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Memorandum

Date: June 17, 2008 Project No.: 129862.105

To: Charles Post (NYSDEC)
Katherine Comerford (NYSDOH)

Cc: Steve Stucker (National Grid)

From: James Marolda and Bob O'Neill

Subject: Phase II Soil Vapor Intrusion Evaluation
Oswego (West Utica St.) Former MGP Site, Oswego, NY

Phase II soil vapor intrusion (SVI) activities were implemented at the Oswego (West Utica St.) Former Manufactured Gas Plant (MGP) site (hereinafter referred to as the "site") to further evaluate the nature and extent of MGP-related constituents detected during Phase I SVI sampling (soil vapor) and to assess the potential for soil vapor to impact indoor air in the buildings located on the site. The work plan for this evaluation was provided to the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) in a letter dated February 29, 2008, following the NYSDEC's request to conduct the evaluation in an e-mail to National Grid dated February 6, 2008. The work plan was subsequently modified by a March 6, 2008 letter from National Grid in response to comments from the NYSDOH in a letter dated March 4, 2008, and approved by NYSDEC/DOH on March 7, 2008. In accordance with the work plan, this technical memorandum is being submitted to the NYSDEC and the NYSDOH in order to document Phase II activities and results.

Pursuant to the NYSDEC/DOH-approved *Remedial Investigation Work Plan, Former Manufactured Gas Plant Site, Oswego (West Utica St.), New York (Brown and Caldwell Associates, June 2006; Revised October 2006)*, SVI activities for the site were to be performed in a phased approach. Based on the results of the Phase I soil vapor samples collected on July 17, 2007 (elevated levels of naphthalene detected in the soil vapor samples), Phase II of the SVI activities was initiated. The Phase I data were previously provided to the NYSDEC/NYSDOH and the property owners in letters dated October 12, 2007, and were also included in the *Data Summary Report, Remedial Investigation, Oswego (West Utica St.) Former MGP Site (Brown and Caldwell Associates, March 2008)*.

Provided below are: a description of the methods and procedures used during field activities and sample analyses; a discussion of the results and findings of the data specific to each property that was sampled; and conclusions and recommendations related to the evaluation of soil vapor intrusion at the site.

Methods and Procedures

In accordance with the work plan for Phase II SVI activities, the following samples were collected at the properties described below:

- **Ontario Lakeside Medical Associates:** Sub-slab vapor sample (SS-4); indoor air sample (IA-4), and duplicate (DUP031808-IA)
- **Sons of Italy Lodge:** Sub-slab vapor sample (SS-5), indoor air sample (IA-5), and duplicate (DUP031808-SS)
- **Car Shop:** Sub-slab vapor sample (SS-1)
- **Advantage Carpets:** Sub-slab vapor sample (SS-2) and indoor air sample (IA-2)
- **Taylor Rental:** Sub-slab vapor sample (SS-3)

In concurrence with NYSDEC/DOH, indoor air sampling was not conducted within the Car Shop building or the Taylor Rental building due to the use/presence of materials that are potential sources of volatile organic compounds (VOCs) associated with the on-going business operations in these buildings (e.g., auto repair and equipment rental/maintenance operations, respectively). As specified in the work plan, a phased approach was followed to determine whether it was appropriate to sample indoor air at the Taylor Rental building, due to the various gasoline powered equipment stored throughout the building interior. Based on the results of the expedited laboratory analysis for a sub-slab vapor sample collected at this location and the building inventory, indoor air sampling was not deemed appropriate for the purposes of evaluating soil vapor intrusion for this location.

Preliminary Activities

Prior to initiating sampling activities for the Phase II SVI evaluation, an Indoor Air Quality Questionnaire and Building Inventory were completed by Brown and Caldwell (BC), on behalf of National Grid, for the Ontario Lakeside Medical Associates, Sons of Italy, Advantage Carpets, and Taylor Rental buildings to identify and minimize conditions that may interfere with the planned activities. The questionnaires and inventories were completed on March 13 and 14, 2008. The form provided in Appendix B of NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, October 2006)* was used for these activities. Completed copies of the forms and associated photo documentation of the building inventories are provided in Attachment A.

Temporary sub-slab vapor probes were installed by BC personnel on March 17, 2008 at each property by advancing a 3/8-inch diameter hole through the concrete slab using a hammer drill, inserting a section of food-grade Teflon® tubing through the hole, and sealing the annular space using Permagum®. The tubing inlet was positioned approximately one to two inches below the slab, and the end of the tubing above the slab was capped.

Sampling Activities

The sub-slab vapor, indoor air, and the outdoor (ambient) air samples were collected on March 18, 2008 by BC personnel using 6-liter Summa® passivated stainless steel canisters. The Summa® canisters were batch-certified as clean by the laboratory for the canisters used for sub-slab vapor and were individually-certified for the canisters used for outdoor and indoor air. Flow-controllers were provided by the laboratory and were pre-calibrated for the desired flow rate (e.g., approximately 0.2 liters per minute for the sub-slab vapor samples) or duration of sample collection (e.g., approximately eight hours for the indoor and ambient air samples). Samples were collected in accordance with the approved appendices from the draft document titled *Standard Operating Procedures for Soil Vapor Intrusion Evaluations at National Grid MGP Sites in New York State (O'Brien & Gere, September 2007).* Prior to collecting a sample of sub-slab vapor from each

location, the temporary probe was connected to a vacuum pump and approximately one to three volumes of air were evacuated from the tubing at a rate of approximately 0.2 liters per minute. Copies of the field sampling forms used during the event are provided in Attachment B.

Sample Analysis

Samples were analyzed using the United States Environmental Protection Agency (USEPA) Method TO-15, including n-alkanes and tentatively identified compounds (TICs). Appropriate quality assurance/quality control (QA/QC) samples were also collected, including a duplicate sample for sub-slab vapor and indoor air.

The sample analyses were conducted by TestAmerica Laboratories of Knoxville, Tennessee. TestAmerica Laboratories is certified under the NYSDOH Environmental Laboratory Approval Program (ELAP) ASP/CLP analytical methods. Laboratory data reports (CD-ROM) for the analyses performed by TestAmerica are provided in Attachment C. Preliminary (non-validated) data was forwarded to the NYSDOH and the NYSDEC in an e-mail from BC dated April 15, 2008.

The results for the SVI samples were forwarded to a data validator for the preparation of a Data Usability Summary Report (DUSR), which is provided along with the laboratory reports in Attachment C. The DUSR was received on May 9, 2008.

Weather Conditions

The temperature ranged from a low of 27 to a high of 42 degrees Fahrenheit throughout the sampling event. The wind was slight to moderate out of the east-southeast, ranging from 5 to 12 miles per hour and trace amounts of precipitation occurred in the afternoon.

Results and Findings

The data associated with the Phase II SVI sampling program are summarized in Table 1. Results from the sub-slab vapor and indoor air samples were compared to typical indoor air concentrations expected for non-residential settings, as provided in the *Guidance for Evaluating Vapor Intrusion in New York State (NYSDOH, October 2006)*. As recommended by the NYSDOH, typical indoor air concentrations in non-residential settings are the 90th percentile values from the USEPA Building Assessment and Survey Evaluation (BASE). Note that if sub-slab vapors were migrating into the building, the resulting concentrations in the building would be expected to be substantially less than those beneath the slab due to attenuation as vapor migrates from the subsurface into the building. In addition to the comparisons noted above, the concentrations from the Phase II SVI samples were compared to the USEPA target indoor air concentrations for non-residential settings as provided in the draft document entitled *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (USEPA, November 2002)*.

The sub-slab vapor, indoor air, and outdoor air samples were analyzed for a list of compounds that include compounds that can potentially be related to MGP operations as listed in the NYSDOH guidance document referenced above (NYSDOH, October, 2006), as well as numerous compounds that are not associated with MGPs. The analyte compounds listed below have been found to be potentially associated with MGP residuals, although each can be associated with other sources as well, in particular petroleum related sources.

- Benzene
- Ethylbenzene
- Toluene

- Xylenes
- Naphthalene
- 1,2,4-Trimethylbenzene
- Tetramethylbenzenes
- Thiopenes
- Indene
- Indane

Based on a review of available historical information (primarily Sanborn Fire Insurance Maps), the former Oswego MGP employed the coal carbonization process which did not use petroleum feed stock; no information has been identified to indicate that the carbureted water gas process, which required petroleum feed stock, was used at the site. If the carbureted water gas process was used at the site, the following alkane compounds would be included in the list above: n-Nonane, n-Decane, n-Undecane, and n-Dodecane.

Discussions of the results and findings according to each property sampled are provided below. Draft letters for transmitting the data to each property owner were prepared and submitted to the NYSDOH and the NYSDEC for review on May 23, 2008. These letters were edited based on comments provided by NYSDOH and NYSDEC and sent to the property owners by June 5, 2008. For reference, an example of the letter format used for reporting the results to the property owners is provided as Attachment D.

The Car Shop

A total of two (2) samples were collected to evaluate potential soil vapor impacts associated with The Car Shop building. The samples included the following:

- A sub-slab vapor sample (SS-1) from beneath the building floor slab; and
- An outdoor air sample (OA-1) located near the southern wall of the building.

Approximate locations of these samples are shown on Figure 1. Note that the outdoor air sample was collected to help evaluate site-specific background outdoor air concentrations. The concentrations in sub-slab vapor sample SS-1, collected from beneath the building, are below the typical indoor air concentrations for non-residential properties (NYSDOH, October 2006), as well as measured outdoor air concentrations, indicating that the sub-slab vapors do not impact the indoor air within the building. The concentrations are also below the USEPA Target Indoor Air Concentrations (non-residential) (USEPA, November 2002). As noted above, if sub-slab vapors were migrating into the building, the resulting concentrations in the building would be expected to be substantially less than those beneath the slab due to attenuation as vapor migrates from the subsurface into the building.

Advantage Carpets

A total of three (3) samples were collected to evaluate potential soil vapor impacts associated with the Advantage Carpet building. The samples included the following:

- A sub-slab vapor sample (SS-2) from beneath the floor slab;
- An outdoor air sample (OA-2) located near the northwest corner of the building; and
- An indoor air sample (IA-2) located near SS-2, within the building.

Approximate locations of these samples are shown on Figure 1. Note that the outdoor air sample was collected to help evaluate site-specific background outdoor air concentrations.

The concentrations of several constituents in sub-slab vapor sample SS-2 are above the typical indoor air concentrations for non-residential properties (NYSDOH, October 2006). However, the concentrations of these same constituents are higher in the indoor air based on the results from sample IA-2, indicating that the source of both the indoor air and sub-slab vapor concentrations are likely operations and materials within the building. Advantage Carpets is a carpet and flooring distributor and showroom, and many of the materials and activities in the building contribute VOCs to the indoor air, for example carpet adhesives contain toluene and other constituents (see indoor air inventory photo log in Attachment A). The only exception where constituent concentrations are not higher in the indoor air as compared to the sub-slab vapor are for the compounds chloroform and 1,2-dichloroethane, which were detected in the sub-slab vapor but not in the indoor air. Neither chloroform or 1,2-dichloroethane are considered as being related to former MGP operations.

Taylor Rental

A total of two (2) samples were collected to evaluate potential soil vapor impacts associated with the Taylor Rental building. The samples included the following:

- A sub-slab vapor sample (SS-3) from beneath the floor slab; and
- An outdoor air sample (OA-3) located near the northeast corner of the building;

Approximate locations of these samples are shown on Figure 1. Note that the outdoor air sample was collected to help evaluate site-specific background outdoor air concentrations. The concentrations in sub-slab vapor sample SS-3, collected from beneath the Taylor Rental portion of the building, are below typical indoor air concentrations for non-residential properties (NYSDOH, October 2006), and are also below the USEPA Target Indoor Air Concentrations (non-residential) (USEPA, November, 2002), indicating that the sub-slab vapors do not impact the indoor air within the building. As noted above, if sub-slab vapors were migrating into the building, the resulting concentrations in the building would be expected to be substantially less than those beneath the slab due to attenuation as vapor migrates from the subsurface into the building.

Ontario Lakeside Medical Associates

A total of three (3) samples were collected to evaluate potential soil vapor impacts associated with the Ontario Lakeside Medical Associates building. The samples included the following:

- A sub-slab vapor sample (SS-4) from beneath the basement floor slab of the building;
- An indoor air sample (IA-4) located near SS-4, within the basement of the building (a duplicate sample, DUP031808-IA, was also collected at this same location at the same time); and
- An outdoor air sample (OA-4) located near the southern wall of the building.

Approximate locations of these samples are shown on Figure 1. Note that the outdoor air sample was collected to help evaluate site-specific background outdoor air concentrations.

The concentrations in sub-slab vapor sample SS-4, collected from beneath the building, and indoor air sample IA-4, collected from within the basement of the building, are below typical indoor air concentrations for

non-residential properties (NYSDOH, October 2006). These concentrations are also below the USEPA Target Indoor Air Concentrations (non-residential) (USEPA, November, 2002), with the exception of trichloroethene (TCE) in SS-4, which is slightly above this criterion. Note that TCE, which is not considered an MGP-related constituent, was not detected in the in the indoor air sample (IA-4), but was detected in outdoor air sample (OA-4), at a slightly higher concentration than SS-4. The concentrations in the sub-slab vapors are typically less than in the indoor air; therefore, the source of the concentrations in the indoor air are indoor sources (e.g., products used and stored indoors [see indoor air inventory photo log in Attachment A]) and/or due to outdoor sources, and not from soil vapor. This assessment indicates that the sub-slab vapors do not impact the indoor air within the building.

Sons of Italy Lodge

A total of three (3) samples were collected to evaluate potential soil vapor impacts associated with the Sons of Italy Lodge building. The samples included the following:

- A sub-slab vapor sample (SS-5) from beneath the building floor slab (a duplicate sample, DUP031808-SS, was also collected at this same location at the same time);
- An indoor air sample (IA-5) located near SS-5, within the building; and
- An outdoor air sample (OA-5) located near the western wall of the building.

Approximate locations of these samples are shown on Figure 1. Note that the outdoor air samples were collected to help evaluate site-specific background outdoor air concentrations.

The concentrations in sub-slab vapor sample SS-5, collected from beneath the building, and indoor air sample IA-5, collected from within the building, are below typical indoor air concentrations for non-residential properties (NYSDOH, October 2006), and are also below the USEPA Target Indoor Air Concentrations (non-residential) (USEPA, November, 2002). As described above, if sub-slab vapors were migrating into the building, the resulting concentrations in the building would be expected to be substantially less than those beneath the slab due to attenuation as vapor migrates from the subsurface into the building. A comparison of the sub-slab vapor and indoor air concentrations do not indicate that the sub-slab vapors are a source of constituents in indoor air in this building. This assessment indicates that the sub-slab vapors do not impact the indoor air within the building.

Conclusions and Recommendations

Based on a review of the Phase II SVI data and the findings discussed above, it does not appear that intrusion of soil vapors related to subsurface MGP-residuals into buildings is a concern at this site. The findings indicate that sub-slab vapors are not impacting indoor air in the buildings described above and that no further evaluation of the potential for impacts from soil vapor is required at this time.

TABLES

TABLE 1
SUB-SLAB VAPOR, INDOOR AIR, AND OUTDOOR AIR RESULTS
PHASE II SVI EVALUATION
OSWEGO (WEST UTICA ST.) FORMER MGP SITE
OSWEGO, NEW YORK

		USEPA Target		Car Shop		Advantage Carpets			Taylor Rental		Ontario Medical Assocaiates			
	Typical Indoor	Indoor Air	Location:	SS-1	OA-1	SS-2	IA-2	OA-2	SS-3	OA-3	SS-4	IA-4	DUP031808-IA	OA-4
	Air Concentration ($\mu g/m^3$) [a]	Concentrations ($\mu g/m^3$)	Date:	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008
Compound	Non-residential	Non-residential [b]	Units:	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
trans-1,3-Dichloropropene	< 1.3	20		1.3 U	0.36 U	3.6 UD	3.6 UD	0.36 U	0.36 U	0.36 U	0.36 U	0.63 UD	0.36 U	0.36 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	< 6.8	NE		0.24 J	0.22 J	5.6 UJD	5.6 UJD	0.25 J	0.24 J	0.56 UJ	0.27 J	0.97 UJD	0.21 J	0.56 UJ
Acetone	98.9	350		14	13 U	48 UD	120 UD	34	14	31	15	29 UD	28	27
1,4-Dioxane	NE	NE		0.72 U	0.72 U	7.2 UD	7.2 UD	0.72 U	0.72 U	0.72 U	0.72 U	1.3 UD	0.72 U	0.72 U
Ethylbenzene	5.7	220		0.35 U	2	**8.2 D**	**52 D**	0.84	0.38	0.6	0.35 U	0.58 JD	0.35 U	0.52
Trichlorofluoromethane	18.1	700		2.2	3.1	3.4 JD	3.3 JD	2.9 J	1.5	2	2.5	2.8 D	2.7	2.4
n-Heptane	NE	NE		0.82 U	1.7	14 D	72 D	0.82	0.25 J	0.5 J	0.23 J	1.1 JD	0.82 U	0.54 J
Hexachlorobutadiene	< 6.8	11		4.3 U	4.3 U	43 UD	42 UD	4.3 U	4.3 U	4.3 U	4.3 U	7.4 UD	4.3 U	4.3 U
n-Hexane	10.2	200		0.7 U	5.7	**36 D**	**150 D**	1.4	0.49 J	0.89	0.33 J	1.7 JD	0.51 J	0.62 J
2-Hexanone	NE	NE		0.82 U	0.82 U	8.2 UD	8.1 UD	1.5	0.82 U	0.93	0.82 U	2 D	0.82 U	0.82 U
2,2,4-Trimethylpentane	NE	NE		0.93 U	3	12 D	69 D	0.88 J	0.28 J	0.73 J	0.36 J	0.52 JD	0.93 U	0.74 J
Isopropyl alcohol	NE	250		0.26 J	0.8 J	5.4 JD	100 D	1.9 J	0.37 J	0.66 J	1.7 J	19 D	19	1.6 J
Isopropylbenzene	NE	400		0.79 U	0.79 U	7.9 UD	7.8 UD	0.79 U	0.79 U	0.79 U	0.79 U	1.4 UD	0.79 U	0.79 U
tert-Butyl alcohol	NE	NE		0.086 J	0.14 J	24 UD	0.67 JD	1.1 J	0.089 J	0.5 J	0.13 J	0.24 JD	0.34 J	0.17 J
Methylene chloride	10.0	520		0.99 U	**59**	8.5 UD	12 UD	0.94 U	1.9 U	1.8 U	1.2 U	2.7 UD	2.9	1.6 U
2-Methylnaphthalene	NE	70		5.8 U	5.8 U	5.8 U	58 UD	5.8 U	5.8 U	5.8 U	5.8 U	10 UD	5.8 U	5.8 U
Naphthalene	5.1	3.0		1 U	1 U	10 UD	**6.2 JD**	1 U	1.8	1 U	1 U	1.8 UD	1 U	1 U
Benzene	9.4	31		0.26 U	3.2	**18 D**	**77 D**	2.5	5	1.4	0.44	1.3 D	0.67	1.5
n-Octane	4.5	NE		0.75 U	0.75	2.3 JD	**14 D**	0.28 J	0.75 U	0.21 J	0.75 U	0.47 JD	0.75 U	0.75 U
Pentane	NE	NE		1.2 U	6	96 D	270 D	2.4	0.92 J	1.7	0.91 J	2.3 D	1.8	1.2
Styrene	1.9	1000		0.34 U	0.33 J	3.4 UD	3.4 UD	0.43	0.22 J	0.34 U	0.34 U	0.69 D	0.34 U	0.17 J
1,1,2,2-Tetrachloroethane	NE	4.2		0.55 U	0.55 U	5.5 UD	5.5 UD	0.41 J	0.55 U	0.55 U	0.55 U	0.96 UD	0.55 U	0.96
Tetrachloroethene	15.9	81		0.54 U	0.33 J	1.3 JD	5.4 UD	0.33 J	0.54 U	0.32 J	0.26 J	0.94 UD	0.54 U	0.62
Toluene	43.0	400		0.3 U	14	**64 D**	**460 D**	3.6	3.7	2.4	27	2.2 JD	0.16 J	2.1
1,2,4-Trichlorobenzene	< 6.8	200		3 U	3 U	30 UD	29 UD	3 U	3 U	3 U	3 U	5.2 UD	3 U	3 U
1,1,1-Trichloroethane	20.6	2200		0.33 J	0.34 J	4.4 UD	4.3 UD	0.12 J	7.9	0.07 J	0.32 J	0.19 JD	1.6 J	0.44 U
1,1,2-Trichloroethane	< 1.5	15		0.44 U	0.44 U	4.4 UD	4.3 UD	0.44 U	0.44 U	0.44 U	0.44 U	0.76 UD	0.44 U	0.44 U
Trichloroethene	4.2	2.2		0.21 U	0.21 U	**3.6 D**	**7.8 D**	0.21 U	0.21 U	0.21 U	**2.5**	0.37 UD	0.21 U	**3**
1,1,2-Trichloro-1,2,2-trifluoroethane	3.5	30000		0.7	0.82	6.1 UD	6.1 UD	1	0.77	0.82	0.8	0.92 JD	0.9	0.94
1,2,4-Trimethylbenzene	9.5	6.0		0.39 U	2.1	**7.4 D**	**61 D**	0.65	0.52	0.3 J	0.39 U	0.51 JD	0.39 U	0.39 U
1,3,5-Trimethylbenzene	3.7	6.0		0.39 U	0.56	2.4 JD	**15 D**	0.15 J	0.27 J	0.39 U	0.39 U	0.68 UD	0.39 U	0.39 U
Vinyl chloride	< 1.9	28		0.2 U	0.2 U	2 UD	2 UD	0.2 U	0.2 U	0.2 U	0.2 U	0.36 UD	0.2 U	0.2 U
o-Xylene	7.9	7000		0.35 U	3.1	**11 D**	**70 D**	0.98	0.71	0.62	0.35 U	0.53 JD	0.35 U	0.48
1-Methylnaphthalene	NE	NE		5.8 U	5.8 U	5.8 UD	58 UD	5.8 U	5.8 U	5.8 U	5.8 U	10 UD	5.8 U	5.8 U
Methyl tert-butyl ether	11.5	3000		1.4 U	1.4 U	14 UD	14 UD	1.4 U	1.4 U	1.4 U	1.4 U	2.5 UD	1.4 U	1.4 U
n-Decane	17.5	NE		2.3 U	1.2 J	23 UD	**18 JD**	1.3 J	0.54 J	0.6 J	2.3 U	1.1 JD	2.3 U	2.3 U
n-Dodecane	15.9	NE		2.8 U	2.8 U	28 UD	**19 JD**	0.37 J	2.8 U	2.8 U	2.8 U	0.61 JD	2.8 U	2.8 U
n-Undecane	22.6	NE		2.6 U	0.18 J	1.8 JD	**27 D**	2.6 U	1.2 J	0.24 J	2.6 U	0.9 JD	2.6 U	2.6 U
Nonane	7.8	NE		1 U	0.77 J	10 UD	**12 D**	0.35 J	0.2 J	0.26 J	1 U	0.5 JD	1 U	0.19 J
m-Xylene & p-Xylene	22.2	7000		0.35 U	7.6	**32 D**	**200 D**	2.7	1.6	2	0.35 U	1.6 D	0.35 U	1.4
Bromodichloromethane	NE	14		0.54 U	0.54 U	5.4 UD	5.3 UD	0.54 U	0.54 U	0.54 U	0.54 U	0.93 UD	0.54 U	0.54 U
1,2-Dibromoethane (EDB)	< 1.5	0.20		0.61 U	0.61 U	6.1 UD	6.1 UD	0.61 U	0.61 U	0.61 U	0.61 U	1.1 UD	0.61 U	0.61 U
2-Butanone (MEK)	12.0	1000		0.82 J	1.8	4.4 JD	**31 D**	10	1.5	6.4	1.5	5.2 D	2.3	3.7
4-Methyl-2-pentanone (MIBK)	6.0	80		0.82 U	0.82 U	8.2 UD	**13 D**	3.8	0.82 U	0.84	0.82 U	1.3 JD	0.82 U	0.82 U
Vinyl bromide	NE	NE		0.35 U	0.35 U	3.5 UD	3.5 UD	0.35 U	0.35 U	0.35 U	0.35 U	0.61 UD	0.35 U	0.35 U
n-Butane	NE	NE		0.83	22	250 D	660 D	9	2.1	4.2	3.3	6.2 D	4.9	4.3
Bromoform	NE	220		0.83 U	0.83 U	8.3 UD	8.2 UD	0.83 U	0.83 U	0.83 U	0.83 U	1.4 UD	0.83 U	0.83 U
Bromomethane	< 1.7	5.0		0.31 U	0.31 U	3.1 UD	3.1 UD	0.31 U	0.31 U	0.31 U	0.31 U	0.54 UD	0.31 U	0.31 U

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		USEPA Target		Car Shop		Advantage Carpets			Taylor Rental		Ontario Medical Assocaiates			
	Typical Indoor	Indoor Air	Location:	SS-1	OA-1	SS-2	IA-2	OA-2	SS-3	OA-3	SS-4	IA-4	DUP031808-IA	OA-4
	Air Concentration ($\mu g/m^3$) [a]	Concentrations ($\mu g/m^3$)	Date:	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008	3/18/2008
Compound	Non-residential	Non-residential [b]	Units:	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
Indene	NE	NE		0.76 U	0.76 U	0.76 UD	7.5 UD	0.76 U	0.76 U	0.76 U	0.76 U	1.3 UD	0.76 U	0.76 U
1,3-Butadiene	< 3.0	0.87		0.35 U	0.35 U	3.5 UD	3.5 UD	0.35 U	0.35 U	0.35 U	0.35 U	0.62 UD	0.35 U	0.35 U
4-Ethyltoluene	NE	NE		0.79 U	0.45 J	2.4 JD	17 D	0.26 J	0.79 U	0.79 U	0.79 U	1.4 UD	0.79 U	0.79 U
Thiophene	NE	NE		0.28 U	0.28 U	0.28 UD	2.7 UD	0.28 U	0.28 U	0.28 U	0.28 U	0.48 UD	0.28 U	0.28 U
Carbon disulfide	4.2	700		0.064 J	0.08 J	1.1 JD	0.73 JD	0.043 J	0.35 J	0.055 J	0.061 J	0.085 JD	0.62 U	0.22 J
Carbon tetrachloride	< 1.3	16		0.49 J	0.93	5 UD	5 UD	1 J	0.5 U	0.9	0.7	0.74 JD	0.84	1.1
Chlorobenzene	< 0.9	60		0.37 U	0.37 U	3.7 UD	3.7 UD	0.37 U	0.37 U	0.37 U	0.37 U	0.64 UD	0.37 U	0.37 U
1,2,3-Trimethylbenzene	NE	NE		0.39 U	0.39 U	4.1 D	7.7 D	0.39 U	0.39 U	0.39 U	0.39 U	0.68 UD	0.39 U	0.39 U
Dibromochloromethane	NE	10		0.68 U	0.68 U	6.8 UD	6.8 UD	0.68 U	0.68 U	0.68 U	0.68 U	1.2 UD	0.68 U	0.68 U
Chloroethane	< 1.1	10000		0.21 U	0.21 U	2.1 UD	2.1 UD	0.21 U	0.21 U	0.21 U	0.21 U	0.37 UD	0.21 U	0.21 U
Chloroform	1.1	11		0.39 U	0.39 U	**2 JD**	3.9 UD	0.39 U	0.39 U	0.11 J	0.69	0.2 JD	0.17 J	**2.3**
Chloromethane	3.7	90		0.41 U	2.3	4.1 UD	4.1 UD	1.9	0.41 U	2.1	1.3	1.1 D	2.2	1.3
3-Chloropropene	NE	NE		0.25 U	0.25 U	2.5 UD	2.5 UD	0.25 U	0.25 U	0.25 U	0.25 U	0.44 UD	0.25 U	0.25 U
2-Methylbutane	NE	NE		0.42 J	16	200 D	580 D	5.2	2	2.9	1.8	3.5 D	2.9	2.8
Indane	NE	NE		0.39 U	0.39 U	1.8 D	4.1 D	0.39 U	0.39 U	0.39 U	0.39 U	0.67 UD	0.39 U	0.39 U
2-Chlorotoluene	NE	NE		0.83 U	0.83 U	8.3 UD	8.2 UD	0.83 U	0.83 U	0.83 U	0.83 U	1.4 UD	0.83 U	0.83 U
Cyclohexane	NE	NE		0.69 U	0.63 J	6.9 UD	13 D	0.53 J	0.53 J	0.69 U	0.69 U	1.2 UD	0.69 U	0.69 U
1,2-Dichlorobenzene	< 1.2	200		0.48 U	0.48 U	4.8 UD	4.8 UD	0.48 U	0.48 U	0.48 U	0.48 U	0.84 UD	0.48 U	0.48 U
1,3-Dichlorobenzene	< 2.4	110		0.48 U	0.48 U	4.8 UD	4.8 UD	0.48 U	0.48 U	0.48 U	0.48 U	0.84 UD	0.48 U	0.48 U
1,4-Dichlorobenzene	5.5	800		0.48 U	0.48 U	4.8 UD	4.8 UD	0.48 U	0.48 U	0.48 U	0.48 U	0.84 UD	0.48 U	0.48 U
Dichlorodifluoromethane	16.5	200		5.4	4.7 J	7.4 JD	8.8 JD	4.9 J	3.4	4.1 J	4.2	4.8 JD	4.8 J	4.7 J
1,1-Dichloroethane	< 0.7	500		0.32 U	0.32 U	3.2 UD	3.2 UD	0.32 U	0.32 U	0.32 U	0.32 U	0.56 UD	0.32 U	0.32 U
1,2-Dichloroethane	< 0.9	9.4		0.32 U	0.32 U	**11 D**	3.2 UD	0.32 U	0.32 U	0.32 U	0.32 U	0.56 UD	0.32 U	0.32 U
1,1-Dichloroethene	< 1.4	200		0.32 U	0.32 U	3.2 UD	3.1 UD	0.32 U	0.32 U	0.32 U	0.32 U	0.55 UD	0.72	0.32 U
cis-1,2-Dichloroethene	< 1.9	35		0.32 U	0.32 U	3.2 UD	3.1 UD	0.32 U	0.32 U	0.32 U	0.32 U	0.55 UD	0.32 U	0.32 U
trans-1,2-Dichloroethene	NE	70		0.32 U	0.32 U	3.2 UD	3.1 UD	0.32 U	0.32 U	0.32 U	0.32 U	0.55 UD	0.32 U	0.32 U
1,2-Dichloropropane	< 1.6	4.0		0.37 U	0.37 U	3.7 UD	3.7 UD	0.37 U	0.37 U	0.37 U	0.37 U	0.64 UD	0.37 U	0.37 U
cis-1,3-Dichloropropene	< 2.3	20		0.36 U	0.36 U	3.6 UD	3.6 UD	0.36 U	0.36 U	0.36 U	0.36 U	0.63 UD	0.36 U	0.36 U

Notes:
U - The analyte was analyzed for, but was not detected. Value shown is representative of the reporting limit for the analyzed constituent.
J - Estimated concentration. The result is below the reporting limit but above the method detection limit.
B - The associated method blank contains the target analyte at a reportable level.
D - Sample was diluted before analysis.
NC - Not Calculated
NE - Not Established

(a) From "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH October 2006). As recommended by NYSDOH, typical indoor air concentrations in non-residential settings are the 90th percentile values from the USEPA BASE data.
(b) From "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (USEPA November 2002). Office of Solid Waste and Emergency Response. An incremental individual lifetime cancer risk level of 10^{-4} is used for non-residential settings.

(µg/m3) - micrograms per cubic meter

Above NYSDOH typical indoor air concentrations

Above USEPA target indoor air concentrations

Above both NYSDOH and USEPA criteria

BROWN AND CALDWELL

TABLE 1
SUB-SLAB VAPOR, INDOOR AIR, AND OUTDOOR AIR RESULTS
PHASE II SVI EVALUATION
OSWEGO (WEST UTICA ST.) FORMER MGP SITE
OSWEGO, NEW YORK

		USEPA Target		Sons of Italy Lodge			
	Typical Indoor	Indoor Air	Location:	SS-5	DUP031808-SS	IA-5	OA-5
	Air Concentration (µg/m^3) [(a)]	Concentrations (µg/m^3)	Date:	3/18/2008	3/18/2008	3/18/2008	3/18/2008
Compound	Non-residential	Non-residential [(b)]	Units:	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
trans-1,3-Dichloropropene	< 1.3	20		0.36 U	0.36 U	0.36 U	0.36 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	< 6.8	NE		0.34 J	0.27 J	0.26 J	0.24 J
Acetone	98.9	350		26 J	7.4 J	21 U	28
1,4-Dioxane	NE	NE		0.72 U	0.72 U	0.72 U	0.72 U
Ethylbenzene	5.7	220		0.17 J	0.12 J	0.51	0.56
Trichlorofluoromethane	18.1	700		2.6	2.5	3	2.3
n-Heptane	NE	NE		0.82 U	0.16 J	0.47 J	0.54 J
Hexachlorobutadiene	< 6.8	11		4.3 U	4.3 U	4.3 U	4.3 U
n-Hexane	10.2	200		0.7 U	0.096 J	0.66 J	0.66 J
2-Hexanone	NE	NE		0.87 J	0.82 U	0.82 U	0.93
2,2,4-Trimethylpentane	NE	NE		30	28	0.45 J	0.55 J
Isopropyl alcohol	NE	250		0.65 J	0.33 J	0.73 J	0.71 J
Isopropylbenzene	NE	400		0.79 U	0.79 U	0.79 U	0.79 U
tert-Butyl alcohol	NE	NE		0.67 J	0.17 J	0.19 J	0.11 J
Methylene chloride	10.0	520		0.78 U	0.76 U	2.1	2.1
2-Methylnaphthalene	NE	70		5.8 U	5.8 U	5.8 U	5.8 U
Naphthalene	5.1	3.0		0.53 J	0.53 J	1 U	1 U
Benzene	9.4	31		0.23 J	0.38	1.5	1.6
n-Octane	4.5	NE		0.11 J	0.75 U	0.19 J	0.19 J
Pentane	NE	NE		0.65 J	0.44 J	1.7	2
Styrene	1.9	1000		0.25 J	0.16 J	0.34 U	0.23 J
1,1,2,2-Tetrachloroethane	NE	4.2		0.55 U	0.55 U	0.55 U	0.55 U
Tetrachloroethene	15.9	81		1.5	0.54	0.31 J	0.19 J
Toluene	43.0	400		0.39	0.34	2.2	2.6
1,2,4-Trichlorobenzene	< 6.8	200		3 U	3 U	3 U	3 U
1,1,1-Trichloroethane	20.6	2200		0.082 J	0.13 J	0.14 J	0.14 J
1,1,2-Trichloroethane	< 1.5	15		0.44 U	0.44 U	0.44 U	0.44 U
Trichloroethene	4.2	2.2		0.21 U	0.21 U	0.21 U	0.21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	3.5	30000		1.1	1	1.1	0.81
1,2,4-Trimethylbenzene	9.5	6.0		0.16 J	0.39 U	0.13 J	0.46
1,3,5-Trimethylbenzene	3.7	6.0		0.34 J	0.36 J	0.39 U	0.16 J
Vinyl chloride	< 1.9	28		0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	7.9	7000		0.31 J	0.23 J	0.5	0.66
1-Methylnaphthalene	NE	NE		5.8 U	5.8 U	5.8 U	5.8 U
Methyl tert-butyl ether	11.5	3000		11	11	1.4 U	1.4 U
n-Decane	17.5	NE		1.6 J	1.1 J	2.3 U	0.32 J
n-Dodecane	15.9	NE		0.71 J	0.27 J	2.8 U	2.8 U
n-Undecane	22.6	NE		2.6 U	2.6 U	2.6 U	0.21 J
Nonane	7.8	NE		1 U	1 U	0.15 J	0.28 J
m-Xylene & p-Xylene	22.2	7000		0.38	0.32 J	1.5	2
Bromodichloromethane	NE	14		0.54 U	0.54 U	0.54 U	0.54 U
1,2-Dibromoethane (EDB)	< 1.5	0.20		0.61 U	0.61 U	0.61 U	0.61 U
2-Butanone (MEK)	12.0	1000		3	1.2 U	1.9	4
4-Methyl-2-pentanone (MIBK)	6.0	80		0.82 U	0.82 U	0.82 U	0.73 J
Vinyl bromide	NE	NE		0.35 U	0.35 U	0.35 U	0.35 U
n-Butane	NE	NE		2.7	2.6	4.8	4.8
Bromoform	NE	220		0.83 U	0.83 U	0.83 U	0.83 U
Bromomethane	< 1.7	5.0		0.31 U	0.31 U	0.31 U	0.31 U

TABLE 1
SUB-SLAB VAPOR, INDOOR AIR, AND OUTDOOR AIR RESULTS
PHASE II SVI EVALUATION
OSWEGO (WEST UTICA ST.) FORMER MGP SITE
OSWEGO, NEW YORK

		USEPA Target		Sons of Italy Lodge			
	Typical Indoor	Indoor Air	Location:	SS-5	DUP031808-SS	IA-5	OA-5
	Air Concentration (µg/m^3) [(a)]	Concentrations (µg/m^3)	Date:	3/18/2008	3/18/2008	3/18/2008	3/18/2008
Compound	Non-residential	Non-residential [(b)]	Units:	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
Indene	NE	NE		0.76 U	0.76 U	0.76 U	0.76 U
1,3-Butadiene	< 3.0	0.87		0.35 U	0.35 U	0.35 U	0.35 U
4-Ethyltoluene	NE	NE		0.79 U	0.79 U	0.79 U	0.18 J
Thiophene	NE	NE		0.28 U	0.28 U	0.28 U	0.28 U
Carbon disulfide	4.2	700		0.1 J	0.095 J	0.078 J	0.065 J
Carbon tetrachloride	< 1.3	16		1.1	1.1	1	0.8
Chlorobenzene	< 0.9	60		0.37 U	0.37 U	0.37 U	0.37 U
1,2,3-Trimethylbenzene	NE	NE		0.62	0.56	0.39 U	0.39 U
Dibromochloromethane	NE	10		0.68 U	0.68 U	0.68 U	0.68 U
Chloroethane	< 1.1	10000		0.21 U	0.21 U	0.21 U	0.21 U
Chloroform	1.1	11		0.16 J	0.14 J	0.19 J	0.12 J
Chloromethane	3.7	90		0.41 U	0.35 J	2.4	2.1
3-Chloropropene	NE	NE		0.25 U	0.25 U	0.25 U	0.25 U
2-Methylbutane	NE	NE		3.6	3.2	3	2.7
Indane	NE	NE		0.39 U	0.39 U	0.39 U	0.39 U
2-Chlorotoluene	NE	NE		0.83 U	0.83 U	0.83 U	0.83 U
Cyclohexane	NE	NE		0.7	0.79	0.69 U	0.69 U
1,2-Dichlorobenzene	< 1.2	200		0.48 U	0.48 U	0.48 U	0.48 U
1,3-Dichlorobenzene	< 2.4	110		0.48 U	0.48 U	0.48 U	0.48 U
1,4-Dichlorobenzene	5.5	800		0.48 U	0.48 U	0.48 U	0.48 U
Dichlorodifluoromethane	16.5	200		4.6	4.3	5.2 J	4.5 J
1,1-Dichloroethane	< 0.7	500		0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	< 0.9	9.4		0.32 U	0.32 U	0.32 U	0.16 J
1,1-Dichloroethene	< 1.4	200		0.32 U	0.32 U	0.32 U	0.32 U
cis-1,2-Dichloroethene	< 1.9	35		0.32 U	0.32 U	0.32 U	0.32 U
trans-1,2-Dichloroethene	NE	70		0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloropropane	< 1.6	4.0		0.37 U	0.37 U	0.37 U	0.37 U
cis-1,3-Dichloropropene	< 2.3	20		0.36 U	0.36 U	0.36 U	0.36 U

Notes:
U - The analyte was analyzed for, but was not detected. Value shown is representative of the reporting limit for the analyzed constituent.
J - Estimated concentration. The result is below the reporting limit but above the method detection limit.
B - The associated method blank contains the target analyte at a reportable level.
D - Sample was diluted before analysis.
NC - Not Calculated
NE - Not Established

(a) From "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH October 2006). As recommended by NYSDOH, typical indoor air concentrations in non-residential settings are the 90th percentile values from the USEPA BASE data.
(b) From "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (USEPA November 2002). Office of Solid Waste and Emergency Response. An incremental individual lifetime cancer risk level of 10^{-4} is used for non-residential settings.

(µg/m3) - micrograms per cubic meter

Above NYSDOH typical indoor air concentrations

Above USEPA target indoor air concentrations

Above both NYSDOH and USEPA criteria

FIGURES

Approximate location of the Ontario Medical Associates Building. (Survey data not available)

N

SS/IA-4
SV-6
OA-4
SS/IA-5
OA-5
SONS OF ITALY LODGE
SV-8
MW-104
SV-7
MW-103
B-105
COAL BIN
WEST THIRD STREET
40 KCF GAS HOLDER
B-105A
SV-5
MW-105D
MW-105S
RETORT HOUSE
TAR TANKS
OA-3
SS-3
SV-2
B-107
AUTO REPAIR SHOP
SS-1
SV-4
SV-3
OA-1
B-106
MW-111D
MW-111S
MW-110D
MW-110S
100 KCF GAS HOLDER
MW-101
MW-106
METER ROOM
B-108
TAYLOR RENTAL
PURIFICATION ROOM
COAL ELEVATOR
ELECTRIC PLANT & AMMONIA STILL
WEST FOURTH STREET
B-102A
SV-1
MW-102
B-109
OA-2
SS/IA-2
OFFICE & STORAGE
ADVANTAGE CARPETS
B-110
MW-108
MW-107S
MW-107D
WEST UTICA STREET
MW-109
305
306
307
308
303
304

Legend

- Soil Boring
- Monitoring Well
- Manhole
- Power Pole
- Ground Surface Elevation Contour (ft, NGVD 29)
- Property Line
- Pavement Edge
- Vegetation
- Water Line
- Storm Sewer Line
- Sanitary Sewer Line
- Gas Line
- Soil Vapor Probe
- Sub-Slab Vapor/Indoor Air Sampling Location (approximate)
- Sub-Slab Vapor Sampling Location (approximate)
- Outdoor Air Sampling Location (approximate)
- Former MGP Structure Location. Locations are approximate, based on 1924 Sanborn Fire Insurance Map.

Source: Base map developed based on drawing prepared by Snyder Engineering & Land Surveying, LLP (January 11, 2005, Revised July 23, 2007). Refer to this drawing for site details.

40 20 0 40 Feet

FIGURE 1

SAMPLE LOCATIONS

OSWEGO (WEST UTICA ST.)
FORMER MGP SITE
OSWEGO, NEW YORK

DATE 02/25/2008

PROJECT NUMBER 129862.103

BROWN AND CALDWELL ASSOCIATES

p:/GIS/National_Grid/Oswego/Oswego_PhaseII_SVI_Sample_Locs.mxd

ATTACHMENT A

Indoor Air Inventories

ADVANTAGE CARPETS

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 JAMES MAROLDA Date/Time Prepared 3/13/08 15:00

Preparer's Affiliation BROWN AND CALDWELL Phone No. 518-472-1988

Purpose of Investigation SOIL VAPOR INTRUSION EVALUATION

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: KELLS First Name: THOMAS

Address: 195 WEST FOURTH ST., OSWEGO, NY 13126

County: OSWEGO

Home Phone: N/A Office Phone: 315-342-3565

Number of Occupants/persons at this location 2-3 Age of Occupants 25-50

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

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

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: N/A

If multiple units, how many? N/A

If the property is commercial, type?

Business Type(s) CARPET DISTRIBUTER

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

Other characteristics:

Number of floors 1 Building age APPROX. 60 YRS.

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

NOT APPLICABLE

Airflow near source

POSITIVE PRESSURE DOCUMENTED AT ENTRANCE TO BUILDING, LOCATED IN VICINITY OF WHERE SUB-SLAB VAPOR AND INDOOR AIR SAMPLING WILL BE CONDUCTED.

Outdoor air infiltration

POSITIVE PRESSURE DOCUMENTED - AIR FLOW DIRECTED TOWARD OUTDOORS FROM BUILDING INTERIOR.

Infiltration into air ducts

OUTWARD; HEAT BLOWING OUT OF DUCTS AT TIME OF INVENTORY.

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

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

Basement/Lowest level depth below grade: 0.5 (feet) APPROX 6-INCH SLAB ON GRADE

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

SHOW ROOM COVERED W/ CARPETING OR CERAMIC TILE

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) FORCED AIR	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: _____

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.

LOCATION OF COLD AIR RETURN LOCATED WITHIN ADJOINING BUILDING (TAYLOR RENTAL).

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	NOT APPLICABLE
1st Floor	SHOWROOM OCCUPIED BY 2-5 PERSONS THROUGHOUT WORKDAY (7:30 AM - 5:00 PM)
2nd Floor	NOT APPLICABLE
3rd Floor	NOT APPLICABLE
4th Floor	NOT APPLICABLE

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 IN ADJOINING BUILDING (TAYLOR RENTAL)

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? IN ADJOINING BUILDING (TAYLOR RENTAL)

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

h. Have cleaning products been used recently? (Y) / N When & Type? HOUSEHOLD PRODUCTS (e.g., WINDEX) 3/12/08

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? THROUGHOUT SHOWROOM AND CARPENTRY

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

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

n. Is there a bathroom exhaust fan? (Y) N If yes, where vented? SOUTH END OF BUILDING

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? _____

Are there odors in the building? (Y) N
If yes, please describe: NEW CARPET ODORS FROM ADHESIVES

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? _____

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

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: NOT APPLICABLE

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

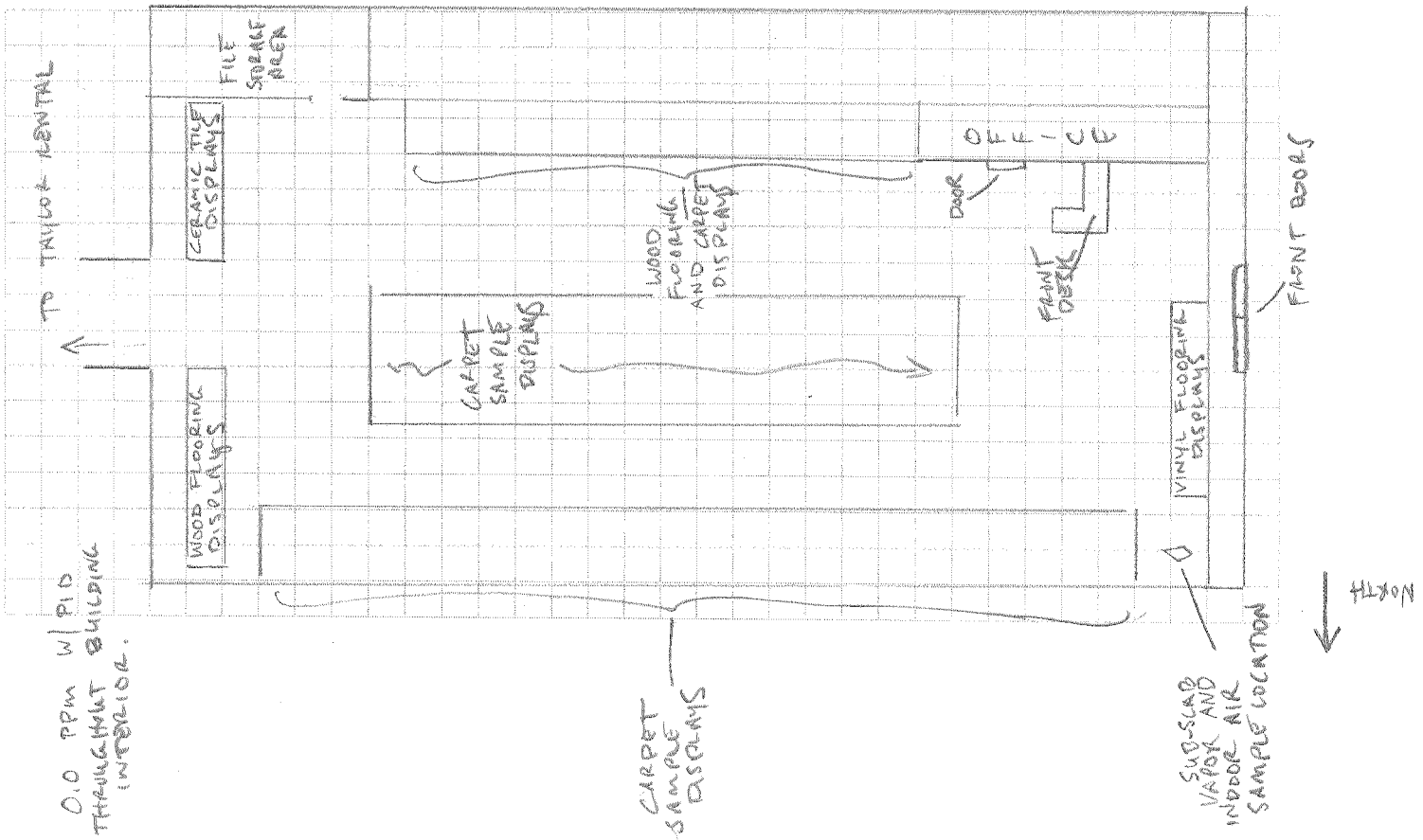
11. FLOOR PLANS

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:

NOT APPLICABLE - BUILDING DOES NOT HAVE BASEMENT

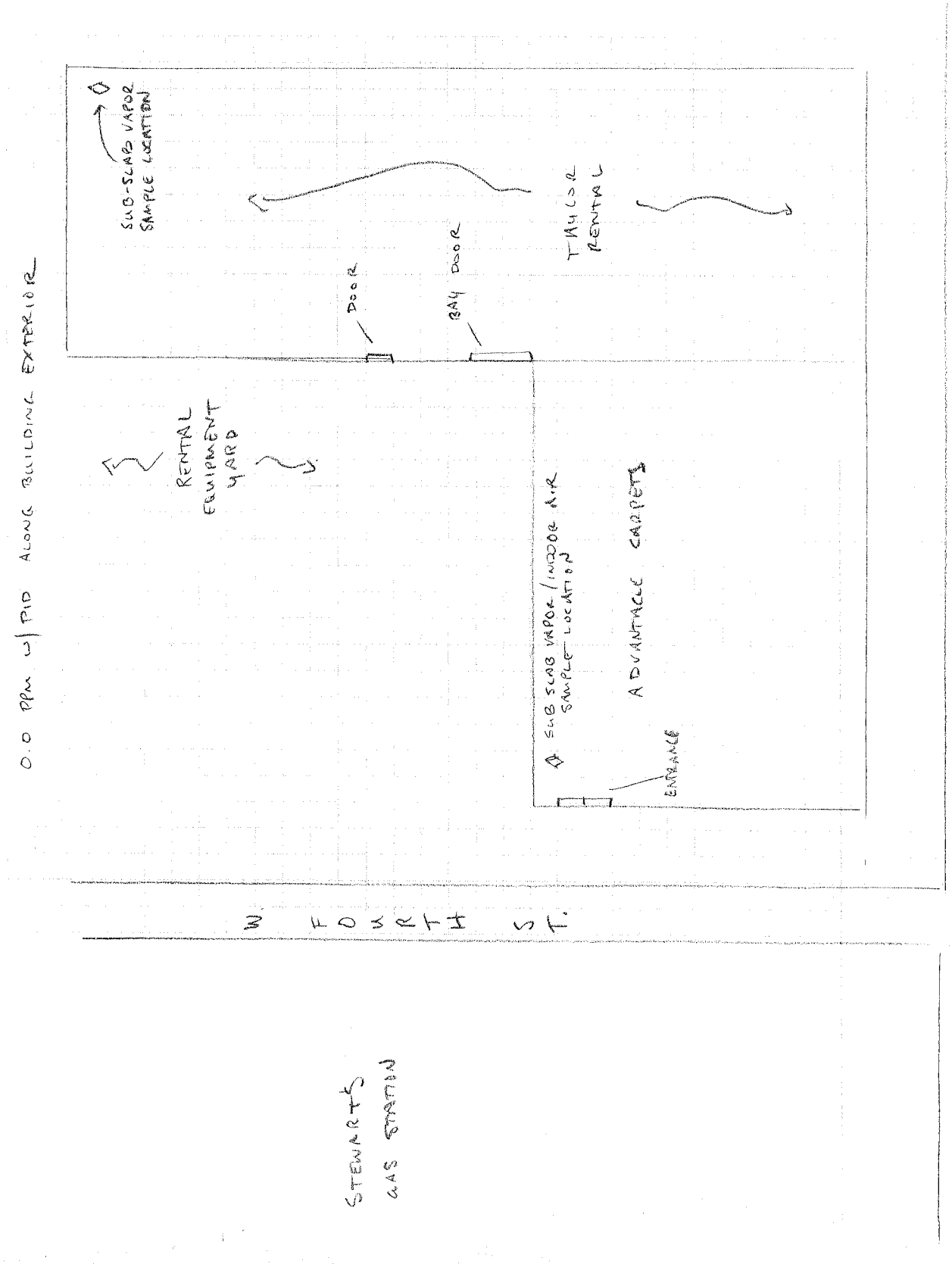
First Floor:



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: RAE Systems MiniRAE 2000

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
SHOWROOM	ECO 100 ULTRA BOND	1 qt.	UO	NONE	0.0	Y
FRNT DESK	FLOOR CARE ESSENTIALS HARD SURFACE CLEANER	32 oz.	U	NOT SPECIFIED	↓	↓
↓	HARDWOOD & LAMINATE FLOOR CLEANER	22 oz	UO	NOT SPECIFIED	↓	↓
↓	MARBLE CLEANER	16 oz	UO	LINEAR PRIMARY ALCOHOL, ETHOXYLATE, LEMON PERFUME, YELLOW DYE	↓	↓
↓	COMBAN'S STAIN REMOVER CARPET/UPHOLSTERY/LAUNDRY FABRIC	32 oz	UO	NOT SPECIFIED	↓	↓
↓	GET OUT STAIN REMOVER	13 oz	UO	NOT SPECIFIED	↓	↓

* 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.

PHOTOGRAPHIC LOG FOR INDOOR AIR QUALITY BUILDING INVENTORY

Photograph #1 –General view of Advantage Carpets showroom area. Top of photo is west.

Photograph #2 – General view of Advantage Carpets showroom area. Top of photo is east.

Photograph #3 – View of sampling area for sub-slab vapor and indoor air (northwest corner of showroom).

Photograph #4 – View of floor/carpet cleaning products.

Photograph #5 – General view of showroom and entrance to Taylor Rental portion of building in background. Top of photo is east.

Photograph #6 –View of exterior of Advantage Carpets portion of building. Top of photo is east.

ONTARIO LAKESIDE MEDICAL ASSOCIATES

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 JAMES MAROLDA Date/Time Prepared 3/14/08 09:00

Preparer's Affiliation BROWN AND CALDWELL Phone No. 518-472-1988

Purpose of Investigation SOIL VAPOR INTRUSION EVALUATION

1. OCCUPANT:

Interviewed: Y / (N)

Last Name: DATOR First Name: CARLOS

Address: 173 WEST 4TH ST. OSWEGO, NY 13126

County: OSWEGO

Home Phone: 315-342-2880 Office Phone: 315-343-2151

Number of Occupants/persons at this location VARIES Age of Occupants VARIES

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

Interviewed: Y / (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: MEDICAL OFFICE

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? N/A

If the property is commercial, type?

Business Type(s) MEDICAL OFFICE

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

Other characteristics:

Number of floors 2 Building age APPROX 150+ yrs

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

UPWARDS TOWARDS FROM BASEMENT TO FIRST FLOOR

Airflow near source

NEAR SAMPLING LOCATION AIRFLOW IS DIRECTED UPWARDS TOWARDS 1ST FLOOR

Outdoor air infiltration

DID NOT DETERMINE DURING INVENTORY

Infiltration into air ducts

DID NOT DETERMINE DURING INVENTORY

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

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

Basement/Lowest level depth below grade: 8 (feet)

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

FOUNDATION WALLS AND BASEMENT FLOOR IN GOOD CONDITION. FLOOR SEALED W/ PAINT. MINIMAL CRACKING OBSERVED IN CONCRETE FLOOR. NO POTENTIAL ENTRY POINTS IDENTIFIED IN FOUNDATION WALLS ASIDE FROM BRICK CUT-OUT LOCATED ALONG SOUTHER WALL.

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: _____

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.

AIR DISTRIBUTION DUCTS IN GOOD CONDITION. APPEAR TO BE FAIRLY NEW.

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	STORAGE
1st Floor	MEDICAL OFFICE, EXAM ROOMS
2nd Floor	MEDICAL EXCERCISE CENTER
3rd Floor	
4th Floor	

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 _____

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? ALL PURPOSE CLEANERS USED IN RECEPTION AREA

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? 1ST FLOOR BATHROOM

k. Is there new carpet, drapes or other textiles? (Y) / N Where & When? 1ST FLOOR WAITING ROOM

l. Have air fresheners been used recently? (Y) / N When & Type? BATHROOM AIR FRESHENERS USED IN 1ST FLOOR.

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

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? OUT TOP OF BUILDING

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? _____

Are there odors in the building? Y / (N)
If yes, please describe: _____

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? _____

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) — No
(Yes, use dry-cleaning infrequently (monthly or less)) — Unknown
Yes, work at a dry-cleaning service — MEDICAL UNIFORMS SENT OUT PERIODICALLY

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

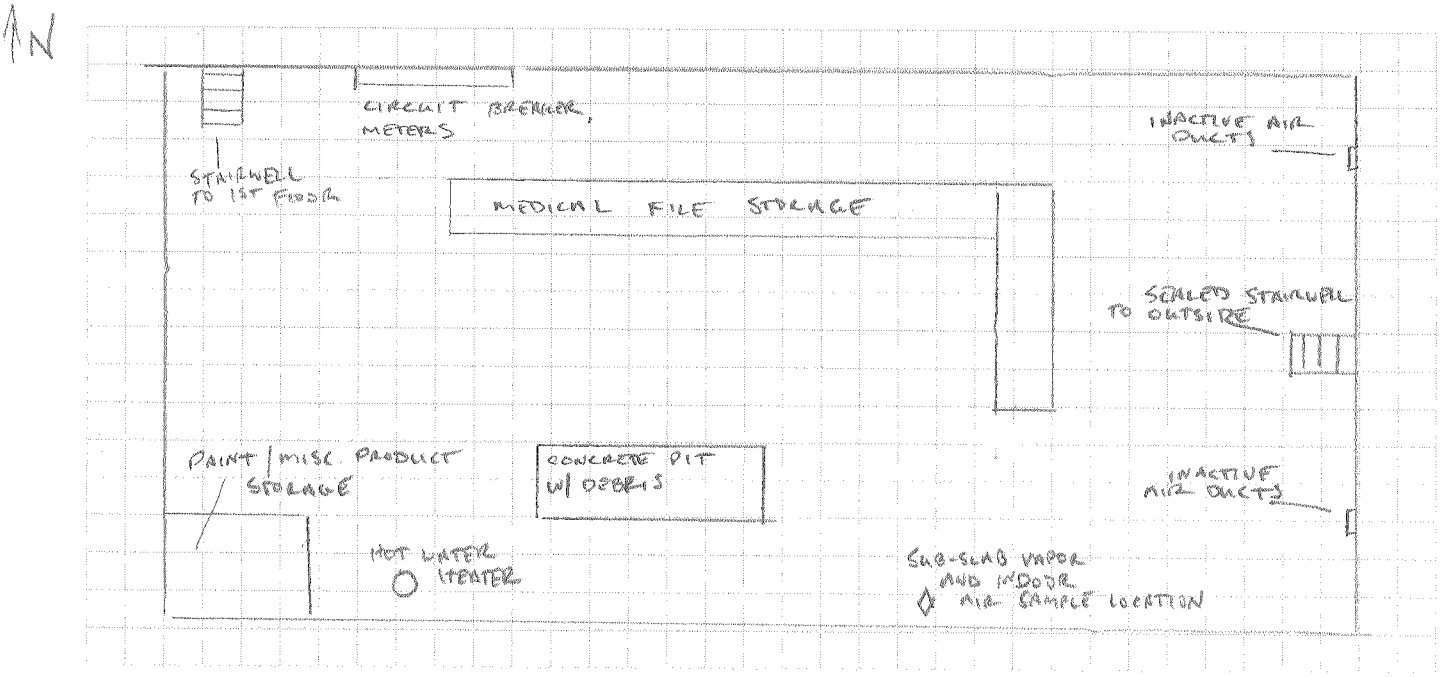
c. Responsibility for costs associated with reimbursement explained? Y / N

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

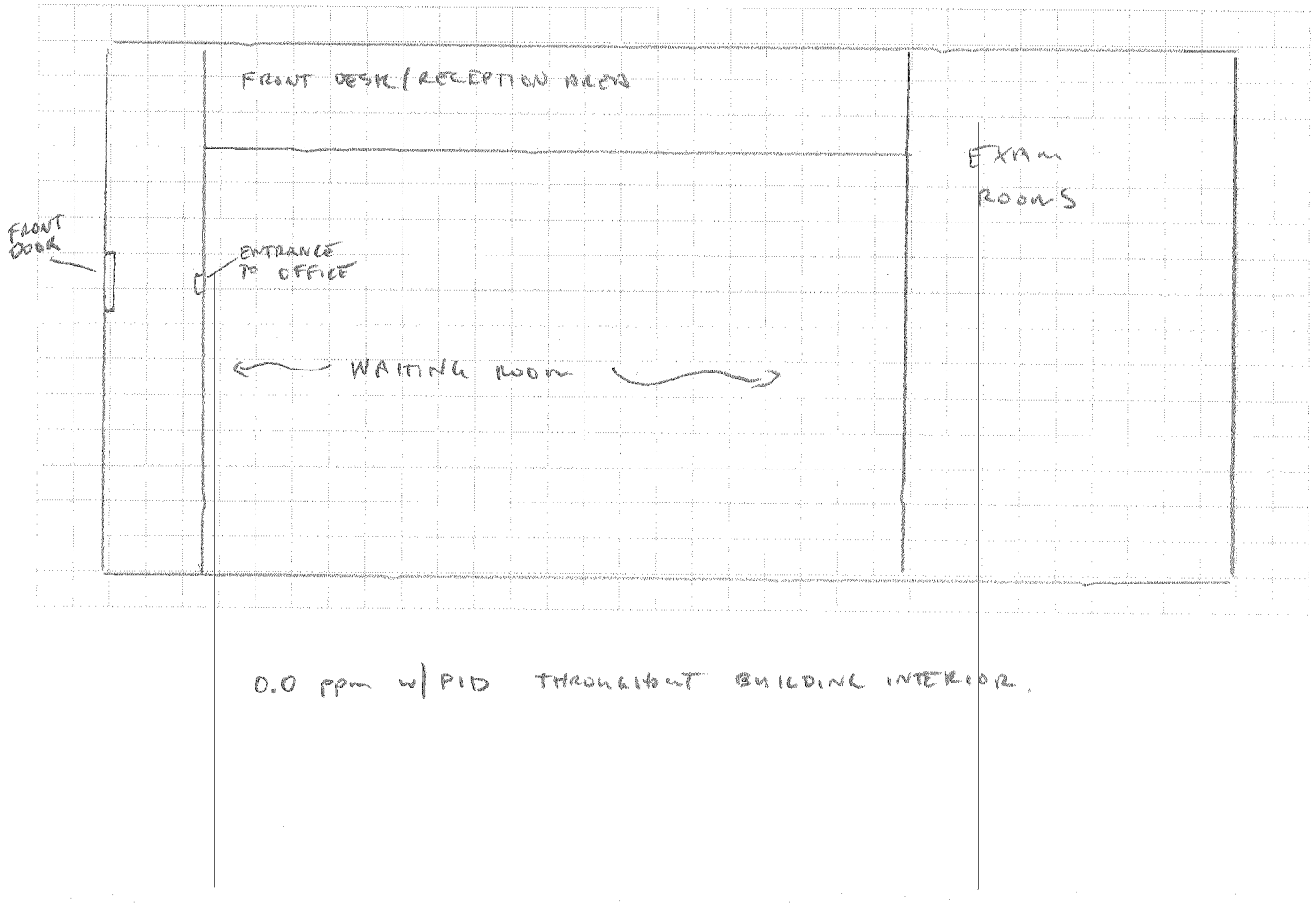
11. FLOOR PLANS

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:



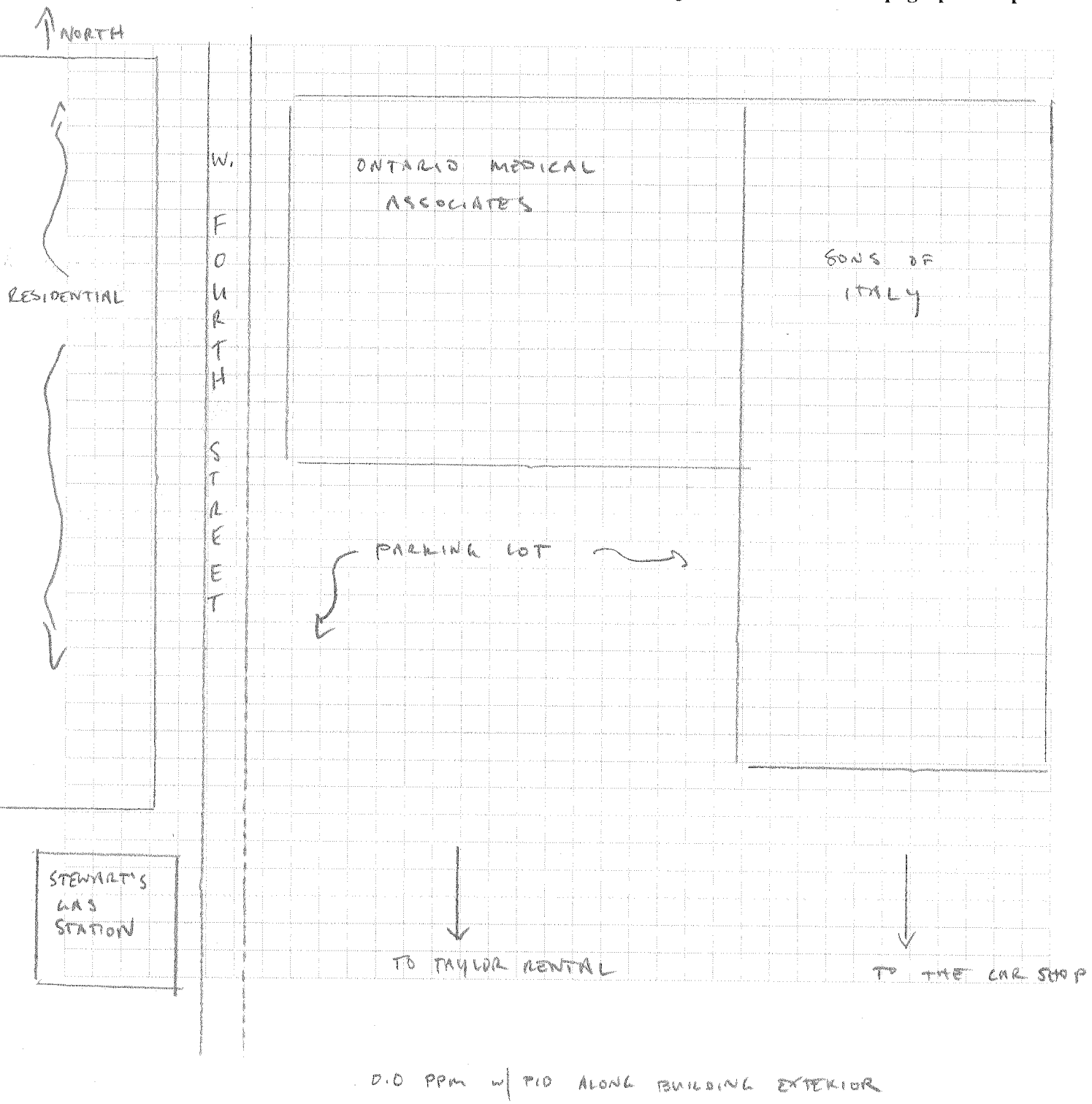
First Floor:



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: RAE SYSTEMS MINI RAE 2000

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
BASEMENT	STAIN & POLYURETHANE	32 oz	U	ALIPHATIC HYDROCARBONS	0.0	Y
	SATIN FINISH	32 oz	U	CRYSTALLINE SILICA		
	GRUNT ADMIX	16 oz	U	NOT SPECIFIED		
	FLEXIBLE FLOOR PATCH AND LEVELER	32 oz	U	CRYSTALLINE SILICA, CALCIUM CARBONATE, ETHYLENE GLYCOL, CLAY, FORMALDEHYDE		
	ALL PURPOSE JOINT COMPOUND	12 lb	U	LIMESTONE, VINYL ACETATE POLYMER, ETHYLENE VINYL ACETATE POLYMER, ATTAPULGITE		
	ACRYLIC LATEX ENAMEL	5 GAL	U	ETHYLENE GLYCOL		
	EGG SHELL FINISH PAINT	5 GAL	U	NOT SPECIFIED		
	SEMI GLOSS ENAMEL	128 oz	U	CRYSTALLINE SILICA ACRYLIC LATEX		
	FAST DRYING POLYURETHANE SPRAY	11.5 oz	U	ALIPHATIC HYDROCARBONS, KETONES, HYDROCARBON PROPELLANTS		
	RUST STOP	128 oz	U	PETROLEUM DISTILLATES, CALCIUM CARBONATE, ALKYD RESIN, MAGNESIUM SILICATE, BARIUM SULFATE		
	SOLVENT FREE COVE BASE ADHESIVE	32 oz	U			
	SEMI GLOSS	32 oz	U	ACRYLIC COPOLYMER, TITANIUM DIOXIDE, ETHYLENE GLYCOL, ESTER ALCOHOL		

* 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.

PHOTOGRAPHIC LOG FOR INDOOR AIR QUALITY BUILDING INVENTORY

Photograph #1 –General view of sampling area for sub-slab vapor and indoor air.

Photograph #2 – General view of basement. Top of photo is west.

Photograph #3 – View of old stairwell to outside located at eastern end of basement.

Photograph #4 – View of paint/miscellaneous product storage area located in southwest corner of basement.

Photograph #5 – View of foundation wall condition.

SONS OF ITALY LODGE

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 JAMES MAROLDA Date/Time Prepared 3/13/08 11:00

Preparer's Affiliation BROWN AND CALDWELL Phone No. 518-472-1988

Purpose of Investigation SOIL VAPOR INTRUSION EVALUATION

1. OCCUPANT:

Interviewed: Y (N)

Last Name: LACERDO First Name: CATHY

Address: 178 WEST THIRD ST, OSWEGO, NY 13126

County: OSWEGO

Home Phone: N/A Office Phone: 315-343-6450

Number of Occupants/persons at this location 2 Age of Occupants 50's

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

Interviewed: Y / (N)

Last Name: ALTIMONDA First Name: ROBERTA

Address: AS ABOVE

County: AS ABOVE

Home Phone: N/A Office Phone: AS ABOVE

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: N/A

If multiple units, how many? N/A

If the property is commercial, type?

Business Type(s) FRATERNAL ORGANIZATION

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

Other characteristics:

Number of floors 1 Building age APPROX 70 YRS

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

NOT APPLICABLE

Airflow near source

POSITIVE PRESSURE AT EXIT DOOR NEAR SOIL VAPOR PROBE (SV-6).

Outdoor air infiltration

POSITIVE PRESSURE OBSERVED USING TRACER SMOKE.

Infiltration into air ducts

OUTWARD FROM HEATING DUCTS

INWARD FOR SMOKE ENTERS (NOT USED ANYMORE)

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

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	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:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 0.5 (feet) APPROX. 6-INCH SLAB ON GRADE

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

SMALL CRACK OBSERVED ON CONCRETE FLOOR IN SOLACE ROOM.

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: _____

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.

HEATING VENTS OBSERVED IN HALL AREA, DUCT WORK NOT VISIBLE

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	NOT APPLICABLE
1st Floor	OCCASIONALLY
2nd Floor	NOT APPLICABLE
3rd Floor	NOT APPLICABLE
4th Floor	NOT APPLICABLE

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_____

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? OCCASIONALLY IN STORAGE AREA

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? (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? ONCE A MONTH

Are there odors in the building? Y / N
If yes, please describe: _____

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? _____

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

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: NOT APPLICABLE

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

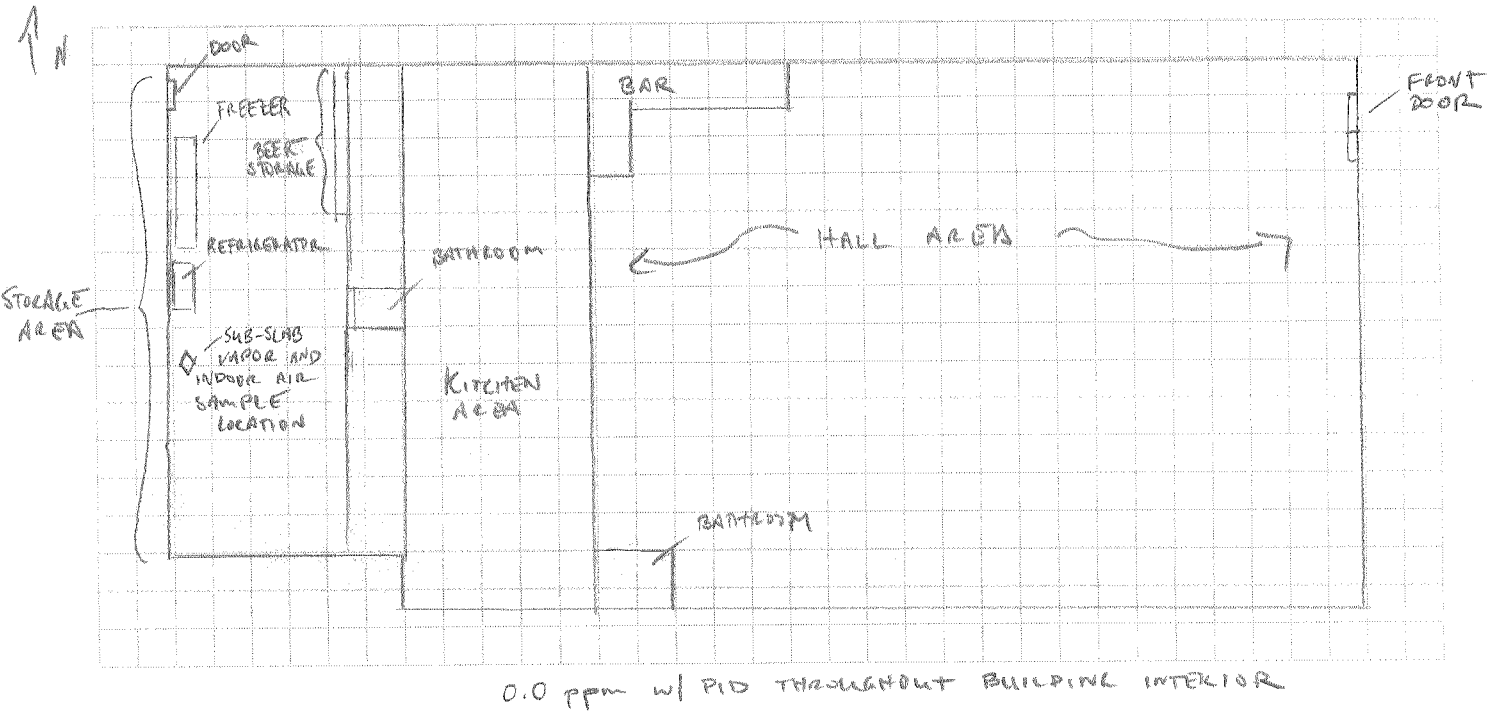
11. FLOOR PLANS

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:

NOT APPLICABLE - BUILDING DOES NOT HAVE BASEMENT

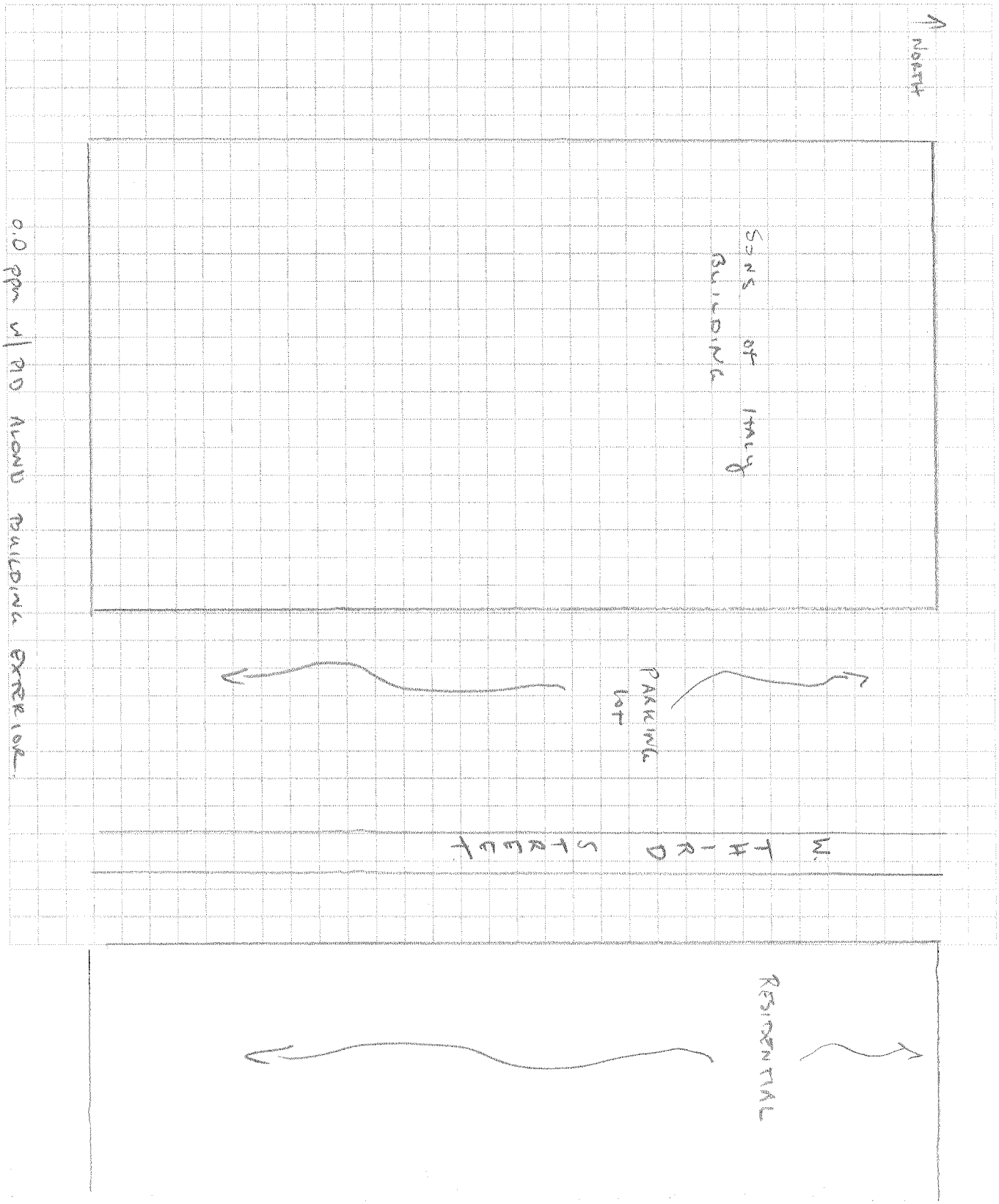
First Floor:



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: RAE Systems MiniRAE 2000

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
BATHROOM	CLOROX BLEACH	1 GAL	U	BLEACH	0.0	Y
BATHROOM	COMET	21 OZ	U	CHLORINOL, DISINFECTANT CLEANSER	↓	↓
STORAGE AREA	MOP ON GLASS RESTORER	1 GAL	U	NOT SPECIFIED	↓	↓
STORAGE AREA	RUG DOCTOR ANTI FOAM CARPET CLEANER	16 OZ	U	SILICON EMULSION	↓	↓
STORAGE AREA	SEMI GLOSS LATEX ENAMEL	5 GAL	U	TITANIUM DIOXIDE, BUTYL ACRELATE, VINYL ACETATE, GLYCOL, PROPYLENE ESTER ALCOHOL	↓	↓
KITCHEN	MACHINE DISHWASHING COMPOUND	5 GAL	U	SODIUM HYDROXIDE	↓	↓

* 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.

PHOTOGRAPHIC LOG FOR INDOOR AIR QUALITY BUILDING INVENTORY

Photograph #1 –General view of storage area. Top of photo is south.

Photograph #2 – View of sampling area for sub-slab vapor and indoor air.

Photograph #3 – View of miscellaneous products in storage area.

Photograph #4 – General view of hall area. Top of photo is east.

Photograph #5 – General view of kitchen.

Photograph #6 – View of exterior of storage area, where sampling of sub-slab vapor and indoor air was performed.

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 JAMES MAROLDA Date/Time Prepared 3/13/08 13:00

Preparer's Affiliation BROWN AND CALDWELL Phone No. 518-472-1988

Purpose of Investigation SOIL VAPOR INTRUSION EVALUATION

1. OCCUPANT:

Interviewed: (Y) N

Last Name: KELLS First Name: THOMAS

Address: 195 WEST FOURTH STREET, OSWEGO, NY 13126

County: OSWEGO

Home Phone: N/A Office Phone: 315-343-5582

Number of Occupants/persons at this location 2-9 Age of Occupants 25-50

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

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

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) EQUIPMENT / TOOL RENTAL

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

Other characteristics:

Number of floors 1 + 2ND STORY STORAGE RACKS

Building age APPROX. 60 YRS.

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

NOT APPLICABLE

Airflow near source

POSITIVE PRESSURE DOCUMENTED IN WAREHOUSE AREA WHERE SAMPLING OF SUB-SLAB VAPOR WILL BE CONDUCTED.

Outdoor air infiltration

POSITIVE PRESSURE: AIR FLOW DIRECTED TOWARDS OUTSIDE FROM INDOORS

Infiltration into air ducts

OUTWARD: HEAT BLOWING OUT OF DUCTS AT TIME OF INVENTORY

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

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

Basement/Lowest level depth below grade: 0.5 (feet) APPROX. 6-INCH SLAB ON GRADE.

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

CONCRETE FLOOR IN WAREHOUSE IN GOOD CONDITION. MINIMAL CRACKING OBSERVED NEAR SOUTHERN PORTION OF WAREHOUSE. NO CRACKS OBSERVED IN VICINITY OF SAMPLING 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) FORCED AIR	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: _____

Boiler/furnace located in: Basement Outdoors Main Floor Other N/A

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.

SEE FLOOR PLAN (SECTION II) FOR LOCATION OF COLD AIR RETURN.

DUCTWORK APPEARS TO BE IN GOOD CONDITION WHERE VISIBLE

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	NOT APPLICABLE
1st Floor	WORKSHOP OCCUPIED BY 2-9 PERSONS THROUGHOUT WORK DAY (7:30 AM - 5:00 PM).
2nd Floor	NOT APPLICABLE
3rd Floor	NOT APPLICABLE
4th Floor	NOT APPLICABLE

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 MISC. GASOLINE POWERED EQUIPMENT (SEE PHOTO LOG)

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? NORTH END OF BUILDING. TOOL REPAIR AREA.

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

h. Have cleaning products been used recently? (Y) N When & Type? 3/12/08, WINDEX

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? Y (N) If yes, where vented? _____

n. Is there a bathroom exhaust fan? (Y) N If yes, where vented? SOUTH END OF BUILDING

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? _____

Are there odors in the building? (Y) N
If yes, please describe: FUEL AND SOLVENT ODORS OBSERVED THROUGHOUT WAREHOUSE AND SHOP AREA.

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? SHOP SOLV, etc. (SEE PRODUCT INVENTORY)

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

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: NOT APPLICABLE

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

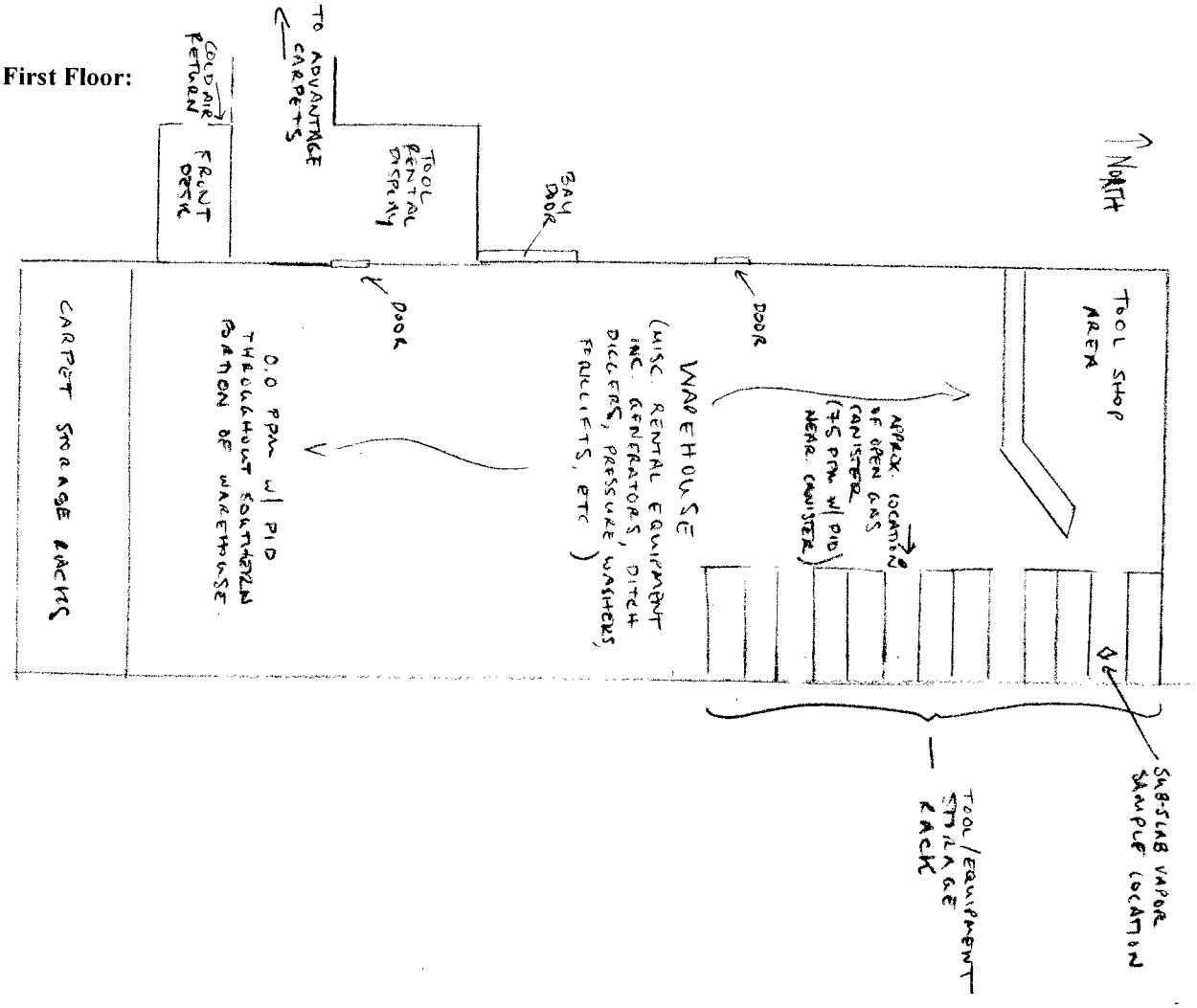
11. FLOOR PLANS

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:

NOT APPLICABLE - BUILDING DOES NOT HAVE BASEMENT

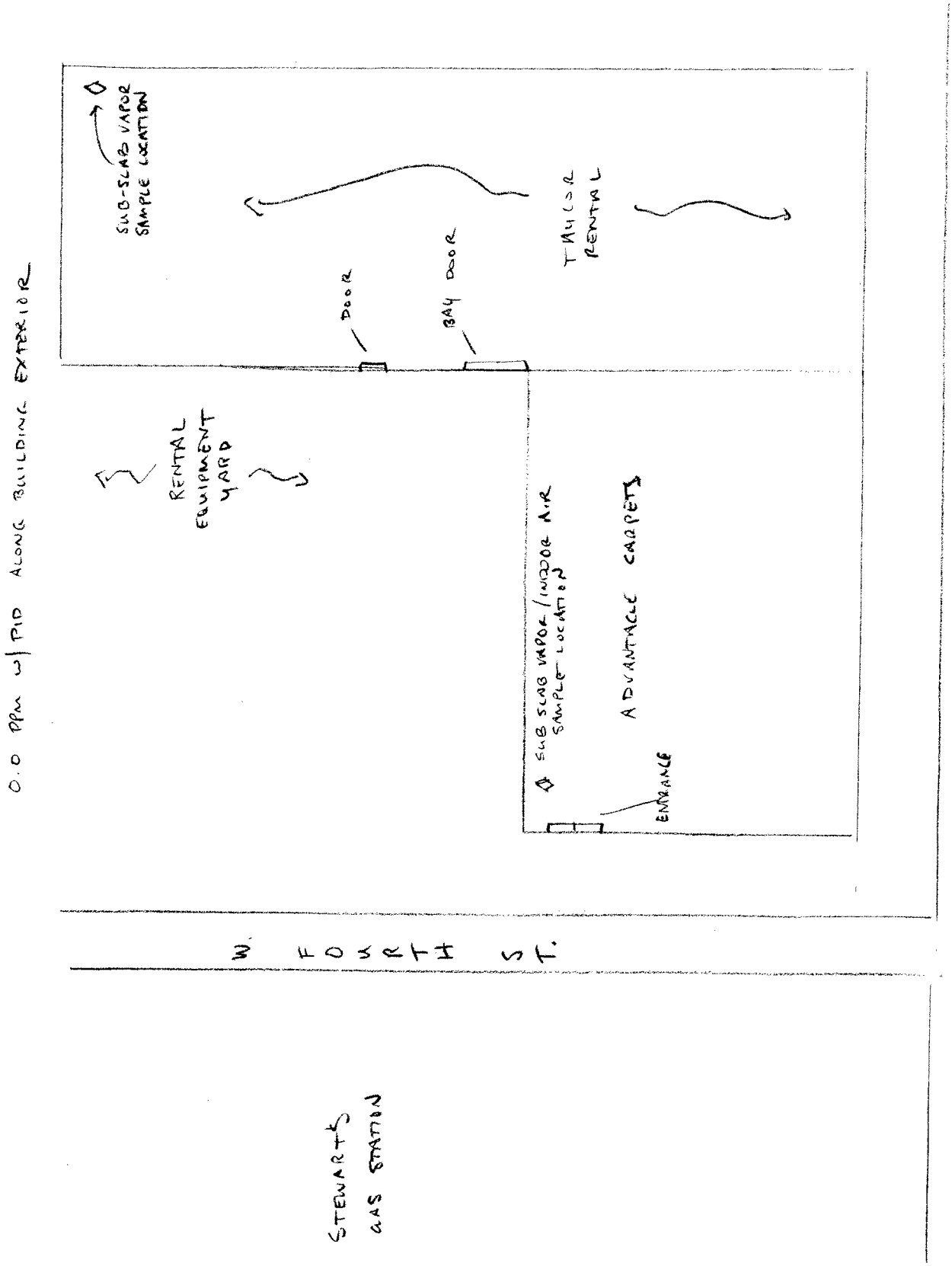
First Floor:



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: RAE SYSTEMS MINIRAE 2000

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
SHOP AREA	PENETRATING OIL	15 3/4 OZ	U	KEROSENE, NAPHTHENIC OIL, N-BUTANE, PROPANE, ETHYL ACETATE, ISOBUTANE	0.0 PPM	Y
	STARTING FLUID	11 OZ		DIETHYL ETHER		
	INTERIOR/EXTERIOR ENAMEL	13 OZ		KETONES, ESTERS, DIOCTYL PHTHALATE, ALIPHATIC/AROMATIC/HYDROGENATED HYDROCARBONS		
	SHOP SOLV	16.5 OZ		HEPTANE, ETHANOL, METHANOL, CARBON DIOXIDE		
	PNEUMATIC TOOL LUBRICANT	1 qt.		NOT SPECIFIED		
	GLASS CLEANER	18 1/4 OZ.		ISOPROPANOL, ISOBUTANE, 2-BUTOXYETHANOL		
	RUST TOUGH ENAMEL	12 OZ		KETONES, TOLUENE, XYLENE		
	ACRYLIC ENAMEL	12 OZ		NOT SPECIFIED		
	OIL SUPPLEMENT	8 OZ.		NOT SPECIFIED		
	WD-40	55 OZ		PETROLEUM DISTILLATES		
	ANTISEIZE LUBRICANT	8 OZ.		PETROLEUM DISTILLATES		
	POLYURETHANE	11 OZ.		XYLENE, TOLUENE, ACETONE		
	CHROME FINISH	11 OZ		KETONES, METALLIC PIGMENT, TOLUENE, XYLENE		
	SANDABLE PRIMER	12 OZ		NOT SPECIFIED		
	CARBURATOR AND CHOKE CLEANER	18.5 OZ		XYLENE, METHYLENE CHLORIDE, PROPANE, ISOBUTANE, N-BUTANE		
	SPRAY TRIM ADHESIVE	17 OZ		N-HEXANE, OTHER HEXANE ISOMERS, CYCLOHEXANE, ISOBUTANE, PROPANE		
	SYNTHETIC LUBRICANT	55 GAL.		NOT SPECIFIED		
	DOUBLE DRY	12 OZ		ISOPROPYL		
	WASTE OIL	55 GAL		NOT SPECIFIED		
	FORM OIL	55 GAL		NOT SPECIFIED		
	ALL PURPOSE ENAMEL	11 OZ		ACETONE, XYLENE		

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

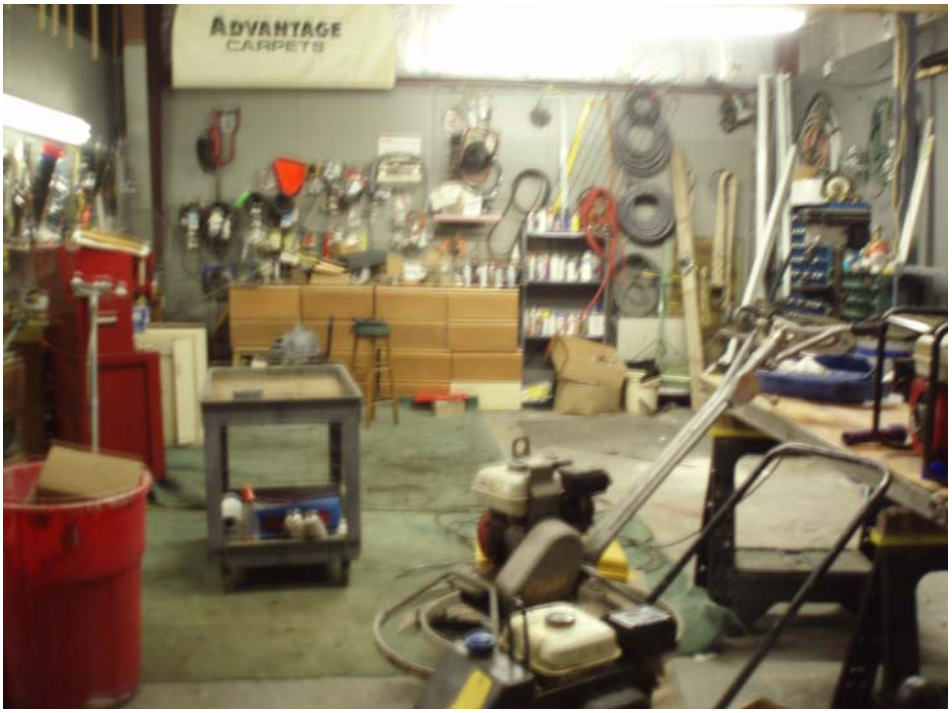
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

PHOTOGRAPHIC LOG FOR INDOOR AIR QUALITY BUILDING INVENTORY

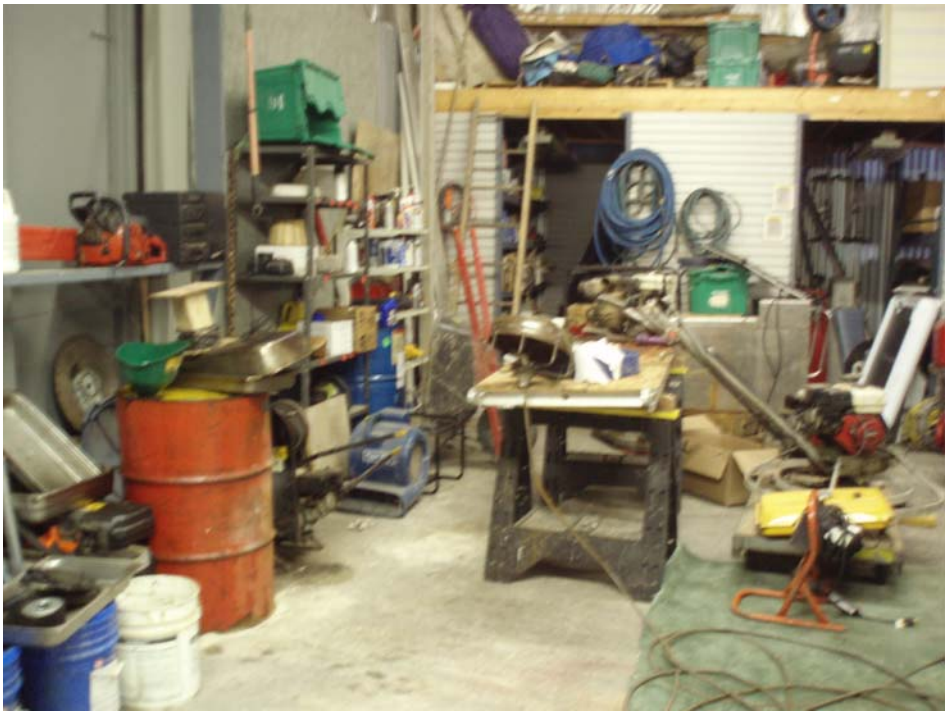
Photograph #1 –General view of Taylor Rental warehouse area. Top of photo is north.

Photograph #2 – View of various types of gasoline-powered equipment stored in warehouse for rental.

Photograph #3 – View of equipment (salamander heater) used as a heat source, which is fueled by kerosene. Top of photo is north.



Photograph #4 – General view of tool repair/cleaning area, located in northern portion of warehouse. Top of photo is west.



Photograph #5 – Additional view of tool repair/cleaning area.

Photograph #6 – Close-up view of sampling area.

Photograph #7 – View of open container of fuel. Reading of area surrounding container was 73 ppm using photoionization detector (PID).

Photograph #8 –View of various solvents/cleaners used in shop area.

Photograph #9 – View of additional solvent/cleaner storage located in shop area.

Photograph #10 – View of waste oil drum and synthetic lubricant drum (background), located in shop area.

Photograph #11 – View of additional storage rack for solvent/cleaners, located in shop area.

Photograph #12 – View of form oil drum, located in shop area.

Photograph #13 – View of front desk/tool rental area.

Photograph #14 – View of diesel fuel tank in warehouse area.

Photograph #15 – Sub-slab vapor sampling performed at Taylor Rental on March 18, 2008.

ATTACHMENT B

Field Sampling Forms

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Sub-slab Vapor (Canister) Sample Collection Field Form

Project # 129862.103
Project Name Oswego, W. Utica St. Phase II SVI
Consultant Brown and Caldwell
Collector CJM / BMR

Sample ID SS-1

Start Date/Time 3/18/08 13:49
End Date/Time 3/18/08 14:23
Canister ID 03843
Flow controller ID 46
Associated indoor air sample ID NA

Vacuum gauge "zero" ("Hg) -29.6
Start Pressure ("Hg) -30.0
End Pressure ("Hg) -5.0
End pressure > "zero"? yes
Sampling duration (intended) 34 minutes
Associated ambient air sample ID OA-1

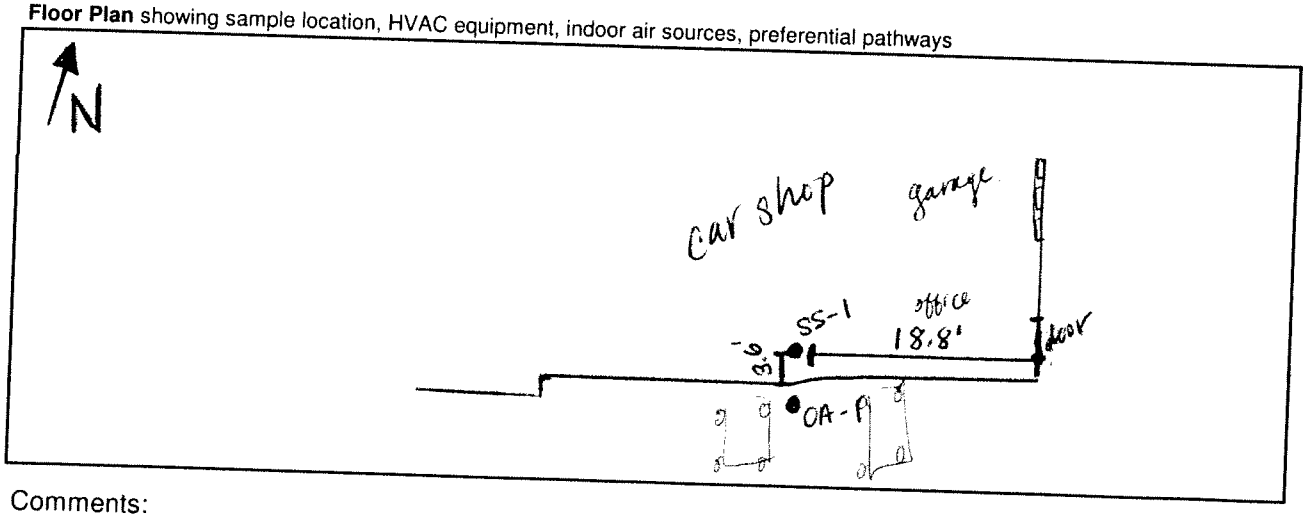
Tubing type used food-grade teflon
Length of tubing 3.9' ~~cm~~
Tubing volume .041 L ~~cc~~
Volume purged .063 ~~cc~~ @ .2 L/min
1 to 3 volumes purged @ ~~≤200cc/min?~~ .2L/min yes

Weather Conditions at Start of Sampling:
Air temperature (°F) 42.1°
Rainfall NA
Wind direction SE
Barometric pressure 30.18 in
Wind speed (mph) 6.9

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Indoor air temp (°F) 54.3°
Indoor relative humidity (%) NA
Building Survey and Chemical Inventory Form Completed? yes
Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

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Sub-slab Vapor (Canister) Sample Collection Field Form

Project # 129862.103
Project Name Oswego, W. Utica St. Phase II SVI
Consultant Brown and Caldwell
Collector CJM | BMR

Sample ID SS-2

Start Date/Time	3/18/08 10:20	Vacuum gauge "zero" ("Hg)	-29.6
End Date/Time	3/18/08 10:50	Start Pressure ("Hg)	-30.0
Canister ID	21639	End Pressure ("Hg)	-4.0
Flow controller ID	01	End pressure > "zero"?	yes
Associated indoor air sample ID	IA-2	Sampling duration (intended)	30 minutes
		Associated ambient air sample ID	OA-2

Tubing type used food grade teflon Length of tubing 2.8' ~~cm~~ Tubing volume .015 L
Volume purged .045 L @ .2 L/min 1 to 3 volumes purged @ < ~~200cc/min~~ .2L/min? yes

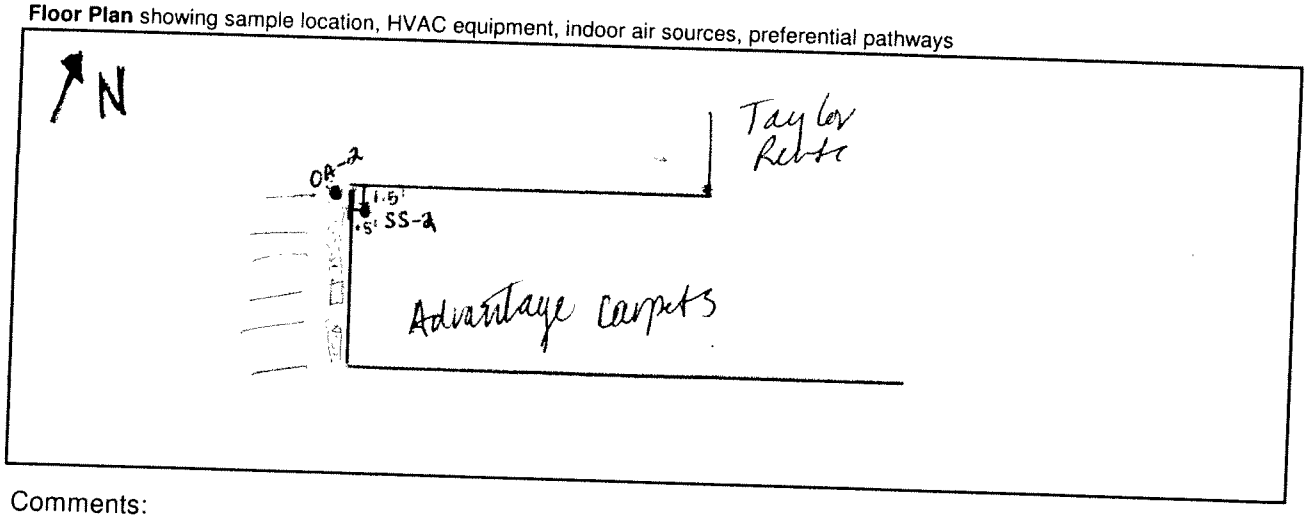
Weather Conditions at Start of Sampling:

Air temperature (°F) 35.1 Rainfall NA Wind direction ESE
Barometric pressure 30.31 in Wind speed (mph) 13.8

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Indoor air temp (°F) 65.7° Indoor relative humidity (%) NA
Building Survey and Chemical Inventory Form Completed? yes Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

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Sub-slab Vapor (Canister) Sample Collection Field Form

Project # 129862.103
Project Name Oswego, W. Utica St. Phase II SVI
Consultant Brown and Caldwell
Collector CJM | BMR

Sample ID SS-3

Start Date/Time	3/18/08 10:38	Vacuum gauge "zero" ("Hg)	-29.6
End Date/Time	3/18/08 11:08	Start Pressure ("Hg)	-29.5
Canister ID	12454	End Pressure ("Hg)	-4.5
Flow controller ID	81	End pressure > "zero"?	yes
Associated indoor air sample ID	NA	Sampling duration (intended)	30 minutes
		Associated ambient air sample ID	OA-3

Tubing type used food-grade teflon Length of tubing 2.9' ~~cm~~ Tubing volume .020 L ~~cc~~
Volume purged .060 L ~~cc~~ @ .2 L / min 1 to 3 volumes purged @ ~~<200cc/min~~? yes .2L/min

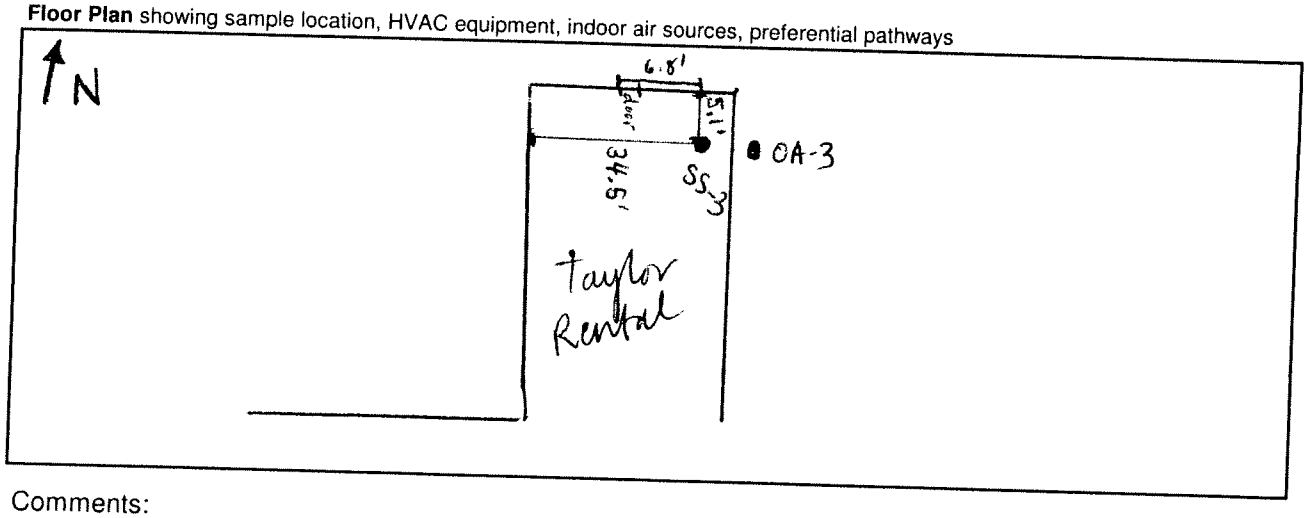
Weather Conditions at Start of Sampling:

Air temperature (°F) 31.5°F Rainfall NA Wind direction ESE
Barometric pressure 30.31 in Wind speed (mph) 13.8

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Indoor air temp (°F) 63.7°F Indoor relative humidity (%) NA
Building Survey and Chemical Inventory Form Completed? yes Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

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Sub-slab Vapor (Canister) Sample Collection Field Form

Project # 129862.103
Project Name Oswego, W. Utica Phase II SVI
Consultant Brown and Caldwell
Collector CJM/BMR

Sample ID SS-4

Start Date/Time	3/18/08 15:33	Vacuum gauge "zero" ("Hg)	-29.6
End Date/Time	3/18/08 16:03	Start Pressure ("Hg)	-29.5
Canister ID	6134	End Pressure ("Hg)	-4.5
Flow controller ID	14	End pressure > "zero"?	yes
Associated indoor air sample ID	IA-4 DUP	Sampling duration (intended)	30 minutes
		Associated ambient air sample ID	OA-4

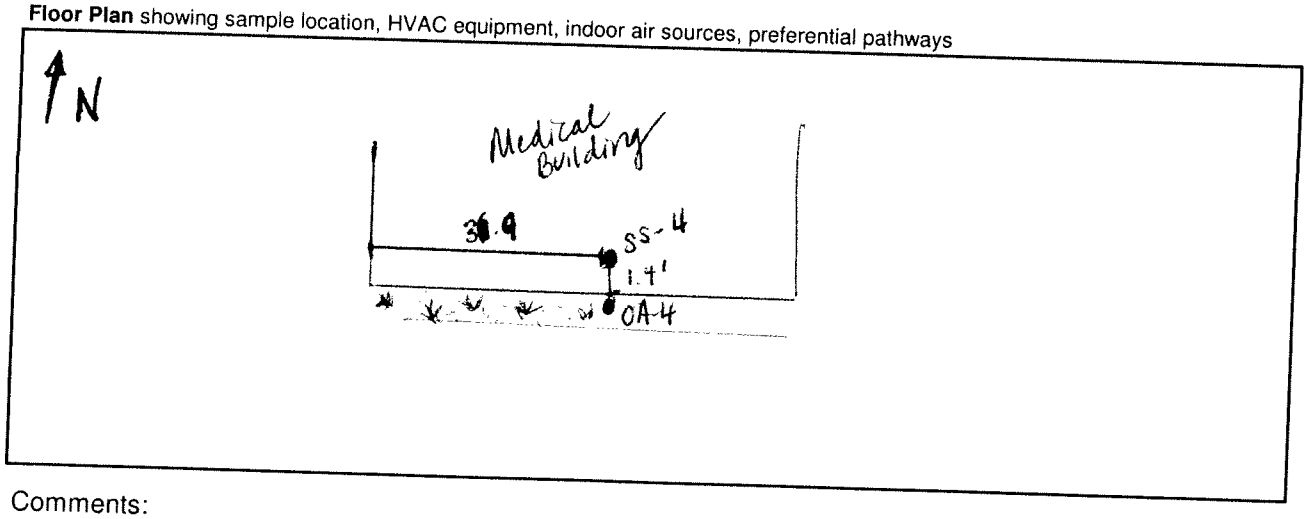
Tubing type used food-grade teflon Length of tubing 3.0' ~~cm~~ Tubing volume .016 L ~~cc~~
Volume purged .048 L ~~cc~~ @ .2 L/min 1 to 3 volumes purged @ ~~<200cc/min?~~ .2L/min yes

Weather Conditions at Start of Sampling:
Air temperature (°F) 39.2° Rainfall 0.00 in Wind direction South
Barometric pressure 30.13 in Wind speed (mph) 9.2

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Indoor air temp (°F) 53.96 Indoor relative humidity (%) NA
Building Survey and Chemical Inventory Form Completed? yes Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

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Sub-slab Vapor (Canister) Sample Collection Field Form

Project # 129862.103
Project Name Oswego, W. Utica St. Phase II SVI
Consultant Brown and Caldwell
Collector CJM | BMR

Sample ID SS-5

Start Date/Time	3/18/08 11:49	Vacuum gauge "zero" ("Hg)	-29.6
End Date/Time	3/18/08 12:19	Start Pressure ("Hg)	-29.5
Canister ID	02639	End Pressure ("Hg)	-4.5
Flow controller ID	38	End pressure > "zero"?	yes
Associated indoor air sample ID	IA-5	Sampling duration (intended)	30 minutes
		Associated ambient air sample ID	OA-5

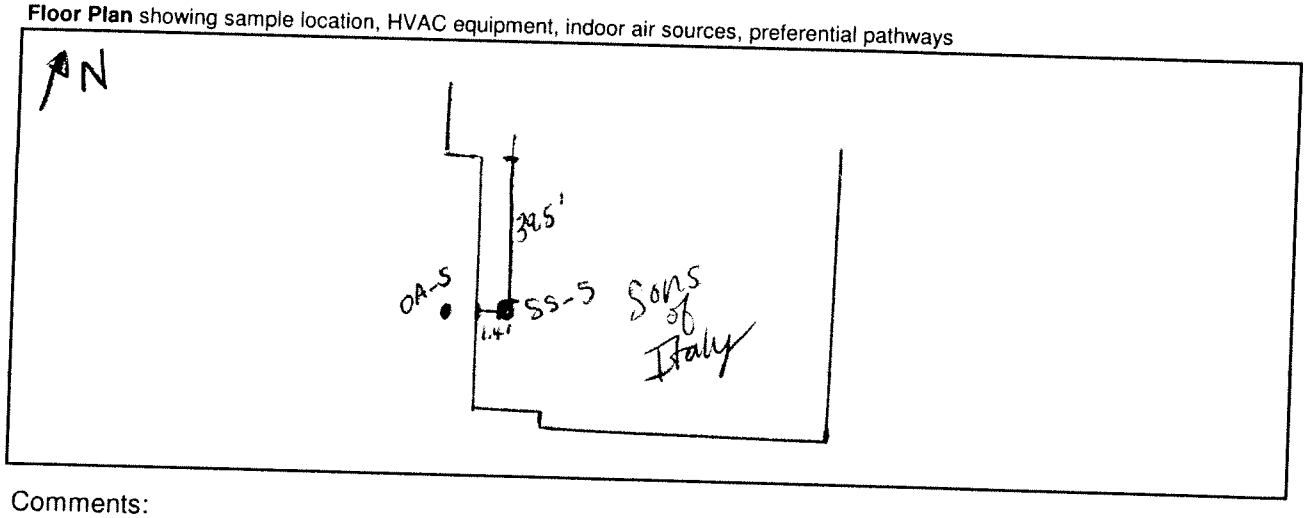
Tubing type used food-grade teflon Length of tubing 2.6' ~~cm~~ Tubing volume .013 L ~~cc~~
Volume purged .039L ~~cc~~ @ .2L / min 1 to 3 volumes purged @ ~~< 200cc/min~~? .2L/min yes

Weather Conditions at Start of Sampling:
Air temperature (°F) 39.9° Rainfall NA Wind direction ESE
Barometric pressure 30.20 Wind speed (mph) 8.1

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Indoor air temp (°F) 60.8° Indoor relative humidity (%) NA
Building Survey and Chemical Inventory Form Completed? yes Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

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Sub-slab Vapor (Canister) Sample Collection Field Form

Project # 129862.103
Project Name Oswego, W. Utica St Phase II SVI
Consultant Brown and Caldwell
Collector CJM/BMR

Sample ID DUP 031808 - SS

Start Date/Time	3/18/08 11:49	Vacuum gauge "zero" ("Hg)	-29.6
End Date/Time	3/18/08 12:19	Start Pressure ("Hg)	-30.6
Canister ID	12820	End Pressure ("Hg)	-3.5
Flow controller ID	08	End pressure > "zero"?	yes
Associated indoor air sample ID	1A-6	Sampling duration (intended)	30 min
		Associated ambient air sample ID	OA-5

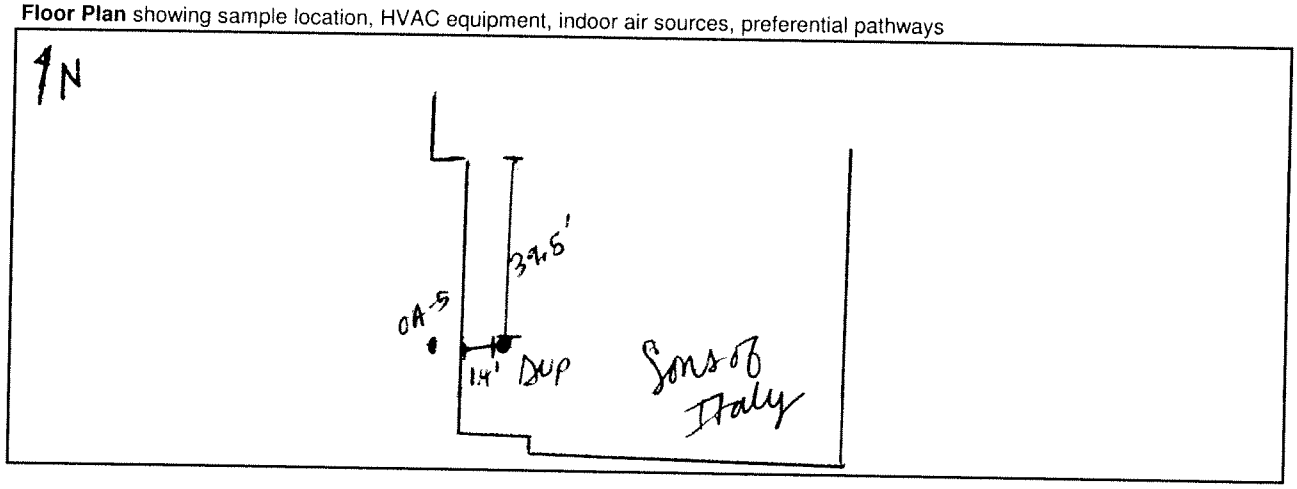
Tubing type used food-grade teflon Length of tubing 2.6' ~~cm~~ Tubing volume .013L pc
Volume purged .039L pc @ .2L/ min 1 to 3 volumes purged @ ~~<200cc/min?~~ .2L/min yes

Weather Conditions at Start of Sampling:
Air temperature (°F) 39.9° Rainfall NA Wind direction ESE
Barometric pressure 30.20 Wind speed (mph) 8.1

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Indoor air temp (°F) 60.8' Indoor relative humidity (%) NA
Building Survey and Chemical Inventory Form Completed? yes Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

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Indoor Air (Canister) Sample Collection Field Form

Project # 129862.103

Project Name Oswego, W. Utica St Phase II SVI

Consultant Brown and Caldwell

Collector CSM | BMR

Sample ID IA-2

Start Date/Time	3/18/08 7:54	Vacuum gauge "zero" ("Hg)	-29.4
End Date/Time	3/18/08 15:54	Start Pressure ("Hg)	-30.0
Canister ID	6365	End Pressure ("Hg)	-4.5
Flow controller ID	K-259	End pressure > "zero"?	yes
Associated ambient air sample ID	OA-2	Sampling duration (intended)	8 hours
		Associated sub-slab vapor sample ID	SS-2

Tubing type used food-grade ~~Teflon~~ Length of tubing 1.0' ~~cm~~ Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

Weather Conditions at Start of Sampling:

Air temperature (°F) 27.0° Rainfall NA Wind direction ESE

Barometric pressure 30.42" Relative humidity 63% Wind speed (mph) 9.2

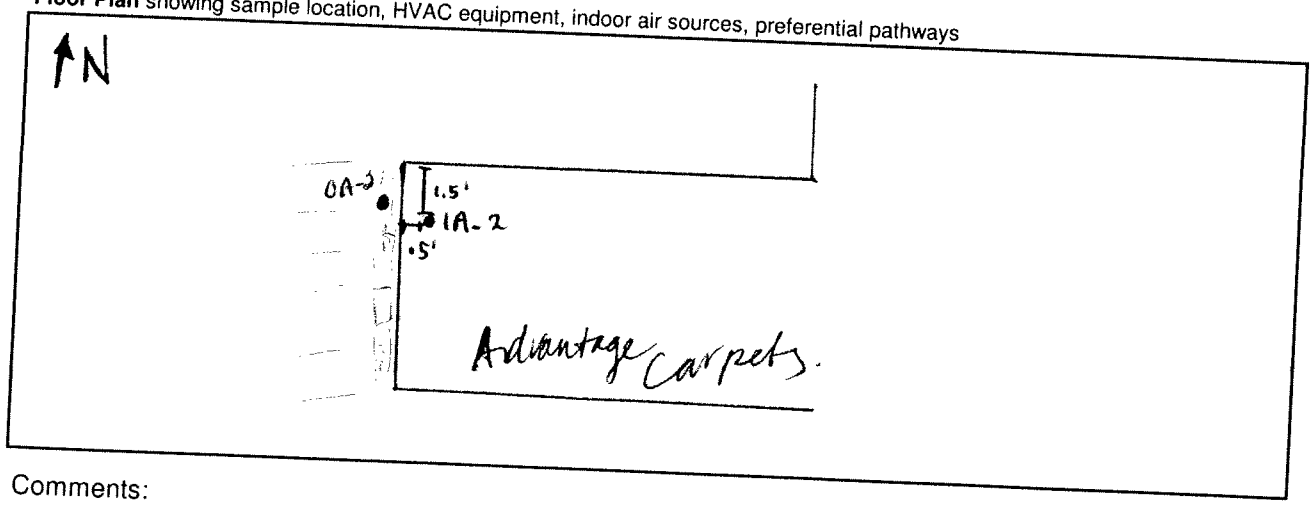
Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

temperature rise approx 10° throughout sampling.
slight rain begins at approx 14:00.

Indoor air temp (°F) 42.8° Indoor relative humidity (%) NA

Building Survey and Chemical Inventory Form Completed? yes Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

nationalgrid

Indoor Air (Canister) Sample Collection Field Form

Project # 129862.103 Consultant Brown and Caldwell

Project Name Oswego, W. Utica St. Phase II SVI Collector CJM | BMR

Sample ID IA-4

Start Date/Time	3/18/08 9:06	Vacuum gauge "zero" ("Hg)	-29.4
End Date/Time	3/18/08 16:55	Start Pressure ("Hg)	-30.0
Canister ID	1123	End Pressure ("Hg)	-14.6
Flow controller ID	K-107	End pressure > "zero"?	yes
Associated ambient air sample ID	OA-4	Sampling duration (intended)	8 hours
		Associated sub-slab vapor sample ID	SS-4

Tubing type used food-grade teflon Length of tubing .7' ~~cm~~ Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

Weather Conditions at Start of Sampling:

Air temperature (°F) 30.0° Rainfall NA Wind direction ESE

Barometric pressure 30.38 in Relative humidity 56% Wind speed (mph) 11.5

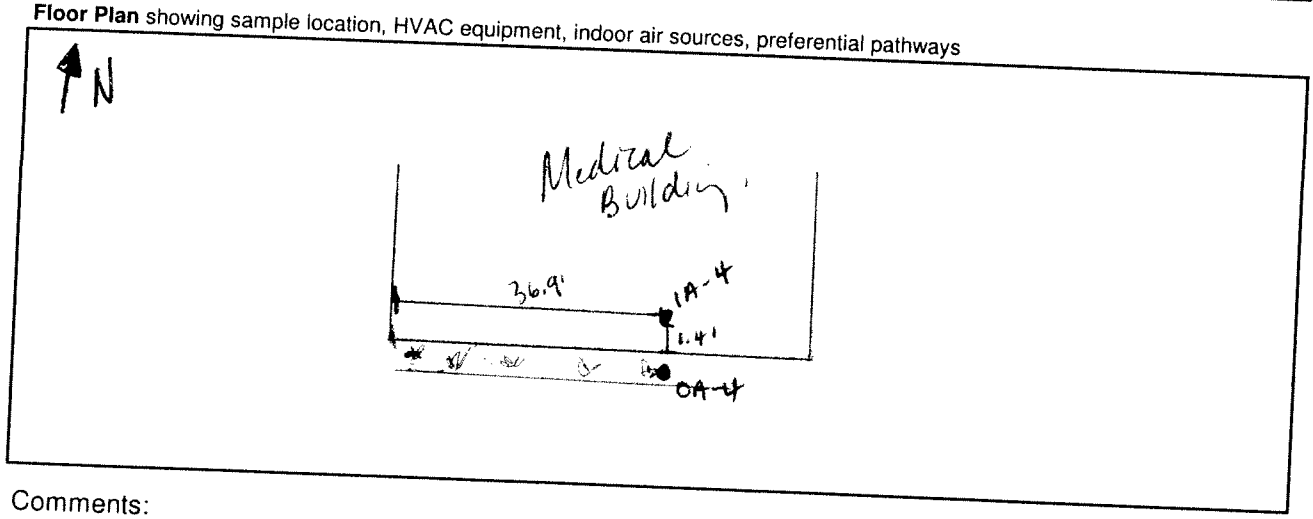
Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

slight rain beginning at approx 14:00

Indoor air temp (°F) 47.1° Indoor relative humidity (%) NA

Building Survey and Chemical Inventory Form Completed? _____ Photograph IDs _____

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

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Indoor Air (Canister) Sample Collection Field Form

Project # 129862.103 Consultant Brown and Caldwell

Project Name Oswego, W. Utica St. Phase II SVI Collector CJM / BMR

Sample ID DUP031808-1A

Start Date/Time	3/18/08 9:06	Vacuum gauge "zero" ("Hg)	-29.4
End Date/Time	3/18/08 16:55	Start Pressure ("Hg)	-30.0
Canister ID	6367	End Pressure ("Hg)	-11.5
Flow controller ID	K-349	End pressure > "zero"?	yes
Associated ambient air sample ID	OA-4	Sampling duration (intended)	8 hours
		Associated sub-slab vapor sample ID	SS-4

Tubing type used food-grade teflon Length of tubing .6' ~~cm~~ Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

Weather Conditions at Start of Sampling:

Air temperature (°F) 30.0° Rainfall NA Wind direction ESE

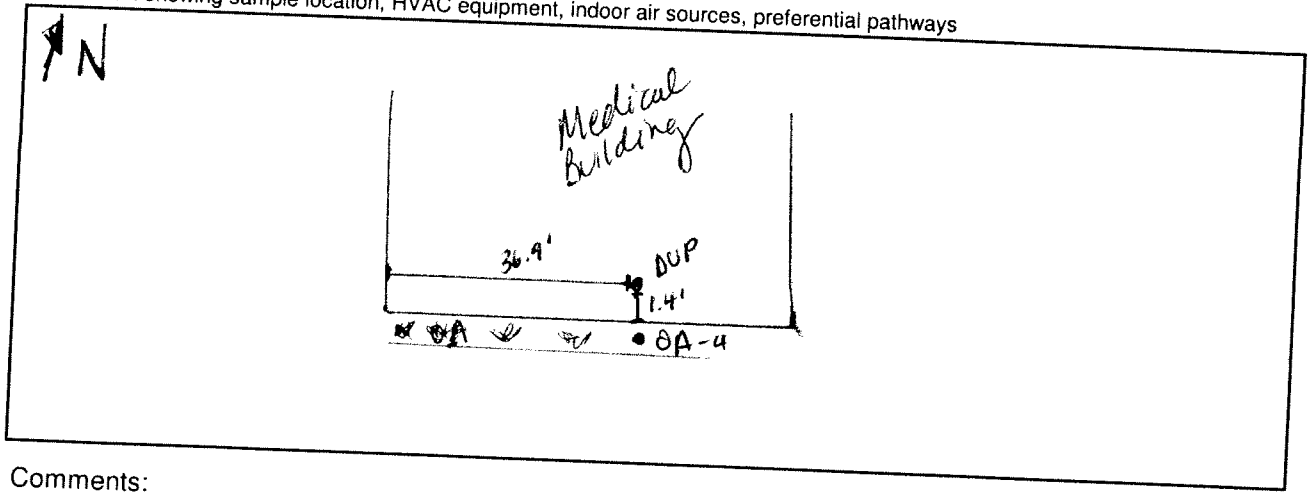
Barometric pressure 30.38 in Relative humidity 56% Wind speed (mph) 11.5

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Indoor air temp (°F) 47.1° Indoor relative humidity (%) NA

Building Survey and Chemical Inventory Form Completed? yes. Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

nationalgrid

Indoor Air (Canister) Sample Collection Field Form

Project # 129862.103 Consultant Brown and Caldwell

Project Name Oswego, W. Utica St. Phase II SVI Collector CJM / BMR

Sample ID 1A-5

Start Date/Time	3/18/08 7:17	Vacuum gauge "zero" ("Hg)	29.4
End Date/Time	3/18/08 15:17	Start Pressure ("Hg)	-27.6
Canister ID	6667	End Pressure ("Hg)	-5.5
Flow controller ID	K-112	End pressure > "zero"?	yes
Associated ambient air sample ID	OA-5	Sampling duration (intended)	8 hours
		Associated sub-slab vapor sample ID	SS-5

Tubing type used food grade teflon Length of tubing 1.1' ~~cm~~ Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

Weather Conditions at Start of Sampling:

Air temperature (°F) 27.0° Rainfall NA Wind direction East

Barometric pressure 30.42 Relative humidity 61% Wind speed (mph) 8.1

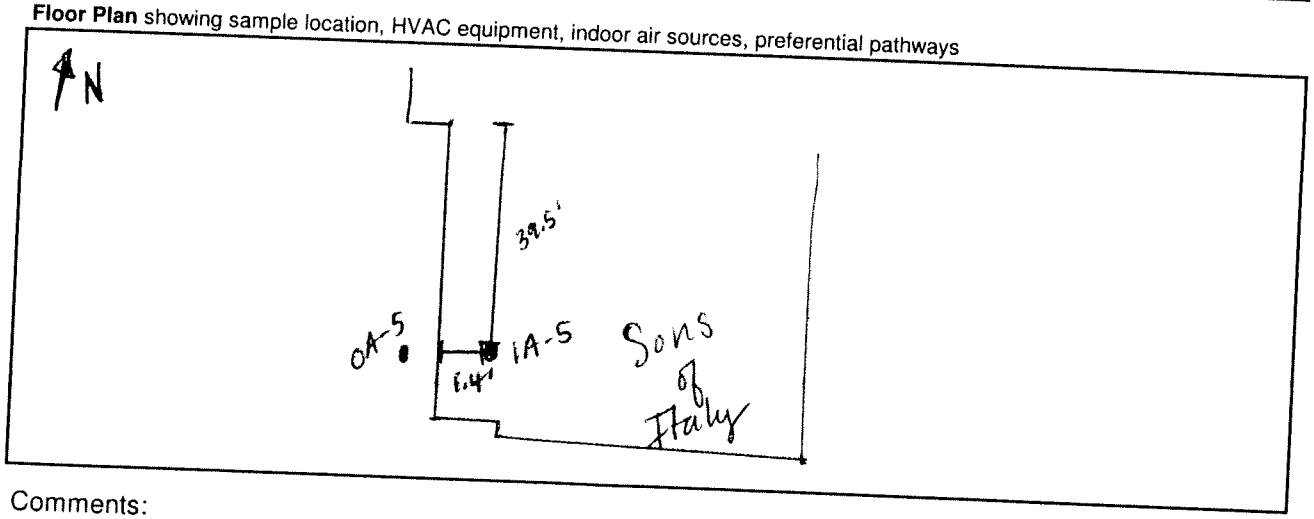
Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Temperature rose approx. 10° throughout sampling.
slight rain begins at approx 14:00

Indoor air temp (°F) 61.9° Indoor relative humidity (%)

Building Survey and Chemical Inventory Form Completed? yes Photograph IDs

Floor Plan showing sample location, HVAC equipment, indoor air sources, preferential pathways



Comments:

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Ambient Air (Canister) Sample Collection Field Form

Project # 129862.103

Project Name Oswego W. Utica St. Phase II SVI

Consultant Brown and Caldwell

Collector CJM | BMR

Sample ID OA-1

Start Date/Time	3/18/08 8:37	Vacuum gauge "zero" ("Hg)	-29.2
End Date/Time	3/18/08 16:37	Start Pressure ("Hg)	-30.0
Canister ID	0001	End Pressure ("Hg)	-5.5
Flow controller ID	K-187	End pressure > "zero"?	yes
		Sampling duration (intended)	8 hour

Tubing type used food-grade tiflon Length of tubing 1.5' ~~cm~~ Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

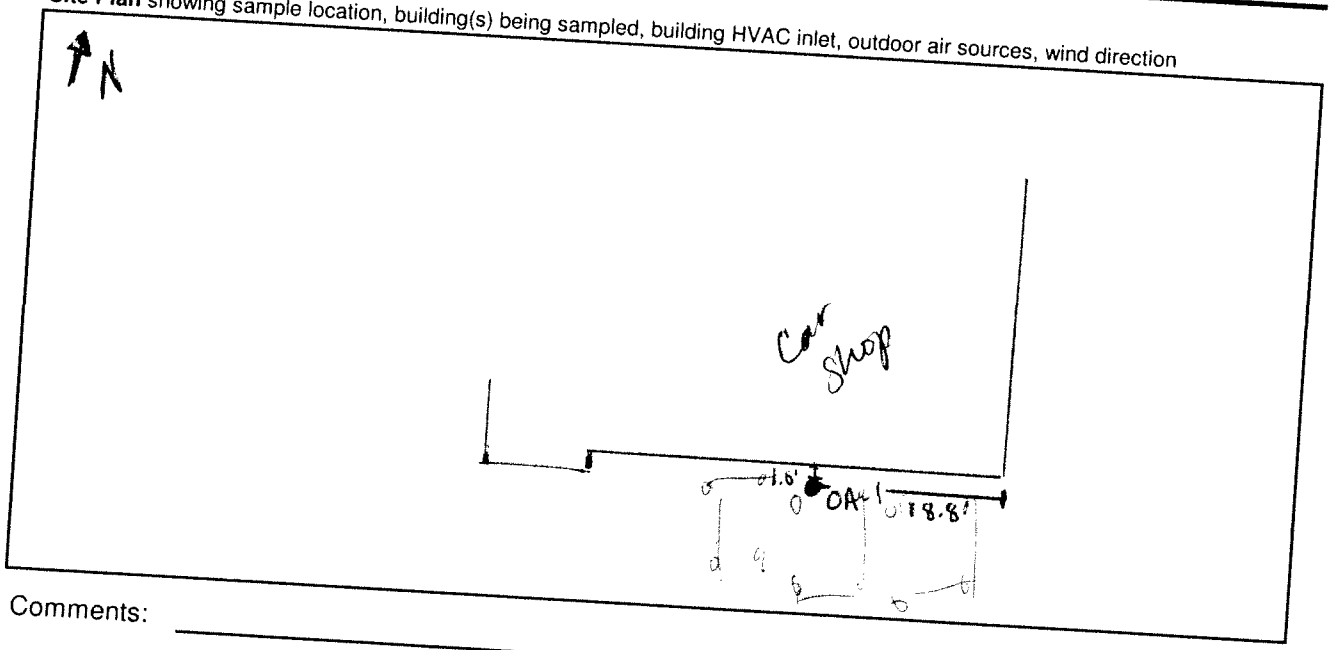
Weather Conditions at Start of Sampling:

Air temperature (°F)	30.0°	Rainfall	NA	Wind direction	ESE
Barometric pressure	30.38"	Relative humidity	56%	Wind speed (mph)	11.5

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

slight rain beginning at approx 14:00

Site Plan showing sample location, building(s) being sampled, building HVAC inlet, outdoor air sources, wind direction



Comments:

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Ambient Air (Canister) Sample Collection Field Form

Project # 129862.103

Project Name Oswego W. Utica St Phase II SVI

Consultant Brown and Caldwell

Collector CJM/BMR

Sample ID OA-2

Start Date/Time	3/18/08 7:45	Vacuum gauge "zero" ("Hg)	-29.1
End Date/Time	3/18/08 15:45	Start Pressure ("Hg)	-30.0
Canister ID	6356	End Pressure ("Hg)	-5.0
Flow controller ID	K-326	End pressure > "zero"?	yes
		Sampling duration (intended)	8 hour

Tubing type used food grade teflon Length of tubing .9' ~~cm~~ Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

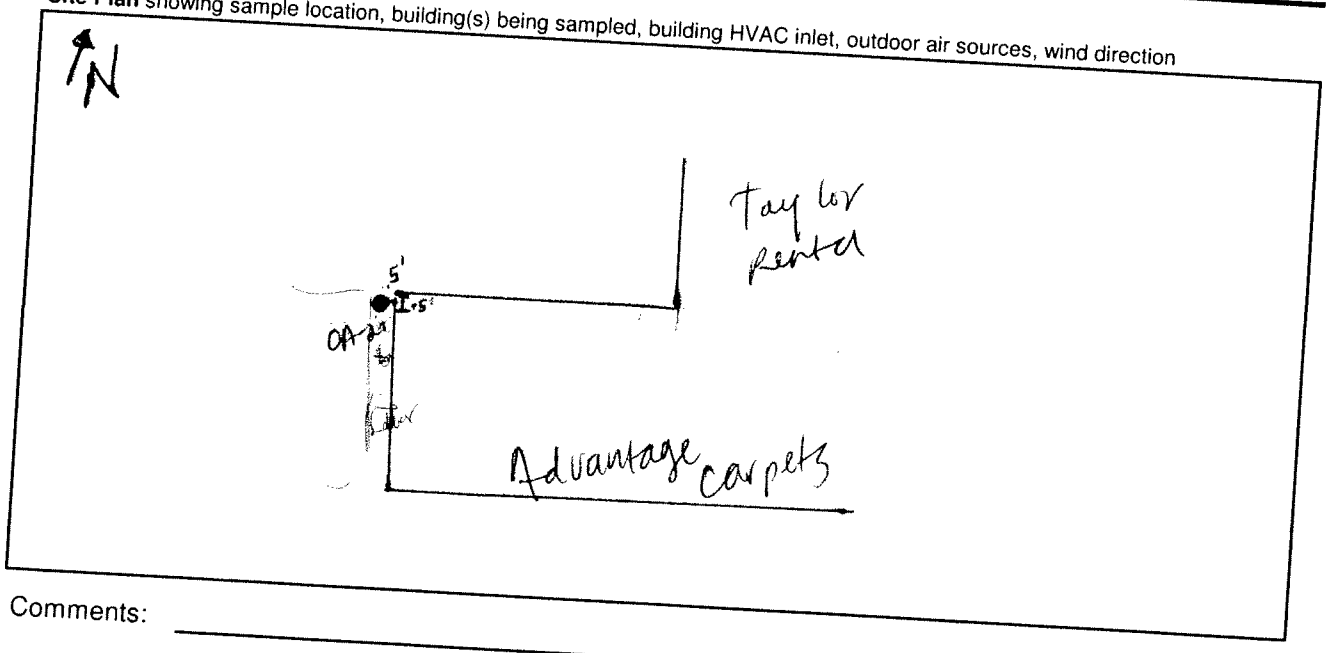
Weather Conditions at Start of Sampling:

Air temperature (°F)	27.0°	Rainfall	NA	Wind direction	ESE
Barometric pressure	30.41	Relative humidity	63%	Wind speed (mph)	9.2

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

temperature rose approx 10° during sampling
slight rain begins at approx 14:00

Site Plan showing sample location, building(s) being sampled, building HVAC inlet, outdoor air sources, wind direction



Comments:

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Ambient Air (Canister) Sample Collection Field Form

Project # 129862.103

Project Name Oswego, W. Utica St Phase II SVI

Consultant Brown and Caldwell

Collector CJM/BMR

Sample ID OA-3

Start Date/Time	3/18/08 8:34	Vacuum gauge "zero" ("Hg)	-29.1
End Date/Time	3/18/08 16:34	Start Pressure ("Hg)	>30
Canister ID	6627	End Pressure ("Hg)	-7.5
Flow controller ID	K-105	End pressure > "zero"?	yes
		Sampling duration (intended)	8 hour

Tubing type used food-grade Teflon Length of tubing 2.0' cm Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

Weather Conditions at Start of Sampling:

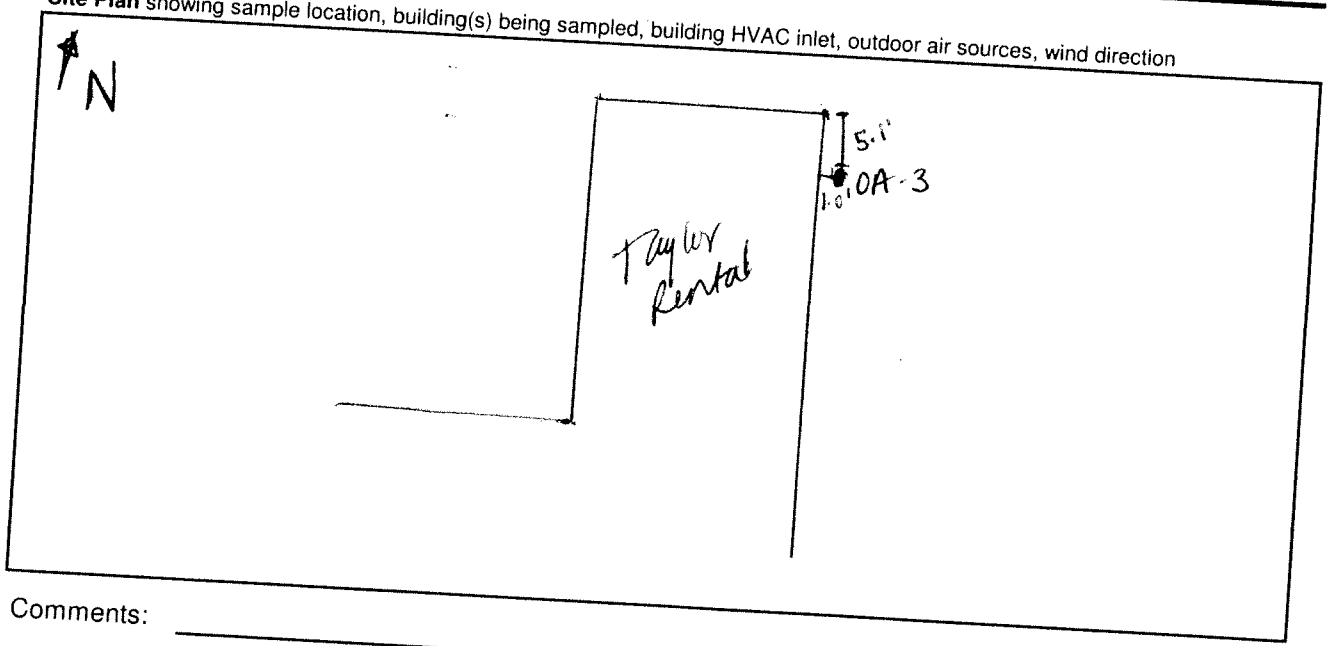
Air temperature (°F) 30.0° Rainfall NA Wind direction ESE

Barometric pressure 30.38" Relative humidity 56% Wind speed (mph) 11.5

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

slight rain begins at approx 14:00

Site Plan showing sample location, building(s) being sampled, building HVAC inlet, outdoor air sources, wind direction



Comments:

nationalgrid

Ambient Air (Canister) Sample Collection Field Form

Project # 129862.103

Project Name Oswego W. Utica St. Phase II SVI

Consultant Brown and Caldwell

Collector CJM/BMR

Sample ID OA-4

Start Date/Time	3/18/08 8:55	Vacuum gauge "zero" ("Hg)	-29.2
End Date/Time	3/18/08 16:30	Start Pressure ("Hg)	-30
Canister ID	2905	End Pressure ("Hg)	-5.0
Flow controller ID	K-352	End pressure > "zero"?	yes
		Sampling duration (intended)	8 hours

Tubing type used food-grade teflon Length of tubing 2.0' ~~cm~~ Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

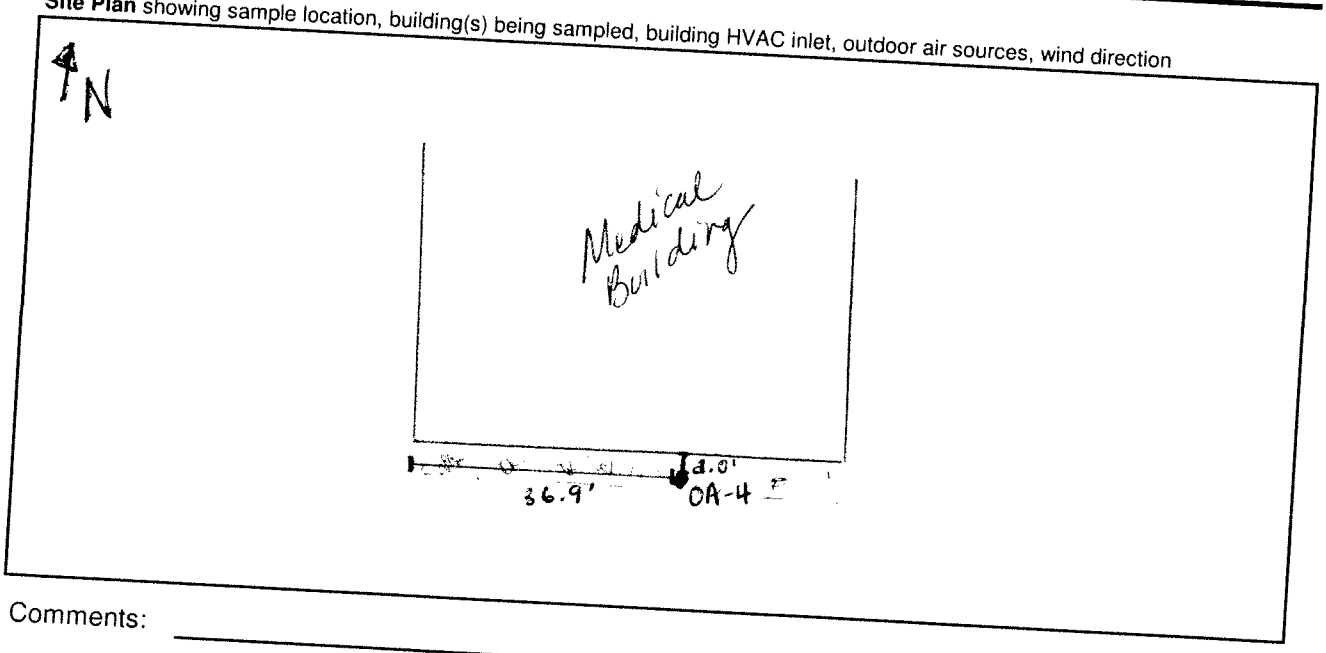
Weather Conditions at Start of Sampling:

Air temperature (°F)	30.0°	Rainfall	NA	Wind direction	ESE
Barometric pressure	30.36"	Relative humidity	56%	Wind speed (mph)	11.5

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

slight rain begins around 14:00

Site Plan showing sample location, building(s) being sampled, building HVAC inlet, outdoor air sources, wind direction



Comments:

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Ambient Air (Canister) Sample Collection Field Form

Project # 129862.103

Project Name Oswego W Utica St. Phase II SVI

Consultant Brown and Caldwell

Collector COM/BMR

Sample ID OA-5

Start Date/Time	3/18/09 7:29	Vacuum gauge "zero" ("Hg)	-29.1
End Date/Time	3/18/09 15:29	Start Pressure ("Hg)	-30.0
Canister ID	3396	End Pressure ("Hg)	-5.5
Flow controller ID	K-225	End pressure > "zero"?	yes
		Sampling duration (intended)	8 hours

Tubing type used food-grade teflon Length of tubing 1.5' cm Tubing volume NA cc

Volume purged NA cc @ NA min 1 to 3 volumes purged @ < 200cc/min? NA

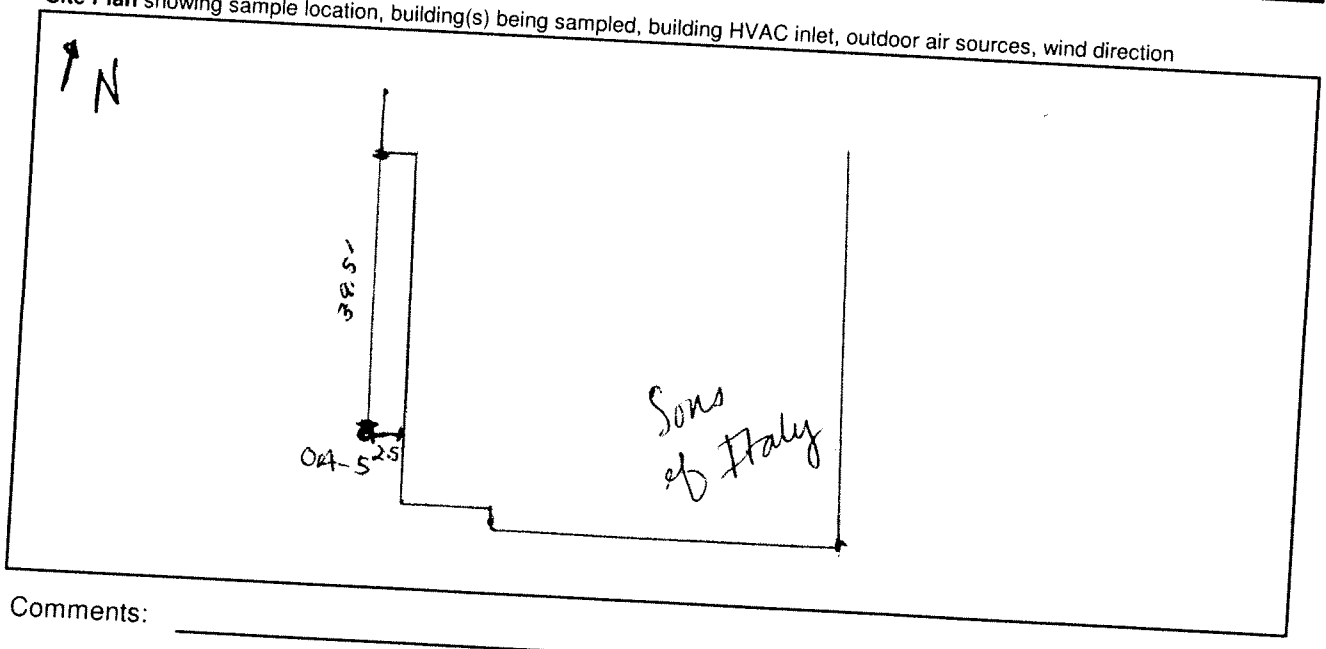
Weather Conditions at Start of Sampling:

Air temperature (°F)	27.0°	Rainfall	NA	Wind direction	ESE
Barometric pressure	30.41	Relative humidity	63%	Wind speed (mph)	9.2

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

temperature rose approx 10° during sampling
slight rain begins at approx 14:00

Site Plan showing sample location, building(s) being sampled, building HVAC inlet, outdoor air sources, wind direction



Comments:

ATTACHMENT C

Analytical Data and Data Usability Summary Report (CD-ROM)

ATTACHMENT D

Example Letter for Property Owner Submittal

nationalgrid

Steven P. Stucker, C.P.G.
Lead Engineer

June 5, 2008

Mr. Thomas Kells
Advantage Carpets and Taylor Rental
195 West 4th Street
Oswego, New York 13126

Re: Sub-slab Soil Vapor, Indoor Air and Ambient Air Sampling, Site # V00481
Oswego (W. Utica Street) Non-Owned Former MGP Site
Oswego, New York

Dear Mr. Kells:

Enclosed for your information is a summary of laboratory results from the sub-slab soil vapor, indoor air and outdoor (ambient) air samples collected on March 18, 2008 within and outside of your building located on West 4th Street in Oswego, New York. The sampling activities were conducted by National Grid in cooperation with the New York State Department of Environmental Conservation (DEC) and the New York State Department of Health (DOH) to evaluate the potential for soil vapor intrusion of constituents associated with the former manufactured gas plant (MGP) previously located on the property. Soil vapor is air present between the soil particles. Sampling of soil vapor from locations near your building was conducted in July 2007 and the results indicated that MGP-related constituents were present within the soil vapor, as well as other constituents unrelated to former MGP operations. These results were provided to you in a letter dated October 12, 2007, and prompted this additional phase of sampling. Table 1 provides a summary of the results of the laboratory analysis of the sub-slab soil vapor, indoor air and outdoor air samples; it presents the results for compounds that were detected in one or more of the samples. Included in Attachment 1 is the laboratory analytical report from which Table 1 was prepared.

A total of five (5) samples were collected to evaluate potential soil vapor impacts within your building. The samples included the following:

- A sub-slab soil vapor sample (SS-3) from beneath the floor slab of the Taylor Rental portion of the building;
- An outdoor air sample (OA-3) located near the northeast corner of the Taylor Rental portion of the building;
- A sub-slab soil vapor sample (SS-2) from beneath the floor slab of the Advantage Carpets portion of the building;
- An outdoor air sample (OA-2) located near the northwest corner of the Advantage Carpets portion of the building; and
- An indoor air sample (IA-2) located near SS-2, within the Advantage Carpets portion of the building.

Environmental Department, 300 Erie Boulevard West, Syracuse, New York 13202
T: (315) 428-5652 ■ F: (315) 460-8805 ■ steven.stucker@us.ngrid.com ■ www.nationalgrid.com

Approximate locations of these samples are shown on Figure 1. Note that the outdoor air samples were collected to help evaluate site-specific background outdoor air concentrations.

Concentrations of various constituents observed in sub-slab soil vapor sample SS-3, collected from beneath the Taylor Rental portion of the building, are relatively low and similar to concentrations of these same constituents in the outdoor air sample associated with this building, indicating that the sub-slab soil vapors do not impact the indoor air within the building. The concentrations of several constituents in sub-slab soil vapor sample SS-2, collected from beneath the Advantage Carpets portion of the building are below the concentrations measured in the indoor air within the building based on the results from sample IA-2. This indicates that the source of the sub-slab soil vapor concentrations is likely the air within the building, i.e., operations and materials within the building. Note that if sub-slab soil vapors were migrating into the building, the resulting concentrations in the building would be expected to be substantially less than those beneath the slab due to attenuation (dilution) as vapor migrates from the subsurface into the building. The only exception to this pattern is for the compounds chloroform and 1,2-dichloroethane, which were detected in the sub-slab soil vapor but not in the indoor air. Neither chloroform or 1,2-dichloroethane are considered as being related to former MGP operations.

For your information we have attached a fact sheet prepared by the DOH (December 2007) entitled "Volatile Organic Compounds (VOCs) in Commonly Used Products". This fact sheet provides insight on sources of constituents typically found in indoor air as a result of the use and storage of various materials at work and at home. In addition, a fact sheet prepared by the DOH (May 2004) entitled "Soil Vapor Intrusion Frequently Asked Questions" is also attached to provide a general understanding of concepts related to soil vapor intrusion.

Based on a review of the data, DEC and DOH concur that sub-slab soil vapors are not impacting indoor air in your building, and that no further evaluation of the potential for impacts from soil vapor is required at this time.

If you have any questions concerning the enclosed data, you may contact Ms. Katherine Comerford of the DOH at 315-477-8566, or Mr. Charles Post of the DEC at 518-402-9662. You are also welcome to contact me at 315-428-5652. I will call you in the next few days to make sure that you have received this information and to answer questions that you may have.

Sincerely,

Steven P. Stucker
Environmental Department

Attachments
cc: Charlie Post, NYSDEC
Katherine Comerford, NYSDOH
Cathy Geraci, National Grid
William Holzhauer, Esq., National Grid
Bob O'Neill, Brown and Caldwell
Jim Marolda, Brown and Caldwell