related volatile organic compounds were detected in the sample at low concentrations.

It is Alpha's opinion that there is no PCE-related sub-slab vapor or vapor intrusion issue beneath the cinema and that the low levels of volatile organic compounds detected in the soil gas sample do not represent an environmental concern or a vapor intrusion issue. It is Alpha's opinion that no further investigation, monitoring, or remediation of soil gas is necessary at the cinema, based on the sampling results.

Please feel free to contact me with any questions regarding the sampling.

Sincerely,

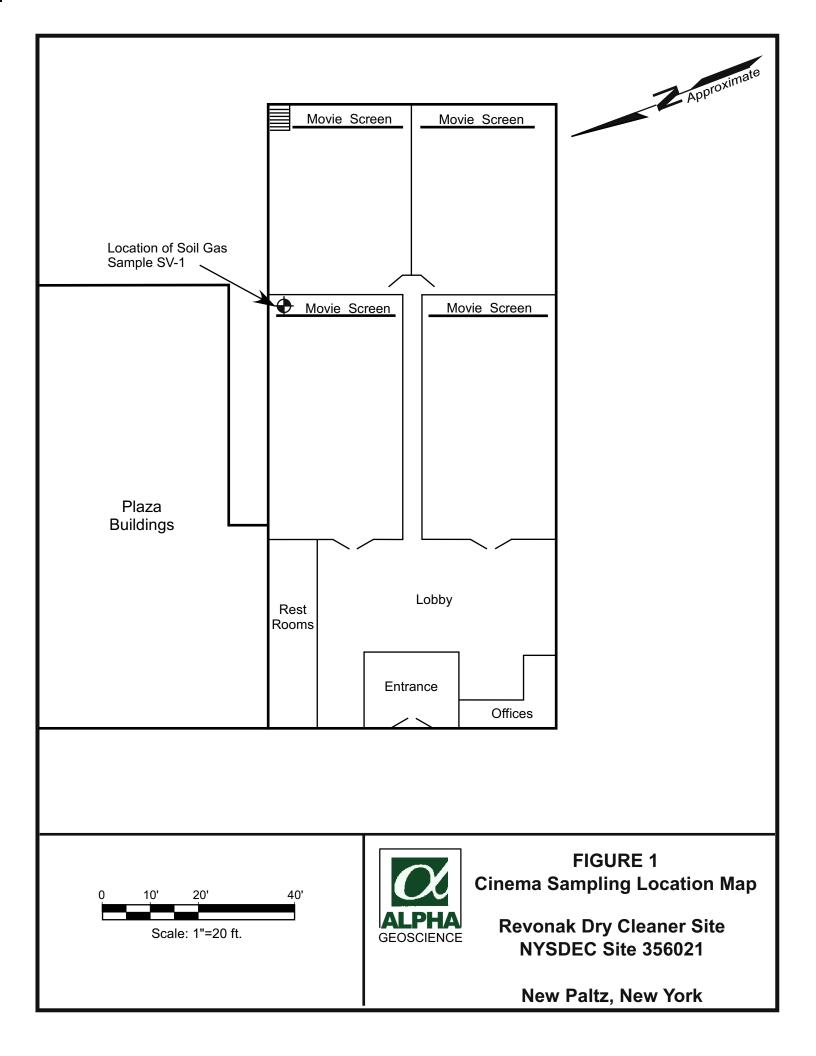
Alpha Geoscience

Thomas M. Johnson Hydrogeologist

cc: R. Schick M. Ryan
F. Navratil J. Rashak
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TMJ/bms

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SOIL VAPOR SAMPLING RECORD

Alpha Geoscience 679 Plank Road Clifton Park, New York 12065

PROJECT NAME		New Paltz F	Plaza - Revo	onak	SA	MPLE ID	Cinema SV-1
PROJECT NUMBER		95141			SOIL GAS	WELL ID	NA
SITE LOCATION		New Paltz, I	New York			DATE	12/7/2005
OENEDAL							
GENERAL		0	I (OE0 E)				
Weather Conditions		Sunny, Cold	1 (~25° F)				
Site Access/Condition		Excellent					
Physical Condition of		NA					
Ambient PID Measur	ement	0.0 to 0.1 pp	om				
PURGING INFORMA	ATION						
Volume of Tubing an		Train	217	cu. in.			
Tubing and Train Vol				cu. in.			
Purging Method		uum pump (2					
Actual Volume Purge				Time Start	12·10 T	ima Stan	12:20
Remarks	:u	88 cu. in.	Fulging i	illie Start	<u>13:18</u> T	ine Stop	13:20
Remarks							
OBSERVATIONS							
Apparent Moisture Co	ontent	None					
Other	oritorit	110110					
	–						
SAMPLING INFORM							
Field Personnel	T. M. Johr						1
Sampling Method		nma Canister					
Sample Date		er 7, 2005					
Sample Time	Start		Finish_	14:51			
Sample Description	Sub-slab						
Suma Canister ID		S-10					
Suma Canister Vacu	um Pressur	е	Start_	25 psi	Finish_	3psi	
Sample Canister Vol	lume	6 liters					
Analysis	TO-15 Vo	latile Organic	Compound	ds			
Remarks							

Chemical Inventory:

The following products are stored and/or used in the facility: Hand Soap, Bleach (five, 1-gal. bottles); Ammonia (seven, 1-gal. bottles), 409 cleaner; Windex glass cleaner; Pine Sol cleaner; spray paint (4 aerosol cans); wall paint (2-3 qts.); Paint thinner (one, 1-qt. can); varnish remover (one, 1-qt. can); Scotch Guard (one aerosol can); Ant & Roach Spray (two aerosol cans)

Report Date: 12/19/2005 Client Project ID: New Paltz Plaza/95141 York Project No.: 05120319

Alpha Geoscience 679 Plank Road Clifton Park, NY 12065 Attention: Thomas Johnson

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 12/12/05. The project was identified as your project "New Paltz Plaza/95141"

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report,

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			Cinema SV-1	
York Sample ID			05120319-01	
Matrix			AIR	
Parameter	Method	Units	Results	MDL
Volatile Organics, TO-15 List	EPA TO15	ppbv		
1,1,1-Trichloroethane			Not detected	0.678
1,1,2,2-tetrachloroethane			Not detected	0.678
1,1,2-Trichloroethane		_	Not detected	0.678
1,1-Dichloroethane			Not detected	0.678
1,1-Dichloroethylene			Not detected	0.678
1,2,4-Trichlorobenzene			Not detected	0.678
1,2,4-Trimethylbenzene			Not detected	0.678
1,2-Dibromoethane			Not detected	0.678
1,2-Dichlorobenzene		······································	Not detected	0.678
1,2-Dichloroethane			Not detected	0.678
1,2-Dichloropropane			Not detected	0.678
1,2-Dichlorotetrafluoroethane			Not detected	0.678
1,3,5-Trimethylbenzene		· · · · · · · · · · · · · · · · · · ·	Not detected	0.678
1,3-Butadiene			Not detected	0.678
1,3-Dichlorobenzene		•	Not detected	0.678
1,4-Dichlorobenzene			Not detected	0.678



Client Sample ID			Cinema SV-1	
			05120319-01	
York Sample ID Matrix			ATR	
The state of the s	Method	Units	Results	MDL
Parameter 1,4-Dioxane	Mento	Canado	Not detected	0.678
2,2,4-Trimethylpentanc	<u> </u>		Not detected	0.678
			0.9	0.678
4-Ethyltoluene			Not detected	0.678
Acetone			Not detected	0.678
Allyl Chloride			0.7	0.678
Benzone Benzyl Chloride		-	Not detected	0,678
Bromodichloromethane			Not detected	0.678
Bromoform	-		Not detected	0.678
			Not detected	0.678
Bromomethane			Not detected	0.678
Carbon Disulfide Carbon Tetrachloride			Not detected	0.678
			Not detected	0.678
Chlorobenzene			Not detected	0.678
Chloroethane	-	 	Not detected	0.678
Chloroform		 	Not detected	0.678
Chloromethane cis-1,2-Dichloroethylene			Not detected	0.678
		 	Not detected	0.678
cis-1,3-Dichloropropylene			Not detected	0.678
Cyclohexane			Not detected	0.678
Dibromochloromethane			Not detected	0.678
Dichlorodifluoromethane Ethyl acetate			Not detected	0.678
			Not detected	0.678
Ethylbenzene Freon-113			Not detected	0.678
Hexachloro-1,3-Butadiene			Not detected	0.678
Isopropanol		 	6.9	0.678
Methyl Butyl ketone		 	Not detected	0.678
Methyl Ethyl ketone			Not detected	0.678
Methyl Isobutyl ketone	-	ļ	Not detected	0.678
Methylene Chloride			Not detected	0.678
MTBE			Not detected	0.678
n-Heptane			Not detected	0.678
n-Hexane	<u> </u>	 	Not detected	0.678
o-Xylene	· · · · · · · · · · · · · · · · · · ·	<u> </u>	Not detected	0.678
p- & m-Xylenes			Not detected	0.678
Propylene			Not detected	0.678
Styrene		 	Not detected	0.678
Tetrachloroethylene		 	Not detected	0.678
Tetrahydrofuran		1	Not detected Not detected	0.678
Toluene			1.2	0.678
trans-1,2-Dichloroethylene			Not detected	0.678
trans-1,3-Dichloropropylene		 	Not detected	0.678
Trichlorocthylene			Not detected	0.678
Trichlorofluoromethane		-	1.0	0.678
Vinyl acetate			Not detected	
Vinyl acetate Vinyl Bromide			Not detected	0.678
				0.678
Vinyl Chloride	EBA TVIE		Not detected	0.678
Volatile Organics, TO-15 List	EPA TO15	ug/cu.m.	Not described	2.01
1,1,1-Trichloroethane		 	Not detected	2.81
1,1,2,2-tetrachloroethane	 	ļ	Not detected	3.56
1,1,2-Trichloroethane	<u> </u>		Not detected	2.81

City Comple III			Cinema SV-1	
Client Sample ID			05120319-01	
York Sample ID			AIR	
Matrix	Method	Units	Results	MDL
Parameter	Mediado	Citata	Not detected	2.78
1,1-Dichloroethane			Not detected	2.75
1,1-Dichloroethylene			Not detected	3.49
1,2,4-Trichlorobenzene			Not detected	2.54
1,2,4-Trimethylbenzene			Not detected	3.97
1,2-Dibromoethane		•	Not detected	3,12
1,2-Dichlorobenzene			Not detected	2.10
1,2-Dichloroethane		 	Not detected	2.41
1,2-Dichloropropane			Not detected	3.39
1,2-Dichlorotetrafluorocthane			Not detected	2.54
1,3,5-Trimethylbenzene		 -	Not detected	1.15
1,3-Butadiene		 	Not detected	3.12
1,3-Dichlorobenzene			Not detected	3.12
1,4-Dichlorobenzene		 	Not detected	1.86
1,4-Dioxane			Not detected	2.41
2,2,4-Trimethylpentanc				
4-Ethyltoluene		-	4.49	2.54 1.22
Acetone		-	Not detected	
Allyl Chloride		 	Not detected 2.27	1.63
Benzenc				1.66
Benzyl Chloride			Not detected	3.42
Bromodichloromethane	<u> </u>	ļ	Not detected	3.46
Bromoform			Not detected	5.36
Bromomethane	<u> </u>		Not detected	2.68
Carbon Disulfide	ļ	 	Not detected	1.63
Carbon Tetrachloride	- 	<u> </u>	Not detected	3.25
Chlorobenzene			Not detected	2.37
Chloroethane			Not detected	1.83 2.51
Chloroform		- 	Not detected	
Chloromethane		 	Not detected	1,42
cis-1,2-Dichloroethylene			Not detected	2.75
cis-1,3-Dichloropropylene		-	Not detected	
Cyclohexane		 	Not detected	1.80
Dibromochloromethane		- 	Not detected	4.41
Dichlorodifluoromethane		 	Not detected	3.42
Ethyl acetate			Not detected	1.90
Ethylbenzene	-		Not detected	2.24
Freon-113	 	 	Not detected	5.29
Hexachloro-1,3-Butadiene	_	ļ	Not detected	3.86
Isopropanol		 	17.3	1.25
Methyl Butyl ketone	 	4	Not detected	2.10
Methyl Ethyl ketone		-	Not detected	1.53
Methyl Isobutyl ketone	 	ļ	Not detected	2.14
Methylene Chloride	 		Not detected	2.41
MTBE	-	ļ	Not detected	1.86
n-Heptane		<u> </u>	Not detected	2.10
n-Hexane		<u> </u>	Not detected	1.83
o-Xylene			Not detected	2.24
p- & m-Xylenes		ļ	Not detected	2.24
Propylene	ļ	ļ	Not detected	0.881
Styrene			Not detected	2.20
Tetrachloroethylene	1		Not detected	3.49

Client Sample ID			Cinema SV-1	
York Sample ID			05120319-01	
Matrix			AIR	
Parameter	Method	Units	Results	MDL
Tetrahydrofuran			Not detected	1.53
Toluene			4.60	1.93
	 	 	Not detected	2.03
trans-1,2-Dichloroethylene		-	Not detected	2.34
trans-1,3-Dichloropropylene	<u> </u>		Not detected	2.78
Trichloroethylene				3.86
Trichlorofluoromethanc		ļ	5.71	
Vinyl acetate			Not detected	1.83
Vinyl Bromide			Not detected	2.27
Vinyl Chloride			Not detected	1.76

Units Key:

For Waters/Liquids: mg/L = ppm; ug/L = ppb

For Soils/Solids: mg/kg = ppm; ug/kg = ppb

Notes for York Project No. 05120319

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.

3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.

5. All samples were received in proper condition for analysis with proper documentation.

6. All analyses conducted met method or Laboratory SOP requirements.

7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By

Robert Q. Bradley

Date: 12/19/2005