15 May 2009

Mr. Robert McPeak, PE, LEP
Energy Solutions
143 West Street
New Milford, CT

RE: Vapor Intrusion Sampling Results
30 and 34 Rowan Road, Cheektowaga, New York

Dear Mr. McPeak:

This letter presents a summary of the final laboratory data report (Attachment A) for air (indoor and ambient) and sub-slab vapor samples collected from the two homes at 30 and 34 Rowan Road on March 16 and March 26, 2009, in accordance with the January 21, 2009 approval of the revised Vapor Intrusion Investigation Work Plan from the New York State Department of Environmental Conservation (NYSDEC). The following sections of the letter describe the sampling procedures, results, and conclusions of the investigation.

Sampling Procedures

On March 16, 2009, two indoor air samples and one sub-slab vapor sample were collected at 30 Rowan Road, one indoor air and one sub-slab vapor sample were collected at 34 Rowan Road, and one ambient air sample was collected between the homes. The sub-slab vapor sample collected on March 16 at 30 Rowan Road was inadvertently not analyzed; therefore, another set of indoor air and sub-slab vapor samples was collected at this home on March 26, 2009. The sampling procedures are described below.

Sub-Slab Vapor Samples

In accordance with our December 23, 2008 Indoor Air Sampling and Analysis Plan, two sub-slab vapor samples (30 ROW-SS and 34 ROW-SS) were collected from the residences at 30 and 34 Rowan Road (Figure 1).

The two temporary sub-slab vapor implants (Figure 1) were constructed by drilling a ½ inch diameter hole through the building slab using a rotary hammer drill to a depth of approximately 2 inches below the bottom of the slab. Sub-slab vapor probes were constructed utilizing 1/8 inch outside diameter (O.D.) Nylaflow® tubing. Tubing inlets were placed at approximately 2 inches below the bottom of the concrete and the tubing extended up the center of the borehole to approximately 3 feet above ground surface and fitted with an air-tight valve. The annulus surrounding the tubing was backfilled with clean, glass beads to approximately 3 inches below the slab surface. The remaining annulus was backfilled to grade with sculpy modeling clay.

Sub-slab vapor probes were not disturbed for at least 1/2 hour after installation and before sampling. Sub-slab vapor samples were collected utilizing the same sampling procedure at each location, as follows:

- Three probe volumes (i.e., the volume of tubing) were calculated based on the diameter of the tubing and purged prior to sample collection;
- The flow rate for purging did not exceed 200 milliliters (ml) per minute;
- The flow rate for sampling was set for approximately 0.7 ml per minute (24 hours for 1 liter) and was controlled by laboratory-set regulators installed on the sample canisters;

- Sub-slab vapor samples were collected in 1 liter stainless steel canisters certified clean by Centek Laboratory (Centek), an Environmental Laboratory Approval Program (ELAP)-certified laboratory;
- Sample canisters were connected to the probe tubing by an air-tight valve, which allowed purging and tracer gas testing using a 60 milliliter (ml) calibrated gas-tight syringe; and
- The volume of each sub-slab vapor sample collected exceeded the minimum volume required to achieve the minimum reporting limit.

Tracer gas (helium) shrouds were placed over each sub-slab vapor sample location prior to sampling to ensure that ambient air was not being pulled into the canisters during sampling. This was accomplished by placing a clean, small plastic shroud over each probe location. An air-tight seal was placed on the ground surface around the edge of the shroud where it contacted the ground. Prior to purging or sampling activities, helium tracer gas was released via a small diameter tube, placed through the side of the shroud, into the enclosure beneath the shroud. The sub-slab vapor tube, fitted with an air-tight valve, extended up through the air-tight seal to the exterior side of the shroud. The valve was then connected to the sampling tube and canister (both outside of the shroud). A sample of the air inside the shroud was measured through a second port using a portable helium detector to determine the concentration of helium within the enclosure beneath the shroud.

Three purge volumes (calculated based on the volume of probe tubing and screen) were purged from the sub-slab vapor tube through the shroud and into a tedlar bag. The tedlar bag was then connected to a portable helium detector to measure the presence of helium gas in the purged vapors. If high concentrations (>10% of the shroud concentration) of helium had been observed in the sample, the sub-slab seal and shroud seal would have been checked and/or enhanced to reduce the infiltration of ambient air into the enclosure and another sample collected. If helium concentrations were less than 10%, a sample was collected and submitted for laboratory analysis. Helium gas was not detected in sub-slab vapor at any location during sub-slab sampling.

Indoor Air and Ambient Air Samples

Two indoor air samples (30 ROW-I and 34 ROW-IA) were collected contemporaneously with each sub-slab vapor sample at locations away from vents and windows using 1 liter stainless steel canisters, certified clean by Centek with laboratory set 24-hour flow regulators. Indoor air samples were collected at approximately 3 to 5 feet above the floor. It should be noted that two additional indoor air samples (30 ROW-IA and 30 ROW-IADUP) were collected from 30 Rowan Road. A contemporaneous sub-slab sample was collected with these indoor air samples. However, the sub-slab sample was not analyzed by the laboratory.

One ambient air sample was collected during sub-slab vapor and indoor air sampling activities using a 1 liter stainless steel canister certified clean by Centek with a laboratory set 24-hour flow regulator. The ambient air sample was collected at a location between 30 and 34 Rowan road approximately 4 feet above ground surface, to be representative of air which might be drawn into the building. The ambient air sample canister was hung on a ladder.

Laboratory Analyses

Sub-slab vapor, indoor air and ambient air samples were submitted to Centek Laboratory in Syracuse, New York for VOC analysis by EPA Method TO-15. Laboratory results are provided in Appendix A. Sampling information is provided in the field notes in Appendix B.

Data Validation

The results of data validation indicate that all of the data (with the exception of 6 compounds that were not detected in any sample that had recoveries above control limits in the laboratory LCS) meet laboratory quality control criteria, were collected properly, and are usable for the purposes of this investigation.

Investigation Results

The results of the indoor air, ambient air, and sub-slab vapor tests are summarized on Tables 1 and 2, which show concentrations for all TO-15 compounds that were detected above laboratory reporting limits in one or more samples (plus cis-1,2-dichloroethene and vinyl chloride, groundwater compounds of concern). Also shown are the New York State Department of Heath (NYSDOH) Air Guidance Values (AGV) concentrations (as available); the NYSDOH Decision Matrices to which certain compounds have been assigned; and residential[1] and commercial[2] indoor air background concentrations (NYSDOH 2006). The tables also indicate which volatile organic compounds (VOCs) have been detected in groundwater monitoring wells in the vicinity of the residences, and which VOCs were specifically identified in consumer product(s), if any, during the building survey.

Ambient Air Concentrations

Several VOCs were detected in the ambient air sample (ROW-AA) at concentrations that are generally typical for a suburban setting. Ambient air concentrations are shaded green when indoor air concentrations were similar to or lower than the ambient air concentrations, indicating ambient air as a potential source of these compounds. It should be noted that trichloroethene (TCE), cis-1,2 dichloroethene (cis-1,2-DCE), and vinyl chloride were not detected in the ambient air sample.

30 Rowan Road Indoor Air and Sub-Slab Vapor Results

The indoor air and sub-slab analytical results for the samples collected from 30 Rowan Road are presented on Table 1 and discussed below.

Indoor Air

The indoor air concentrations for most tested compounds at 30 Rowan Road were generally low, being either below the reporting limit (blue shading on Table 1), similar to or lower than the maximum ambient air levels measured (green shading), or within NYSDOH (2006) residential background ranges (light yellow shading)[3]. Only one compound (chloroform) was detected in excess of the NYSDOH Residential Indoor Air Background value as indicated by bright yellow shading on Table 1.

None of the indoor air concentrations exceeded the AGVs, where applicable. TCE concentrations were above the reporting limit of 0.21 $\mu g/m^3$ but less than 0.5 $\mu g/m^3$ in all samples, i.e., within the residential background range and below the NYSDOH AGV of 5 $\mu g/m^3$.

---

[1] Both 90th percentile and upper fence concentrations are shown for residential indoor air.
[2] 90th percentile concentrations shown for commercial indoor air.
[3] In the case of 4-ethyltoluene, ethyl acetate, and isopropyl alcohol, concentrations are compared to the USEPA commercial background range, as no NYSDOH residential background value is available.

Sub-Slab Vapor Concentrations and Ratios

The sub-slab vapor concentrations of several VOCs at 30 Rowan Road were either below detection or similar to ambient air levels, as indicated by the blue and green shading on Table 1.

The potential source and significance of the other VOCs, detected in sub-slab vapor above ambient air levels, can be evaluated by examining the sub-slab to indoor air concentration ratio[4], as shown on Table 1. When contaminants were detected in the sub-slab vapor sample, sub-slab to indoor air ratios less than 1 (indoor air concentration higher than the sub-slab vapor concentration, shaded grey on Table 1) strongly suggest that the source of the VOCs detected in the sub-slab vapor is the building air. Ratios greater than 1 may indicate a subsurface source of at least a portion of the vapors, but do not necessarily indicate discernable impacts to indoor air, depending on the degree of attenuation that occurs as the vapors migrate across the slab. The potential for vapor intrusion impacts increases with higher sub-slab to indoor air ratios; ratios above 100 are shaded orange on Table 1. A ratio of 100 is only exceeded for carbon disulfide, cyclohexane, n-heptane, and toluene. However, none of these compounds have been detected in nearby groundwater. Carbon disulfide, cyclohexane, and n-heptane were not detected in indoor air on the day when the sub-slab vapor samples were collected. All indoor air values were an order of magnitude below typical background levels. Overall, the lines of evidence indicate that vapor intrusion is not occurring at discernable levels for these four compounds.

While the chloroform concentration was slightly above typical background concentrations for residential homes, as discussed above, chloroform was detected at significantly lower concentration in the sub-slab vapor and has not been detected in nearby groundwater; therefore, an indoor source is more likely than a vapor intrusion source. Chloroform is present in laundry bleach, public water supplies and other commercial products.

For the principle compounds of concern in groundwater (TCE, cis-1,2-DCE, and vinyl chloride), cis-1,2-DCE and vinyl chloride were not detected in any of the samples collected. The sub-slab to indoor air ratio for TCE at 30 Rowan Road was 3.6, which does not indicate a high potential for vapor intrusion impacts.

34 Rowan Road Indoor Air and Sub-Slab Vapor Results

The indoor air and sub-slab analytical results for the samples collected from 34 Rowan Road are presented on Table 2.

Indoor Air

The indoor air concentrations for most compounds tested at 34 Rowan Road were generally low, either being below the reporting limit (blue shading on Table 2), similar to or lower than the maximum ambient air levels measured (green shading), or within NYSDOH (2006) residential background ranges (light yellow shading)[5].

Seven compounds (1,1,1-trichloroethane (TCA), 1,2-dichloroethane (1,2-DCA), chloroform, ethyl acetate, methyl isobutyl ketone (MIBK), tetrachloroethene (PCE), and TCE) were detected in indoor air above typical indoor air background values, as indicated by the bright yellow or magenta shading on Table 2. However, when compared to the associated sub-slab sample results, as discussed below, the

[4] Note that this ratio is the inverse of the attenuation factor defined by Johnson and Ettinger (1991), or α.

[5] In the case of 4-ethyltoluene, ethyl acetate, and isopropyl alcohol, concentrations are compared to the USEPA commercial background range, as no NYSDOH residential background value is available.

detection of these compounds is more likely due to indoor air source(s). Further, two of the compounds (methyl isobutyl ketone, and TCE) were present in consumer products observed during the building survey. These compounds are shaded magenta on Table 2.

The TCE concentration was above the reporting limit of 0.21 µg/m^3 but below the NYSDOH AGV of 5 µg/m^3. PCE and TCA were above typical background concentrations, but were unlikely to be due to vapor intrusion based on sub-slab vapor concentrations that were lower than indoor air concentrations, as discussed below. Further, TCA, TCE, and PCE concentrations in groundwater at nearby monitoring wells MW-5 and MW-5A, located just to the north of these homes, were below detection (5 ug/L) in the last two sampling events (May 2007 and 2008).

Sub-Slab Vapor Concentrations and Ratios

The sub-slab vapor concentrations of several VOCs were either below detection or similar to ambient air levels, as indicated by the blue and green shading on Table 2.

As described in detail above, the potential source and significance of VOCs detected in sub-slab vapor above ambient air levels can be evaluated by examining the sub-slab to indoor air concentration ratio, based on collocated samples. A sub-slab to indoor air ratio of 100 was not exceeded for any of the VOCs analyzed at 34 Rowan Road. In fact, the highest ratio was 3.8 for carbon disulfide, indicating that none of the compounds detected in indoor air were due to vapor intrusion. The data indicates clearly that the VOCs detected in nearby monitoring wells (MW-5 and MW-5A) have not affected the sub-slab vapor or indoor air at the residence.

Conclusions

None of the VOCs detected in indoor air at 30 or 34 Rowan Road exceeded the NYSDOH AGVs, where applicable.

The probable source of each VOC detected in the indoor air at 30 and 34 Rowan Road is indicated by the color shading of each compound name on Tables 1 and 2, (far left column) based on the various lines of evidence discussed above. First, several compounds are shaded blue, because all indoor air concentrations were below detection. Other compounds are attributed to ambient air (green shading), because all indoor air concentrations were similar to or lower than ambient air concentrations. The remaining compounds are all attributed to sources other than known groundwater contamination, based on various lines of evidence as discussed above.

The color used to shade each compound (far left column) indicates the predominant line of evidence, although more than one line of evidence usually supports the source attribution decision. In general, compounds with consistently low sub-slab to indoor air ratios (less than 1) are shaded gray, indicating that an indoor source is highly likely. The remaining compounds are shaded light yellow or magenta, indicating the concentrations are within NYSDOH residential background, or from identified indoor sources, respectively, based on consistency with typical background concentration levels, relatively low sub-slab vapor to indoor air ratios, and a lack of detection in groundwater (as applicable).

The data shows that the VOCs detected in nearby groundwater monitoring wells (MW-5 and MW-5A) have not migrated to the sub-slab or indoor air giving clear indication that the local groundwater has not affected the sub-slab vapor or indoor air of the residences.

Recommendations

When the indoor air and sub-slab vapor concentrations of those compounds assigned to NYSDOH (2006) decision matrices are compared to the matrices, no further action is indicated for the vapor intrusion pathway. This finding is also consistent with our evaluation of the various lines of evidence for all compounds detected in the indoor air at both 30 and 34 Rowan Street, as discussed above.

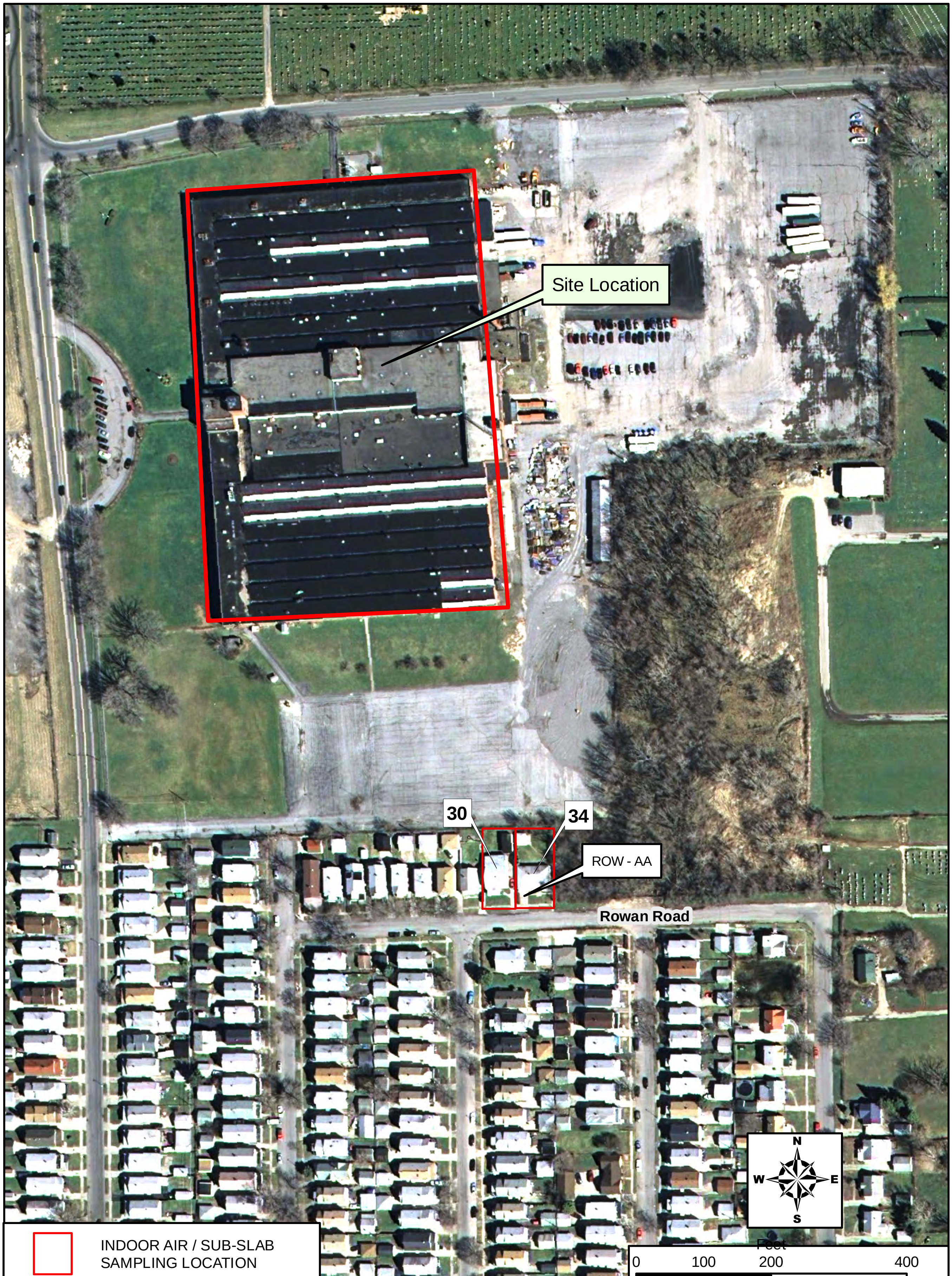
Should you have any questions regarding the information included in this letter, please contact us at 801-303-1092.

Respectfully submitted,
Eric Lovenduski

Project Manager

Cc: Carl Grabinski
Briana Sye Marvuglio

Attachments:
Table 1 – Summary of Indoor Air, Sub-slab and Ambient Air Analytical Results 30 Rowan Road
Table 2 – Summary of Indoor Air, Sub-slab and Ambient Air Analytical Results 34 Rowan Road
Figure 1 – Sample Location Map
Attachment A - Final laboratory analytical results (SDG CO903028 & CO903054)
Attachment B – Resident questionnaires and chemical inventories



Printing Date: 12/16/2008
File: R:\Energy_Solutions\LE0614_Leica_Buffalo\GIS\Figure2.mxd

EnviroGroup Limited
Centennial, Colorado

Figure 2
LE-0614

Leica Area C, Cheektowaga, NY

LOCATIONS OF INDOOR AIR AND SUB-SLAB VAPOR SAMPLING

TABLE 1
SUMMARY OF INDOOR AIR, SUB-SLAB VAPOR, AND AMBIENT AIR ANALYTICAL RESULTS (UG/M3)
30 ROWAN ROAD, CHEEKTOWAGA, NY

SAMPLE TYPE:				Sub-slab	Indoor Air			Sub-slab/Indoor Air Ratio	Ambient Air				
SAMPLE LOCATION:													
SAMPLE IDENTIFICATION:		NYSDOH		30 ROW-SS	30 ROW-IA	30 ROW-IADUP	30 ROW-I	30ROWSS/30ROWI	ROW-AA	NYSDOH	NYSDOH Residential	EPA BASE (2001)	
SAMPLE DATE:	Detected in Groundwater	Air Guideline	NYSDOH Decision	3/26/2009	3/16/2009	3/16/2009	3/26/2009	3/26/2009	3/16/2009	Residential Indoor Air Background	Indoor Air Background (Upper	Commercial Indoor Air Background	Source of VOC Identified During
PARAMETERS	Near Building	Value	Matrix							(90th%)	Fence)	(90%)	Building Survey
1,1,1-Trichloroethane			2	ND < 0.83	ND < 0.83	ND < 0.83	ND < 0.83		ND < 0.83	3.1	2.5	20.6	
1,2,4-Trimethylbenzene				72	2	1.1	0.9	80.0	0.65 J	9.5	9.8	9.5	
1,2-Dichloroethane				0.99	ND < 0.62	ND < 0.62	ND < 0.62	> 1.6	ND < 0.62	<0.25	0.4	<0.9	
1,3,5-Trimethylbenzene				24	1	ND < 0.75	ND < 0.75	> 32.0	ND < 0.75	3.6	3.9	3.7	
1,4-Dichlorobenzene				1	ND < 0.92	ND < 0.92	ND < 0.92	> 1.1	ND < 0.92	1.3	1.2	5.5	
2,2,4-trimethylpentane				ND < 0.71	1.9	2.5	ND < 0.71		9.9	6.5	5	4.5	
2-Butanone (MEK)				9.6	1.9	1.9	1.8	5.3	ND < 0.9	16	16	12	
4-Ethyltoluene				18	0.6 J	ND < 0.75	ND < 0.75	> 24.0	ND < 0.75	NV	NV	3.6	
Acetone	yes			46	24	22	14	3.3	67	110	115	99	
Benzene				46	1.1	1.1	0.81	56.8	1	15	13	9.4	
Carbon Disulfide				130	ND < 0.47	ND < 0.47	ND < 0.47	> 276.6	ND < 0.47	NV	NV	4.2	
Carbon Tetrachloride			1	ND < 0.96	0.51 J	0.51 J	0.32	< 3.0	0.51 J	0.8	1.3	<1.3	
Chloroform				0.65 J	1	1.1	1.5	0.4	ND < 0.74	1.4	1.2	1.1	
Chloromethane				ND < 0.31	ND < 0.31	ND < 0.31	0.71	< 0.4	0.82	3.3	4.2	3.7	
cis-1,2-Dichloroethene	yes		2	ND < 0.6	ND < 0.6	ND < 0.6	ND < 0.6		ND < 0.6	<0.25	0.4	<1.9	
Cyclohexane				88	0.59	0.52	ND < 0.52	> 169.2	0.7	8.1	6.3	NV	
Dichlorodifluoromethane (Freon 12)				2	2.1	2.3	1.9	1.1	2.1	15	10	16.5	
Ethyl acetate				4.2	0.73 J	0.62 J	0.81 J	5.2	ND < 0.92	NV	NV	5.4	
Ethylbenzene				17	1.4	1.4	1.1	15.5	ND < 0.66	7.3	6.4	5.7	
n-Heptane				110	1.2	1.2	ND < 0.62	> 177.4	0.67	19	18	NV	
Hexane				150	2	1.7	4	37.5	1.3	18	14	10.2	
Isopropyl alcohol				ND < 0.37	9.5	4.8	22	< 0.02	ND < 0.37	NV	NV	250	
Methyl Isobutyl ketone				ND < 1.2	1.1 J	1.2 J	ND < 1.2		0.67 J	2.2	1.9	6	
Methyl tert-Butyl Ether				ND < 0.55	ND < 0.55	ND < 0.55	ND < 0.55		ND < 0.55	26	14	11.5	
Methylene chloride		60		0.74	6.2	1.5	ND < 0.53	> 1.4	1	22	16	10	
Styrene				4.3	ND < 0.65	ND < 0.65	ND < 0.65	> 6.6	ND < 0.65	1.3	1.4	1.9	
Tetrachloroethene		100	2	12	2.1	0.83 J	ND < 1	> 12.0	ND < 1	2.9	2.5	15.9	
Toluene				960	4.7	4.4	3.3	290.9	2.9	58	57	43	
Trichloroethene	yes	5	1	1.2	0.49	0.44	0.33	3.6	ND < 0.22	0.5	0.5	4.2	
Trichlorofluoromethane (Freon 11)				0.8 J	1.1	1.4	0.97	0.8	1.3	17	12	18.1	
m,p-Xylene	yes			74	5.8	4.9	3.8	19.5	1.1 J	12	11	22.2	
o-Xylene	yes			26	1.8	1.4	1.1	23.6	0.44 J	7.6	7.1	7.9	
Vinyl Chloride	yes		1	ND < 0.39	ND < 0.39	ND < 0.39	ND < 0.1		ND < 0.39	<0.25	0.4	<1.9	

Notes:

1) ug/m^3 - Microgram per cubic meter.

2) Parameters listed were detected in a minimum of one sample.

3) ND - Not detected at the reporting limit shown.

Explanation of Color Coding

(light blue)	not detected in indoor air (sub-slab values are also colored if not detected).
(light green)	Similar to ambient air concentrations (likely due to ambient air)
(gray)	indoor air higher than sub-slab concentration (probable above ground source)
(light yellow)	less than or equal to upper fence residential background concentration or commercial background where no residential values (NYSDOH, 2006)
(yellow)	above upper fence residential background concentration or commercial background where no residential values (NYSDOH, 2006)
(orange)	sub-slab vapor to indoor air ratio > 100:1

TABLE 2
SUMMARY OF INDOOR AIR, SUB-SLAB VAPOR, AND AMBIENT AIR ANALYTICAL RESULTS (UG/M3)
34 ROWAN ROAD, CHEEKTOWAGA, NY

SAMPLE TYPE:				Sub-slab	Indoor Air	Sub-slab/Indoor Air Ratio	Ambient Air				
SAMPLE LOCATION:											
SAMPLE IDENTIFICATION:				34 ROW-SS	34 ROW -IA	34ROWSS/34ROW IA	ROW-AA				
SAMPLE DATE:				3/16/2009	3/16/2009	3/16/2009	3/16/2009				
PARAMETERS	Detected in Groundwater Near Building	NYSDOH Air Guideline Value	NYSDOH Decision Matrix					NYSDOH Residential Indoor Air Background (90th%)	NYSDOH Residential Indoor Air Background (Upper Fence)	EPA BASE (2001) Commercial Indoor Air Background (90%)	Source of VOC Identified During Building Survey
1,1,1-Trichloroethane			2	2.3	4.8	0.48	ND < 0.83	3.1	2.5	20.6	
1,2,4-Trimethylbenzene				6.9	7.5	< 0.92	0.65 J	9.5	9.8	9.5	
1,2-Dichloroethane				ND < 0.62	2.4	< 0.26	ND < 0.62	<0.25	0.4	<0.9	
1,3,5-Trimethylbenzene				2.7	2.6	1.04	ND < 0.75	3.6	3.9	3.7	
1,4-Dichlorobenzene				ND < 0.92	ND < 0.92		ND < 0.92	1.3	1.2	5.5	
2,2,4-trimethylpentane				ND < 0.71	1.1	< 0.65	9.9	6.5	5	4.5	
2-Butanone (MEK)				6 J	2.6	2.31	ND < 0.9	16	16	12	
4-Ethyltoluene				1.4	3.5	0.40	ND < 0.75	NV	NV	3.6	
Acetone	yes			25	36	0.69	67	110	115	99	
Benzene				4.8	2.8	1.71	1	15	13	9.4	
Carbon Disulfide				1.8	ND < 0.47	3.83	ND < 0.47	NV	NV	4.2	
Carbon Tetrachloride			1	ND < 0.96	0.51	< 1.88	0.51 J	0.8	1.3	<1.3	
Chloroform				ND < 0.74	1.6	< 0.46	ND < 0.74	1.4	1.2	1.1	
Chloromethane				ND < 0.31	1.1	< 0.28	0.82	3.3	4.2	3.7	
cis-1,2-Dichloroethene	yes		2	ND < 0.6	ND < 0.6		ND < 0.6	<0.25	0.4	<1.9	
Cyclohexane				7.7	3.5	2.20	0.7	8.1	6.3	NV	
Dichlorodifluoromethane (Freon 12)				2.3	2.3	1.00	2.1	15	10	16.5	
Ethyl acetate				ND < 0.92	8.1	< 0.11	ND < 0.92	NV	NV	5.4	
Ethylbenzene				1.9	3.2	0.59	ND < 0.66	7.3	6.4	5.7	
n-Heptane				14	5.4	2.59	0.67	19	18	NV	
Hexane				14	10	1.40	1.3	18	14	10.2	
Isopropyl alcohol				ND < 0.37	ND < 0.37		ND < 0.37	NV	NV	250	
Methyl Isobutyl ketone				13	4.9	2.65	0.67 J	2.2	1.9	6	yes
Methyl tert-Butyl Ether				ND < 0.55	2.4	< 0.23	ND < 0.55	26	14	11.5	
Methylene chloride		60		1	7.8	0.13	1	22	16	10	
Styrene				ND < 0.65	1.2	< 0.54	ND < 0.65	1.3	1.4	1.9	
Tetrachloroethene		100	2	1.6	5.6	0.29	ND < 1	2.9	2.5	15.9	
Toluene				19	11	1.73	2.9	58	57	43	
Trichloroethene	yes	5	1	ND < 0.82	0.6	< 1.37	ND < 0.22	0.5	0.5	4.2	yes
Trichlorofluoromethane (Freon 11)				1.5	2.6	0.58	1.3	17	12	18.1	
m,p-Xylene	yes			9	12	0.75	1.1 J	12	11	22.2	
o-Xylene	yes			3	3.4	0.88	0.44 J	7.6	7.1	7.9	
Vinyl Chloride	yes		1	ND < 0.39	ND < 0.39		ND < 0.39	<0.25	0.4	<1.9	

Notes:

1) ug/m^3 - Microgram per cubic meter.
2) Parameters listed were detected in a minimum of one sample.
3) ND - Not detected at the reporting limit shown.
4) J - estimated concentration
5) NV - No value determined for this compound.

Explanation of Color Coding

- not detected in indoor air (sub-slab values are also colored if not detected).
- Similar to ambient air concentrations (likely due to ambient air)
- indoor air higher than sub-slab concentration (probable above ground source)
- less than or equal to upper fence residential background concentration or commercial background where no residential values (NYSDOH, 2006)
- above upper fence residential background concentration or commercial background where no residential values (NYSDOH, 2006)
- sub-slab vapor to indoor air ratio > 100:1
- probable source identified (not related to known groundwater or soil contamination)