

NEW YORK
state department of
HEALTH

Howard A. Zucker, M.D., J.D.
Acting Commissioner of Health

Sue Kelly
Executive Deputy Commissioner

May 28, 2014

Ms. [REDACTED]
[REDACTED] Street
Ithaca, NY 14850

Re: Air Sampling Results
Former Ithaca Gun Factory
Ithaca, Thompsonkins County

Dear Ms. Bell:

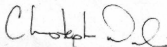
On February 27, 2014, the New York State Departments of Environmental Conservation and Health (referred to as "the State") collected air samples from within and beneath your home. Environmental samples previously collected near your property have indicated chlorinated volatile organic compounds (VOCs), primarily trichloroethene (TCE), may be present in the environment. The goal of the air sampling was to determine whether actions are needed to address exposures to site-related contaminants, which may move from contaminated groundwater into the indoor air of an overlying structure through a process referred to as soil vapor intrusion (see enclosed fact sheet for additional information). I have summarized your chlorinated VOC results in Figure 1 and have also enclosed a table with all VOC results for the samples collected at your home.

Based on our review of your results, no actions are needed to address exposures related to soil vapor intrusion at your home. Chlorinated VOCs were detected in your basement air samples and chlorinated VOCs, including TCE, were detected in the air beneath your home; however, these levels were low and we do not expect these levels to significantly affect your indoor air (Figure 1).

As expected, other VOCs were detected in the indoor air because they are a part of our everyday lives. They are present in the products we store and use indoors and in the outdoor air that enters buildings. The concentrations of the other VOCs detected in the indoor air are consistent with those commonly found in indoor air and do not represent a health concern.

Thank you for your cooperation in allowing us to sample your home. If you wish to discuss your results further, please call me at 518-402-7860.

Sincerely,



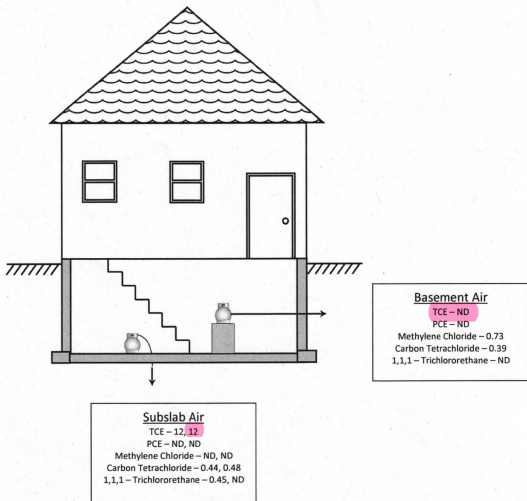
Christopher M. Doroski
Public Health Specialist
Bureau of Environmental Exposure Investigation

Enclosures

ec: M. Schuck / File
J. Strepelis - Syracuse Central Regional Office
E. Cameron - TCHD
W. Daigle - NYSDEC Central
H. Warner – NYSDEC, Region 7 Syracuse
G. Priscott– NYSDEC Region 7, Kirkwood

C:\Users\cmd16\Desktop\Ithaca Gun 2014 Homeowner Letters\NFA\216_Queen_Street.doc.docx

FIGURE 1
Chlorinated VOC Sampling Results (in mcg/m³)



NOTES:

1. This diagram is intended to provide a quick reference to illustrate the testing results for site-related cVOCs in air samples collected from the basement and sub-slab vapor at your home.
2. mcg/m³ = micrograms per cubic meter.
3. ND = the compound was not detected in the air sample.
4. The sampling results are provided in the enclosed laboratory sheets. The sheets are identified as follows:

Basement Air = Client Sample ID.: H21-BA-2014

Sub-Slab Vapor = Client Sample ID.: H21-SS-2014, DUP2



Structure Sampling Questionnaire and Building Inventory
New York State Department of Environmental Conservation

Site Name: Former Ithaca Gun Factory - Off-Site Site Code: C755019A Operable Unit: 001
Building Code: H21 Building Name: H21
Address: [REDACTED] Apt/Suite No: [REDACTED]
City: Ithaca State: NY Zip: 14850 County: Tompkins

Contact Information

Preparer's Name: Karen Carling Phone No: (518) 885-5383
Preparer's Affiliation: Aztech Technologies, Inc Company Code: [REDACTED]
Purpose of Investigation: Sub-slab and Air Monitoring Date of Inspection: 2/27/2014
Contact Name: [REDACTED] Affiliation: OWNER
Phone No: (607) [REDACTED] Alt. Phone No: [REDACTED] Email: [REDACTED]
Number of Occupants (total): 4 Number of Children: 2
 Occupant Interviewed? Owner Occupied? Owner Interviewed?
Owner Name (if different): [REDACTED] Owner Phone: [REDACTED]
Owner Mailing Address: [REDACTED]

Building Details

Bldg Type (Res/Com/Ind/Mixed): RESIDENTIAL Bldg Size (S/M/L): MEDIUM
If Commercial or Industrial Facility, Select Operations: [REDACTED] If Residential Select Structure Type: SINGLE FAMILY RES
Number of Floors: 2 Approx. Year Construction: 1890 Building Insulated? Attached Garage?
Describe Overall Building Tightness' and Airflows (e.g., results of smoke tests):
Basement walls have a parged surfacing material. Portions of the basement floor is dirt or deteriorated concrete.

Foundation Description

Foundation Type: BASEMENT Foundation Depth (bgs): 6 Unit: FEET
Foundation Floor Material: POURED CONCRETE Foundation Floor Thickness: 4 Unit: INCHES
Foundation Wall Material: LAID-UP STONE Foundation Wall Thickness: 8
 Floor penetrations? Describe Floor Penetrations: [REDACTED]
 Wall penetrations? Describe Wall Penetrations: Sewer and water connection and natural gas and dryer
Basement is: UNFINISHED Basement is: DRY Sumps/Drains? Water In Sump?: [REDACTED]
Describe Foundation Condition (cracks, seepage, etc.): [REDACTED]
 Radon Mitigation System Installed? VOC Mitigation System Installed? Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR Heat Fuel Type: GAS Central A/C Present?

Vented Appliances

Water Heater Fuel Type: GAS Clothes Dryer Fuel Type: GAS
Water Htr Vent Location: OUTSIDE Dryer Vent Location: OUTSIDE



Structure Sampling Questionnaire and Building Inventory
New York State Department of Environmental Conservation

Building Code: H21

Address: [REDACTED]

Ithaca, NY 14850

Sampling Information

Sampler Name(s): Garth Barrett

Sampler Company Code: _____

Sample Collection Date: 02/27/2014-2/28/2014

Date Samples Sent To Lab: 03/04/2014

Sample Chain of Custody Number: Not Applicable

Outdoor Air Sample Location ID: H21-OA-2014

SUMMA Canister Information

Sample ID:	H21-SS-2014	DUP2	H21-BA-2014	H21-OA-2014	
Location Code:					
Location Type:	SUBSLAB	BASEMENT	BASEMENT	OUTDOOR	
Canister ID:	09685	10026	10995	10379	
Regulator ID:	K281	K630	K448	KK186	
Matrix:	Subslab Soil Vapo	Indoor Air	Indoor Air	Ambient Outdcd	
Sampling Method:	SUMMA AIR SAMPLIN	SUMMA AIR SAM	SUMMA AIR SAM	SUMMA AIR SAM	

Sampling Area Info

Slab Thickness (Inches):	4 inches				
Sub-Slab Material:					
Sub-Slab Moisture:					
Seal Type:	CLAY				
Seal Adequate?:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Times and Vacuum Readings

Sample Start Date/Time:	2/27/2014 10:53	2/27/2014 10:53	2/27/2014 10:53	2/27/2014 10:53	
Vacuum Gauge Start:	-30	-30	-28	-27	
Sample End Date/Time:	2/28/2014 10:39	2/28/2014 10:39	2/28/2014 10:39	2/28/2014 10:39	
Vacuum Gauge End:	-2	-2	-2	-1	
Sample Duration (hrs):	24	24	24	24	
Vacuum Gauge Unit:	in (hg)	in (hg)	in (hg)	in (hg)	

Sample QA/QC Readings

Vapor Port Purge:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Purge PID Reading:	0.0				
Purge PID Unit:	ppb				
Tracer Test Pass:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

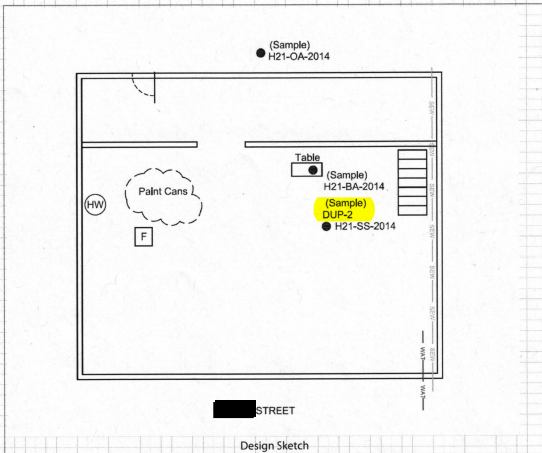


Structure Sampling Questionnaire and Building Inventory
New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level. The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sketch
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or F	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	XXXXXXXX	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	#####	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

Analytical Data for February 2014 Indoor Air Sampling

Client ID	H21-SS-2014	DUP2	H21-BA-2014	H21-OA-2014		
Lab Sample ID	140-996-39	140-996-43	140-996-40	140-996-41		
Sampling Date	2/27/2014	2/27/2014	2/27/2014	2/27/2014		
Matrix	Sub-slab Air	Air	Air	Air		
Dilution*Factor	1	1	1	1		
Unit	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$		
GC/MS VOA-T015	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.45		0.44	U	0.44	U
1,1,2,2-Tetrachloroethane	0.55	U	0.55	U	0.55	U
1,1,2-Trichloroethane	0.44	U	0.44	U	0.44	U
1,1,2-Trichlorotrifluoroethane	0.61	U	0.61	U	0.61	U
1,1-Dichloroethane	0.32	U	0.32	U	0.32	U
1,1-Dichloroethene	0.32	U	0.32	U	0.32	U
1,2,4-Trichlorobenzene	0.59	U	0.59	U	0.59	U
1,2,4-Trimethylbenzene	0.39	U	0.39	U	0.39	U
1,2-Dibromoethane	0.61	U	0.61	U	0.61	U
1,2-Dichlorobenzene	0.48	U	0.48	U	0.48	U
1,2-Dichloroethane	0.32	U	0.32	U	0.32	U
1,2-Dichloropropane	0.37	U	0.37	U	0.37	U
1,2-Dichlorotetrafluoroethane	0.56	U	0.56	U	0.56	U
1,3,5-Trimethylbenzene	0.39	U	0.39	U	0.39	U
1,3-Dichlorobenzene	0.48	U	0.48	U	0.48	U
1,4-Dichlorobenzene	0.48	U	0.48	U	0.48	U
1,4-Dioxane	0.72	U	0.72	U	0.72	U
2,2,4-Trimethylpentane	0.93	U	0.93	U	0.93	U
2-Butanone	0.94	U	2.6		0.94	U
4-Methyl-2-pentanone (MIBK)	1.2		0.82	U	0.82	U
Benzene	0.26	U	0.26	U	0.44	
Benzyl chloride	0.83	U	0.83	U	0.83	U
Bromodichloromethane	0.75		0.76		0.54	U
Bromoform	0.83	U	0.83	U	0.83	U
Bromomethane	0.31	U	0.31	U	0.31	U
Carbon tetrachloride	0.44		0.48		0.39	
Chlorobenzene	0.37	U	0.37	U	0.37	U
Chloroethane	0.21	U	0.21	U	0.21	U
Chloroform	8.8		8.3		0.39	U
Chloromethane	0.41	U	0.41	U	1.1	
cis-1,2-Dichloroethene	0.32	U	0.32	U	0.32	U
cis-1,3-Dichloropropene	0.36	U	0.36	U	0.36	U
Cyclohexane	0.69	U	0.69	U	0.69	U
Dibromochloromethane	0.68	U	0.68	U	0.68	U
Dichlorodifluoromethane	1.1		1.2		1.2	
Ethanol	4.4		6.6		12	
Ethylbenzene	0.35	U	0.35	U	0.35	U
Hexachlorobutadiene	0.85	U	0.85	U	0.85	U
Hexane	2.7		0.70	U	0.70	U
Methyl tert-butyl ether	0.58	U	0.58	U	0.58	U
Methylene Chloride	0.69	U	0.69	U	0.73	
m-Xylene & p-Xylene	0.74		0.66		0.67	
o-Xylene	0.35	U	0.35	U	0.57	
Styrene	0.34	U	0.34	U	0.34	U
t-Butyl alcohol	0.97	U	0.97	U	0.97	U
Tetrachloroethene	0.54	U	0.54	U	0.54	U
Toluene	0.80		0.84		0.53	
trans-1,2-Dichloroethene	0.32	U	0.32	U	0.32	U
trans-1,3-Dichloropropene	0.36	U	0.36	U	0.36	U
Trichloroethene	12		12		0.21	U
Trichlorofluoromethane	1.1		1.1		1.2	
Vinyl chloride	0.20	U	0.20	U	0.20	U

Notes/Qualifiers:

 $\mu\text{g}/\text{m}^3$ = Micrograms per cubic meter

BA = Indoor basement air sample

SS = Sub-slab air sample

OA = Outdoor air sample

DUP = Duplicate sample

U = Analyzed for but, not detected at reported quantitation limit