



October 16, 2015

Kristen Tenorio
2566 Pioneer Rd
Richfield, WI 53076

RE: **Environmental Investigation Sampling Results**
BRRTS#: 02-41-562047

Dear Ms. Tenorio:

In accordance with the executed Agreement to Provide Access for Sampling Activities, and in accordance with Wisconsin Department of Natural Resources (WDNR) regulation NR 716.14, Environmental Forensic Investigations, Inc. (EnviroForensics) is providing the results of environmental samples collected from your properties located at 2600 Wauwatosa Avenue in Wauwatosa, Wisconsin on September 26 and 27, 2015. The sampling activities are part of an environmental investigation being performed for the former Modern (Vogue) Cleaners facility located at 2578 North Wauwatosa Ave, Wauwatosa, Wisconsin at the direction of the WDNR pursuant to the authority granted to it under State and Federal law. The chemicals of concern for the investigation are the dry cleaning solvent tetrachloroethene (PCE) and its associated breakdown products.

The Responsible Party is:

Former Vogue and Modern Drycleaners
Ron Collison
2578 North Wauwatosa Ave,
Wauwatosa, Wisconsin

Sampling Results

Seven (7) samples were collected from your property located at 2600 Wauwatosa Ave. Two (2) sub-slab vapor samples designated 6349-2600-SSV-1 and 6349-2600-SSV-2 were collected from the beneath the basement floor. Indoor air samples 6349-2600-IA-1-1, 6349-2600-IA-2-1, 6349-2600-IA-3-B and 6349-2600-IA-4-B were collected from the first floor, and basement floor respectively. The sampling locations are depicted on the attached map. The laboratory report that relates to the vapor and air samples is also attached.

Document: 6349-0683

Environmental Forensic Investigations, Inc.
N16 W23390 Stone Ridge Drive, Suite G
Waukesha, WI 53188
Phone: 262-290-4001 • Fax 317-972-7875



In sample 6349-2600-IA-3-, tetrachloroethene (PCE) and trichloroethene were detected at concentrations of 8.07 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and 2.47 $\mu\text{g}/\text{m}^3$, respectively, which are below the Vapor Action Level of 180 $\mu\text{g}/\text{m}^3$ and 8.8 $\mu\text{g}/\text{m}^3$. 6349-2600-SSV-1 and 6349-2600-SSV-2 contained PCE at 878 and 48.8 respectively, which are below the Vapor Risk Screening Level of 5,999 ($\mu\text{g}/\text{m}^3$). These results are compared to the screening levels on the attached Table.

Because detections of targeted chemicals were detected in both the sub-slab vapor and indoor air, it is recommended the sampling be conducted during winter months to understand if mitigation is required. We will work with the WDNR to ensure actions meet current guidance requirements.

If you have any questions or would like us to discuss these results with you, please contact us at 262-290-4001 or by email at rhoverman@enviroforensics.com. The WDNR project manager, Gena Larson, can be reached at (608) 261-5404. We greatly appreciate your help and patience with this matter.

Sincerely,

Environmental Forensic Investigations, Inc.

A handwritten signature in blue ink, appearing to read "Rob Hoverman".

Rob Hoverman, LPG

Senior Project Manager

Attachments: Results Table
Vapor Intrusion Sample Location Maps
WDNR Fact Sheet RR-977
Laboratory Analytical Report

Copy: Gena Larson, Wisconsin Department of Natural Resources

Table 1
Sub-Slab and Indoor/Outdoor Air Vapor Sample Analytical Results
Former Vogue Cleaners
Wauwatosa, Wisconsin

Sample Address	Sample Identification	Sample Location	Applicable Criteria	Date Sampled	Chlorinated VOCs				
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
INDOOR/ OUTDOOR AIR									
Non-Residential Vapor Action Level					180	8.8	NE	260	28
2600 Wauwatosa Ave	6349-2600-IA-1-1	N Workstation	Small Commercial	9/26/2015	<3.19	<1.07	<19.8	<39.6	<1.28
2600 Wauwatosa Ave	6349-2600-IA-2-1	S Reception	Small Commercial	9/26/2015	<3.19	<1.07	<19.8	<39.6	<1.28
2600 Wauwatosa Ave	6349-2600-IA-3-B	NE Office	Small Commercial	9/26/2015	8.07	2.47	<19.8	<39.6	<1.28
2600 Wauwatosa Ave	6349-2600-IA-4-B	SW Excercise Room	Small Commercial	9/26/2015	<3.19	<1.07	<19.8	<39.6	<1.28
2600 Wauwatosa Ave	6349-2600-OA	NE on Property Line	Small Commercial	9/26/2015	<3.19	<1.07	<19.8	<39.6	<1.28
SUB-SLAB VAPOR									
Non-Residential Vapor Risk Screening Level					5,999	293	NE	8,666	933
2600 Wauwatosa Ave	6349-2600-SSV-1	Near SW Excercise Room	Small Commercial	9/27/2015	878	<10.7	<198	<396	<12.8
2600 Wauwatosa Ave	6349-2600-SSV-2	Near NE Office	Small Commercial	9/27/2015	48.8	<10.7	<198	<396	<12.8

Notes:

Results reported in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)

Analysis performed by Envision Laboratories according to EPA Method TO-15

IA = Indoor Air

NE = Not Established

OA = Outdoor Air

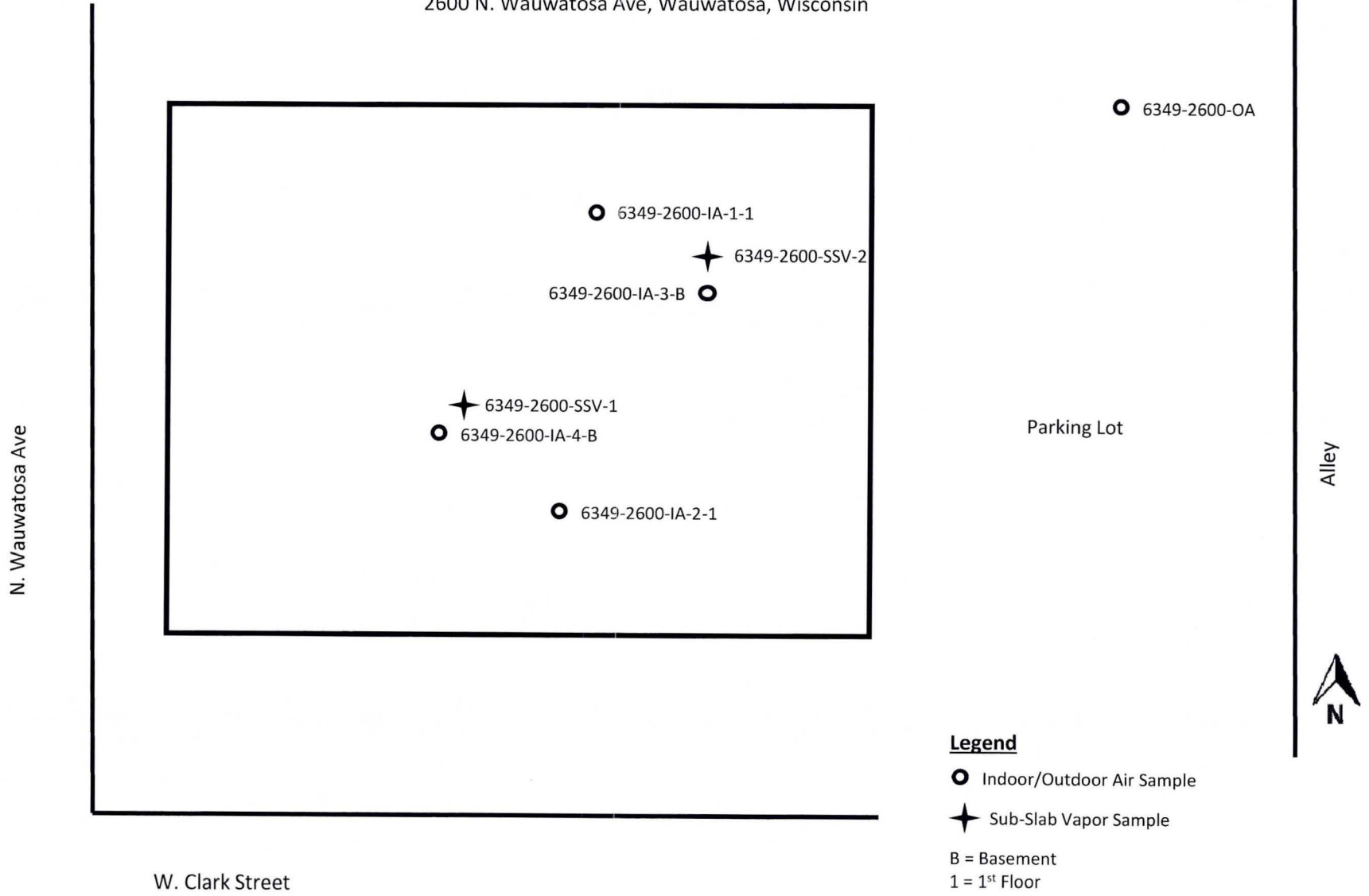
SSV = Sub-Slab Vapor

Sub-slab vapor screening levels derived using the attenuation factor of 0.3.

Bolded values are above detection limits

Bolded and orange shaded concentrations exceed the applicable non-residential screening level

VAPOR INTRUSION SAMPLE LOCATIONS
2600 N. Wauwatosa Ave, Wauwatosa, Wisconsin





EnvisionAir
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Mr. Rob Hoverman
Enviroforensics
N16 W. 23390 Stone Ridge Dr
Suite G
Waukesha, WI 53188

October 9, 2015

ENVision Project Number: 2015-561
Client Project Name: Fmr Vogue Cleaners

Dear Mr. Hoverman,

Please find the attached analytical report for the samples received September 29, 2015. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

A handwritten signature in black ink that reads "David Norris". The signature is written in a cursive, flowing style.

David Norris

Client Services Manager
EnvisionAir



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Client Name: ENVIROFORENSICS
Project ID: FORMER VOGUE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2015-561

Sample Summary

Canister Pressure / Vacuum

<u>Laboratory Sample Number:</u>	<u>Sample Description:</u>	<u>Matrix:</u>	<u>START</u>		<u>START</u>		<u>START</u>		<u>START</u>		<u>Lab</u>	
			<u>Date</u>	<u>Time</u>	<u>End Date</u>	<u>End Time</u>	<u>Date</u>	<u>Time</u>	<u>Initial Field</u>	<u>Final Field</u>	<u>Received</u>	<u>Received</u>
15-2081	6349-2600-IA-1-1	A	9/26/15	12:57	9/27/15	12:12	9/29/15	10:45	-28	0	0	0
15-2082	6349-2600-IA-2-1	A	9/26/15	12:59	9/27/15	12:14	9/29/15	10:45	-30	-8	-8	-8
15-2083	6349-2600-IA-3-B	A	9/26/15	12:50	9/27/15	12:17	9/29/15	10:45	-27	-9	-9	-9
15-2084	6349-2600-IA-4-B	A	9/26/15	12:53	9/27/15	12:10	9/29/15	10:45	-29	-5	-5	-5
15-2085	6349-2600-OA	A	9/26/15	13:05	9/27/15	12:00	9/29/15	10:45	-28.5	-4	-4	-4
15-2086	6349-2600-SSV-1	A	9/27/15	12:37	9/27/15	12:44	9/29/15	10:45	-28	-2	-2	-2
15-2087	6349-2600-SSV-2	A	9/27/15	13:05	9/27/15	13:12	9/29/15	10:45	-28	-2	-2	-2



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Client Name: ENVIROFORENSICS
Project ID: FORMER VOGUE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2015-561

Analytical Method: TO-15
Analytical Batch: 093015AIR(1)

Client Sample ID: 6349-2600-IA-1-1
Envision Sample Number: 15-2081
Sample Matrix: AIR

Sample Collection START Date/Time: 9/26/15 12:57
Sample Collection END Date/Time: 9/27/15 12:12
Sample Received Date/Time: 9/29/15 10:45

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 1800	1800	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichlorethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	111%		
Analysis Date/Time:	10-1-15/14:55		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: FORMER VOGUE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2015-561

Analytical Method: TO-15
Analytical Batch: 093015AIR(1)

Client Sample ID: 6349-2600-IA-2-1
Envision Sample Number: 15-2082
Sample Matrix: AIR

Sample Collection START Date/Time: 9/26/15 12:59
Sample Collection END Date/Time: 9/27/15 12:14
Sample Received Date/Time: 9/29/15 10:45

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 1800	1800	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichlorethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	10-1-15/15:37		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: FORMER VOGUE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2015-561

Analytical Method: TO-15
Analytical Batch: 093015AIR(1)

Client Sample ID: 6349-2600-IA-3-B
Envision Sample Number: 15-2083
Sample Matrix: AIR

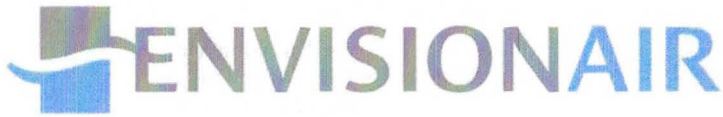
Sample Collection START Date/Time: 9/26/15 12:50
Sample Collection END Date/Time: 9/27/15 12:17
Sample Received Date/Time: 9/29/15 10:45

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 1800	1800	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	8.07	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichlorethene	2.47	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	10-1-15/16:17		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: FORMER VOGUE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2015-561

Analytical Method: TO-15
Analytical Batch: 093015AIR(1)

Client Sample ID: 6349-2600-IA-4-B
Envision Sample Number: 15-2084
Sample Matrix: AIR

Sample Collection START Date/Time: 9/26/15 12:53
Sample Collection END Date/Time: 9/27/15 12:10
Sample Received Date/Time: 9/29/15 10:45

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 1800	1800	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichlorethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	116%		
Analysis Date/Time:	10-1-15/16:57		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: FORMER VOGUE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2015-561

Analytical Method: TO-15
Analytical Batch: 093015AIR(1)

Client Sample ID: 6349-2600-OA
Envision Sample Number: 15-2085
Sample Matrix: AIR

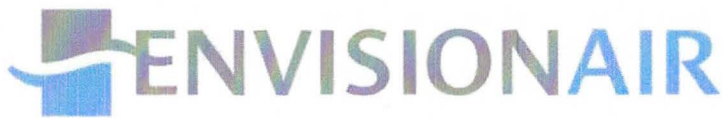
Sample Collection START Date/Time: 9/26/15 13:05
Sample Collection END Date/Time: 9/27/15 12:00
Sample Received Date/Time: 9/29/15 10:45

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 1800	1800	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichlorethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	116%		
Analysis Date/Time:	10-1-15/14:16		
Analyst Initials	tjg		



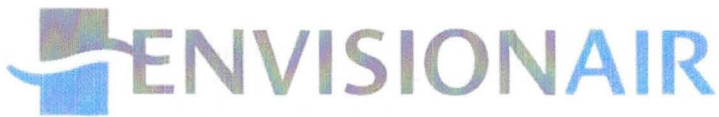
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Client Name: ENVIROFORENSICS
Project ID: FORMER VOGUE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2015-561

Analytical Method: TO-15
Analytical Batch: 093015AIR

Client Sample ID: 6349-2600-SSV-1 **Sample Collection START Date/Time:** 9/27/15 12:37
Envision Sample Number: 15-2086 **Sample Collection END Date/Time:** 9/27/15 12:44
Sample Matrix: AIR **Sample Received Date/Time:** 9/29/15 10:45

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 4920	4920	2
4-Methyl-2-pentanone (MIBK)	< 20500	20500	2
1,1,1-Trichloroethane	< 5460	5460	2
1,1,2,2-Tetrachloroethane	< 3.36	3.36	1,2
1,1,2-Trichloroethane	< 2.10	2.10	1,2
1,1-Dichloroethane	< 40.5	40.5	2
1,1-Dichloroethene	< 1980	1980	2
1,2,4-Trichlorobenzene	< 7.42	7.42	2
1,2,4-Trimethylbenzene	< 49.2	49.2	2
1,2-dibromoethane (EDB)	< 0.32	0.32	1,2
1,2-Dichlorobenzene	< 601	601	2
1,2-Dichloroethane	< 4.05	4.05	2
1,2-Dichloropropane	< 4.62	4.62	2
1,3,5-Trimethylbenzene	< 49.2	49.2	2
1,3-Butadiene	< 2.21	2.21	2
1,3-Dichlorobenzene	< 601	601	2
1,4-Dichlorobenzene	< 6.01	6.01	2
1,4-Dioxane	< 18.0	18.0	2
2-Butanone (MEK)	< 29500	29500	2
2-Hexanone	< 205	205	2
Acetone	< 23800	23800	2
Benzene	< 16.0	16.0	2
Benzyl Chloride	< 4.14	4.14	1,2
Bromodichloromethane	< 5.36	5.36	1,2
Bromoform	< 103	103	2
Bromomethane	< 38.8	38.8	2
Carbon Disulfide	< 3110	3110	2
Carbon Tetrachloride	< 6.29	6.29	2
Chlorobenzene	< 230	230	2
Chloroethane	< 132	132	2



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 8.30	8.30	2
Chloromethane	< 206	206	2
cis-1,2-Dichloroethene	< 198	198	2
cis-1,3-Dichloropropene	< 45.4	45.4	2
Cyclohexane	< 55100	55100	2
Dibromochloromethane	< 8.52	8.52	2
Dichlorodifluoromethane	< 495	495	2
Ethyl Acetate	< 18000	18000	2
Ethylbenzene	< 86.8	86.8	2
Hexachloro-1,3-butadiene	< 10.7	10.7	2
Isooctane	< 4670	4670	2
m,p-Xylene	< 434	434	2
Methylene Chloride	< 417	417	2
Methyl-tert-butyl ether	< 361	361	2
N-Heptane	< 4100	4100	2
N-Hexane	< 1760	1760	2
o-Xylene	< 434	434	2
Propylene	< 1720	1720	2
Styrene	< 4260	4260	2
Tetrachloroethene	878	31.9	2
Tetrahydrofuran	< 2950	2950	2
Toluene	< 37700	37700	2
trans-1,2-Dichloroethene	< 396	396	2
trans-1,3-Dichloropropene	< 45.4	45.4	2
Trichlorethene	< 10.7	10.7	2
Trichlorofluoromethane	< 5620	5620	2
Vinyl Acetate	< 1760	1760	2
Vinyl Bromide	< 4.37	4.37	2
Vinyl Chloride	< 12.8	12.8	2
4-bromofluorobenzene (surrogate)	96%		
Analysis Date/Time:	10-2-15/06:11		
Analyst Initials	tjg		



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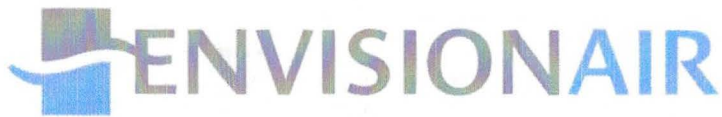
Client Name: ENVIROFORENSICS
Project ID: FORMER VOGUE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2015-561

Analytical Method: TO-15
Analytical Batch: 093015AIR

Client Sample ID: 6349-2600-SSV-2
Envision Sample Number: 15-2087
Sample Matrix: AIR

Sample Collection START Date/Time: 9/27/15 13:05
Sample Collection END Date/Time: 9/27/15 13:12
Sample Received Date/Time: 9/29/15 10:45

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 4920	4920	2
4-Methyl-2-pentanone (MIBK)	< 20500	20500	2
1,1,1-Trichloroethane	< 5460	5460	2
1,1,2,2-Tetrachloroethane	< 3.36	3.36	1,2
1,1,2-Trichloroethane	< 2.10	2.10	1,2
1,1-Dichloroethane	< 40.5	40.5	2
1,1-Dichloroethene	< 1980	1980	2
1,2,4-Trichlorobenzene	< 7.42	7.42	2
1,2,4-Trimethylbenzene	< 49.2	49.2	2
1,2-dibromoethane (EDB)	< 0.32	0.32	1,2
1,2-Dichlorobenzene	< 601	601	2
1,2-Dichloroethane	< 4.05	4.05	2
1,2-Dichloropropane	< 4.62	4.62	2
1,3,5-Trimethylbenzene	< 49.2	49.2	2
1,3-Butadiene	< 2.21	2.21	2
1,3-Dichlorobenzene	< 601	601	2
1,4-Dichlorobenzene	< 6.01	6.01	2
1,4-Dioxane	< 18.0	18.0	2
2-Butanone (MEK)	< 29500	29500	2
2-Hexanone	< 205	205	2
Acetone	< 23800	23800	2
Benzene	< 16.0	16.0	2
Benzyl Chloride	< 4.14	4.14	1,2
Bromodichloromethane	< 5.36	5.36	1,2
Bromoform	< 103	103	2
Bromomethane	< 38.8	38.8	2
Carbon Disulfide	< 3110	3110	2
Carbon Tetrachloride	< 6.29	6.29	2
Chlorobenzene	< 230	230	2
Chloroethane	< 132	132	2



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 8.30	8.30	2
Chloromethane	< 206	206	2
cis-1,2-Dichloroethene	< 198	198	2
cis-1,3-Dichloropropene	< 45.4	45.4	2
Cyclohexane	< 55100	55100	2
Dibromochloromethane	< 8.52	8.52	2
Dichlorodifluoromethane	< 495	495	2
Ethyl Acetate	< 18000	18000	2
Ethylbenzene	< 86.8	86.8	2
Hexachloro-1,3-butadiene	< 10.7	10.7	2
Isooctane	< 4670	4670	2
m,p-Xylene	< 434	434	2
Methylene Chloride	< 417	417	2
Methyl-tert-butyl ether	< 361	361	2
N-Heptane	< 4100	4100	2
N-Hexane	< 1760	1760	2
o-Xylene	< 434	434	2
Propylene	< 1720	1720	2
Styrene	< 4260	4260	2
Tetrachloroethene	48.8	31.9	2
Tetrahydrofuran	< 2950	2950	2
Toluene	< 37700	37700	2
trans-1,2-Dichloroethene	< 396	396	2
trans-1,3-Dichloropropene	< 45.4	45.4	2
Trichlorethene	< 10.7	10.7	2
Trichlorofluoromethane	< 5620	5620	2
Vinyl Acetate	< 1760	1760	2
Vinyl Bromide	< 4.37	4.37	2
Vinyl Chloride	< 12.8	12.8	2
4-bromofluorobenzene (surrogate)	96%		
Analysis Date/Time:	10-2-15/06:51		
Analyst Initials	tjg		

TO-15 Quality Control Data

EnvisionAir Batch Number: 093015AIR(1)

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
4-Ethyltoluene	< 100	100	
4-Methyl-2-pentanone (MIBK)	< 500	500	
1,1,1-Trichloroethane	< 100	100	
1,1,2,2-Tetrachloroethane	< 0.049	0.049	1
1,1,2-Trichloroethane	< 0.038	0.038	1
1,1-Dichloroethane	< 1	1	
1,1-Dichloroethene	< 50	50	
1,2,4-Trichlorobenzene	< 0.1	0.1	
1,2,4-Trimethylbenzene	< 1	1	
1,2-dibromoethane (EDB)	< 0.0041	0.0041	1
1,2-Dichlorobenzene	< 10	10	
1,2-Dichloroethane	< 0.1	0.1	
1,2-Dichloropropane	< 0.1	0.1	
1,3,5-Trimethylbenzene	< 1	1	
1,3-Butadiene	< 0.1	0.1	
1,3-Dichlorobenzene	< 10	10	
1,4-Dichlorobenzene	< 0.1	0.1	
1,4-Dioxane	< 0.5	0.5	
2-Butanone (MEK)	< 1000	1000	
2-Hexanone	< 5	5	
Acetone	< 1000	1000	
Benzene	< 0.5	0.5	
Benzyl Chloride	< 0.08	0.08	1
Bromodichloromethane	< 0.08	0.08	1
Bromoform	< 1	1	
Bromomethane	< 1	1	
Carbon Disulfide	< 100	100	
Carbon Tetrachloride	< 0.1	0.1	
Chlorobenzene	< 5	5	
Chloroethane	< 5	5	
Chloroform	< 0.17	0.17	
Chloromethane	< 10	10	
cis-1,2-Dichloroethene	< 5	5	
cis-1,3-Dichloropropene	< 1	1	
Cyclohexane	< 1600	1600	
Dibromochloromethane	< 0.1	0.1	
Dichlorodifluoromethane	< 10	10	
Ethyl Acetate	< 500	500	
Ethylbenzene	< 2	2	
Hexachloro-1,3-butadiene	< 0.1	0.1	
Isooctane	< 100	100	
m,p-Xylene	< 10	10	
Methylene Chloride	< 12	12	
Methyl-tert-butyl ether	< 10	10	
N-Heptane	< 100	100	
N-Hexane	< 50	50	
o-Xylene	< 10	10	
Propylene	< 100	100	
Styrene	< 100	100	
Tetrachloroethene	< 0.47	0.47	
Tetrahydrofuran	< 100	100	

Analytical Report

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
Toluene	< 1000	1000	
trans-1,2-Dichloroethene	< 10	10	
trans-1,3-Dichloropropene	< 1	1	
Trichlorethene	< 0.2	0.2	
Trichlorofluoromethane	< 100	100	
Vinyl Acetate	< 50	50	
Vinyl Bromide	< 0.1	0.1	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	98%		
Analysis Date/Time:	9-30-15/10:05		
Analyst Initials	tjg		

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D Conc(ppbv)</u>	<u>LCS Rec.</u>	<u>LCSD Rec.</u>	<u>RPD</u>	<u>Flag</u>
Propylene	10.1	8.68	10	101%	87%	15.1%	
Dichlorodifluoromethane	9.34	9.73	10	93%	97%	4.1%	
Chloromethane	10.2	9.43	10	102%	94%	7.8%	
Vinyl Chloride	11	10.1	10	110%	101%	8.5%	
1,3-Butadiene	10.2	9.07	10	102%	91%	11.7%	
Bromomethane	10.2	9.81	10	102%	98%	3.9%	
Chloroethane	11.4	10.3	10	114%	103%	10.1%	
Vinyl Bromide	10.4	10.1	10	104%	101%	2.9%	
Trichlorofluoromethane	10.8	10.4	10	108%	104%	3.8%	
Acetone	9.85	9.4	10	99%	94%	4.7%	
1,1-Dichloroethene	10.2	9.48	10	102%	95%	7.3%	
Methylene Chloride	9.22	8.8	10	92%	88%	4.7%	
Carbon Disulfide	9.74	9.09	10	97%	91%	6.9%	
trans-1,2-Dichloroethene	9.52	8.97	10	95%	90%	5.9%	
Methyl-tert-butyl ether	9.82	9.32	10	98%	93%	5.2%	
1,1-Dichloroethane	9.72	9.25	10	97%	93%	5.0%	
Vinyl Acetate	9.94	9.66	10	99%	97%	2.9%	
N-Hexane	10	9.58	10	100%	96%	4.3%	
2-Butanone (MEK)	10.8	10.2	10	108%	102%	5.7%	
cis-1,2-Dichloroethene	9.8	9.28	10	98%	93%	5.5%	
Ethyl Acetate	9.94	9.31	10	99%	93%	6.5%	
Chloroform	9.2	8.69	10	92%	87%	5.7%	
Tetrahydrofuran	10.8	11.3	10	108%	113%	4.5%	
1,2-Dichloroethane	10.6	10.6	10	106%	106%	0.0%	
1,1,1-Trichloroethane	9.8	10.1	10	98%	101%	3.0%	
Carbon Tetrachloride	9.58	9.6	10	96%	96%	0.2%	
Benzene	10.1	10.2	10	101%	102%	1.0%	
Cyclohexane	9.45	9.3	10	95%	93%	1.6%	
1,2-Dichloropropane	10.6	10.7	10	106%	107%	0.9%	
Trichlorethene	9.88	9.78	10	99%	98%	1.0%	
Bromodichloromethane	9.91	9.97	10	99%	100%	0.6%	
1,4-Dioxane	9.74	10	10	97%	100%	2.6%	
Isooctane	10.3	10.2	10	103%	102%	1.0%	
N-Heptane	10.8	10.3	10	108%	103%	4.7%	
cis-1,3-Dichloropropene	10.1	10	10	101%	100%	1.0%	
4-Methyl-2-pentanone (MIBK)	11.1	11.1	10	111%	111%	0.0%	
trans-1,3-Dichloropropene	10.1	10.2	10	101%	102%	1.0%	
1,1,2-Trichloroethane	10.1	10.2	10	101%	102%	1.0%	
Toluene	10.1	10.1	10	101%	101%	0.0%	
2-Hexanone	11.6	11.7	10	116%	117%	0.9%	
Dibromochloromethane	9.36	9.7	10	94%	97%	3.6%	
1,2-dibromoethane (EDB)	10.2	10	10	102%	100%	2.0%	
Tetrachloroethene	10.1	10.3	10	101%	103%	2.0%	
Chlorobenzene	10.3	10.4	10	103%	104%	1.0%	
Ethylbenzene	10.4	10.4	10	104%	104%	0.0%	
m,p-Xylene	20.8	20.9	20	104%	105%	0.5%	
Bromoform	9.17	9.42	10	92%	94%	2.7%	



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Analytical Report

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D</u> <u>Conc(ppbv)</u>	<u>LCS</u> <u>Rec.</u>	<u>LCSD</u> <u>Rec.</u>	<u>RPD</u>	<u>Flag</u>
Styrene	10.4	10.6	10	104%	106%	1.9%	
1,1,2,2-Tetrachloroethane	9.87	10.3	10	99%	103%	4.3%	
o-Xylene	10.4	10.2	10	104%	102%	1.9%	
4-Ethyltoluene	9.65	9.84	10	97%	98%	1.9%	
1,3,5-Trimethylbenzene	10.3	10.5	10	103%	105%	1.9%	
1,2,4-Trimethylbenzene	10.1	10.1	10	101%	101%	0.0%	
1,3-Dichlorobenzene	10.1	10.3	10	101%	103%	2.0%	
Benzyl Chloride	9.72	9.83	10	97%	98%	1.1%	
1,4-Dichlorobenzene	10.5	10.6	10	105%	106%	0.9%	
1,2-Dichlorobenzene	10.3	10.4	10	103%	104%	1.0%	
1,2,4-Trichlorobenzene	10.2	10.1	10	102%	101%	1.0%	
Hexachloro-1,3-butadiene	8.51	8.36	10	85%	84%	1.8%	
4-bromofluorobenzene (surrogate)	97%	96%					
Analysis Date/Time:	9-30-15/08:44	9-30-15/09:27					
Analyst Initials	tjg	tjg					

TO-15 Quality Control Data

EnvisionAir Batch Number: 093015AIR(2)

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
4-Ethyltoluene	< 100	100	
4-Methyl-2-pentanone (MIBK)	< 500	500	
1,1,1-Trichloroethane	< 100	100	
1,1,2,2-Tetrachloroethane	< 0.049	0.049	1
1,1,2-Trichloroethane	< 0.038	0.038	1
1,1-Dichloroethane	< 1	1	
1,1-Dichloroethene	< 50	50	
1,2,4-Trichlorobenzene	< 0.1	0.1	
1,2,4-Trimethylbenzene	< 1	1	
1,2-dibromoethane (EDB)	< 0.0041	0.0041	1
1,2-Dichlorobenzene	< 10	10	
1,2-Dichloroethane	< 0.1	0.1	
1,2-Dichloropropane	< 0.1	0.1	
1,3,5-Trimethylbenzene	< 1	1	
1,3-Butadiene	< 0.1	0.1	
1,3-Dichlorobenzene	< 10	10	
1,4-Dichlorobenzene	< 0.1	0.1	
1,4-Dioxane	< 0.5	0.5	
2-Butanone (MEK)	< 1000	1000	
2-Hexanone	< 5	5	
Acetone	< 1000	1000	
Benzene	< 0.5	0.5	
Benzyl Chloride	< 0.08	0.08	1
Bromodichloromethane	< 0.08	0.08	1
Bromoform	< 1	1	
Bromomethane	< 1	1	
Carbon Disulfide	< 100	100	
Carbon Tetrachloride	< 0.1	0.1	
Chlorobenzene	< 5	5	
Chloroethane	< 5	5	
Chloroform	< 0.17	0.17	
Chloromethane	< 10	10	
cis-1,2-Dichloroethene	< 5	5	
cis-1,3-Dichloropropene	< 1	1	
Cyclohexane	< 1600	1600	
Dibromochloromethane	< 0.1	0.1	
Dichlorodifluoromethane	< 10	10	
Ethyl Acetate	< 500	500	
Ethylbenzene	< 2	2	
Hexachloro-1,3-butadiene	< 0.1	0.1	
Isooctane	< 100	100	
m,p-Xylene	< 10	10	
Methylene Chloride	< 12	12	
Methyl-tert-butyl ether	< 10	10	
N-Heptane	< 100	100	
N-Hexane	< 50	50	
o-Xylene	< 10	10	
Propylene	< 100	100	
Styrene	< 100	100	
Tetrachloroethene	< 0.47	0.47	
Tetrahydrofuran	< 100	100	

Analytical Report

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
Toluene	< 1000	1000	
trans-1,2-Dichloroethene	< 10	10	
trans-1,3-Dichloropropene	< 1	1	
Trichlorethene	< 0.2	0.2	
Trichlorofluoromethane	< 100	100	
Vinyl Acetate	< 50	50	
Vinyl Bromide	< 0.1	0.1	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	95%		
Analysis Date/Time:	10-1-15/21:37		
Analyst Initials	tjg		

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D</u> <u>Conc(ppbv)</u>	<u>LCS</u> <u>Rec.</u>	<u>LCSD</u> <u>Rec.</u>	<u>RPD</u>	<u>Flag</u>
Propylene	9.94	10.6	10	99%	106%	6.4%	
Dichlorodifluoromethane	8.51	9.41	10	85%	94%	10.0%	
Chloromethane	8.76	9.24	10	88%	92%	5.3%	
Vinyl Chloride	10	10.1	10	100%	101%	1.0%	
1,3-Butadiene	8.47	8.79	10	85%	88%	3.7%	
Bromomethane	10.3	10.7	10	103%	107%	3.8%	
Chloroethane	10.1	10.3	10	101%	103%	2.0%	
Vinyl Bromide	11.1	11.6	10	111%	116%	4.4%	
Trichlorofluoromethane	9.94	10.3	10	99%	103%	3.6%	
Acetone	9.06	9.25	10	91%	93%	2.1%	
1,1-Dichloroethene	9.59	9.93	10	96%	99%	3.5%	
Methylene Chloride	9.25	9.34	10	93%	93%	1.0%	
Carbon Disulfide	10.9	11.1	10	109%	111%	1.8%	
trans-1,2-Dichloroethene	10.5	10.4	10	105%	104%	1.0%	
Methyl-tert-butyl ether	9.09	9.5	10	91%	95%	4.4%	
1,1-Dichloroethane	9.61	9.99	10	96%	100%	3.9%	
Vinyl Acetate	9.5	9.72	10	95%	97%	2.3%	
N-Hexane	10.4	10.3	10	104%	103%	1.0%	
2-Butanone (MEK)	10.2	10.4	10	102%	104%	1.9%	
cis-1,2-Dichloroethene	9.52	9.74	10	95%	97%	2.3%	
Ethyl Acetate	9.49	9.53	10	95%	95%	0.4%	
Chloroform	8.91	9.1	10	89%	91%	2.1%	
Tetrahydrofuran	9.77	9.88	10	98%	99%	1.1%	
1,2-Dichloroethane	8.6	8.83	10	86%	88%	2.6%	
1,1,1-Trichloroethane	8.21	8.37	10	82%	84%	1.9%	
Carbon Tetrachloride	8.06	8.45	10	81%	85%	4.7%	
Benzene	10.2	10.4	10	102%	104%	1.9%	
Cyclohexane	8.58	9.05	10	86%	91%	5.3%	
1,2-Dichloropropane	10.1	10.9	10	101%	109%	7.6%	
Trichlorethene	8.88	9.48	10	89%	95%	6.5%	
Bromodichloromethane	8.7	8.82	10	87%	88%	1.4%	
1,4-Dioxane	9.97	9.08	10	100%	91%	9.3%	
Isooctane	9.43	9.67	10	94%	97%	2.5%	
N-Heptane	9.34	9.86	10	93%	99%	5.4%	
cis-1,3-Dichloropropene	8.98	9.29	10	90%	93%	3.4%	
4-Methyl-2-pentanone (MIBK)	9.44	9.82	10	94%	98%	3.9%	
trans-1,3-Dichloropropene	8.49	8.66	10	85%	87%	2.0%	
1,1,2-Trichloroethane	9.3	9.78	10	93%	98%	5.0%	
Toluene	9.49	9.67	10	95%	97%	1.9%	
2-Hexanone	9.41	9.78	10	94%	98%	3.9%	
Dibromochloromethane	9.79	10.2	10	98%	102%	4.1%	
1,2-dibromoethane (EDB)	10.7	11.1	10	107%	111%	3.7%	
Tetrachloroethene	10.2	10.5	10	102%	105%	2.9%	
Chlorobenzene	11	11.3	10	110%	113%	2.7%	
Ethylbenzene	10.6	10.9	10	106%	109%	2.8%	
m,p-Xylene	20.7	21.3	20	104%	107%	2.9%	
Bromoform	9.62	9.96	10	96%	100%	3.5%	



EnvisionAir

1441 Sadlier Circle West Drive
 Indianapolis, IN 46239
 Ph: 317-351-0885
 Fax: 317-351-0882
 www.envision-air.com

Analytical Report

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D</u> <u>Conc(ppbv)</u>	<u>LCS</u> <u>Rec.</u>	<u>LCSD</u> <u>Rec.</u>	<u>RPD</u>	<u>Flag</u>
Styrene	11	11.3	10	110%	113%	2.7%	
1,1,2,2-Tetrachloroethane	10.9	11.4	10	109%	114%	4.5%	
o-Xylene	11	11.5	10	110%	115%	4.4%	
4-Ethyltoluene	9.6	9.93	10	96%	99%	3.4%	
1,3,5-Trimethylbenzene	10.1	10.5	10	101%	105%	3.9%	
1,2,4-Trimethylbenzene	10	10.2	10	100%	102%	2.0%	
1,3-Dichlorobenzene	9.63	9.95	10	96%	100%	3.3%	
Benzyl Chloride	8.79	8.99	10	88%	90%	2.2%	
1,4-Dichlorobenzene	9.73	10.2	10	97%	102%	4.7%	
1,2-Dichlorobenzene	10.1	10.5	10	101%	105%	3.9%	
1,2,4-Trichlorobenzene	8.65	9.16	10	87%	92%	5.7%	
Hexachloro-1,3-butadiene	8.84	9.04	10	88%	90%	2.2%	
4-bromofluorobenzene (surrogate)	109%	110%					
Analysis Date/Time:	10-1-15/20:16	10-1-15/20:59					
Analyst Initials	tjg	tjg					



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Flag Number

Comments

- | | |
|---|--|
| 1 | Reporting limit is supported by MDL. TJG |
| 2 | Reported value is from a 10x dilution. TJG 10-9-15 |

CHAIN OF CUSTODY RECORD

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: <u>ENVIRO FORENSICS</u>	P.O. Number: <u>2015873</u>
Report Address:	Project Name or Number: <u>FUR VOGUE CLEANERS</u>
Report To: <u>R. Hoveman</u>	Sampled by:
Phone: <u>262-510-0612</u>	QA/QC Required: (circle if applicable) Level III <u>Level IV</u>
Invoice Address:	Reporting Units needed: (circle) <u>ug/m³</u> mg/m ³ PPBV PPMV
Desired TAT: (Please Circle One) <u>1 day</u> 2 days 3 days <u>Std (5 bus. days)</u>	Media type: 1LC = 1 Liter Canister 6LC = 6 Liter Canister TB = Tedlar Bag TD = Thermal Desorption Tube

REQUESTED PARAMETERS

TO-15 Full List

TO-15 Short List



Sampling Type:

- Soil-Gas:
- Sub-Slab:
- Indoor-Air:

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Canister Pressure / Vacuum

Air Sample ID	Media Type <small>(see code above)</small>	Coll. Date <small>(Grab/Comp Start)</small>	Coll. Time <small>(Grab/Comp Start)</small>	Coll. Date <small>(Comp. End)</small>	Coll. Time <small>(Comp. End)</small>					Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
6349-2600-IA-1-1	6LC	9/26	1257	9/27/15	1212	X				4687	67750	-28	0	0	
6349-2600-IA-2-1	6LC	9/26	1259	9/27/15	1214	X				16019	07460	-30	-8	-8	
6349-2600-IA-3-8	6LC	9/26	1250	9/27/15	1217	X				91538	07622	-27	-9	-9	
6349-2600-IA-4-B	6LC	9/26	1253	9/27/15	1210	X				91573	04652	-29	-5	-5	
6349-2600-OA	6LC	9/26	1305	9/27	1200	X				11670	07438	-28.5	-4	-4	
6349-2600-SSV-1	1LC	9/27	1237	9/27/15	1244	X				515	-	-28	-2	-2	
6349-2600-SSV-2	1LC	9/27	1305	9/27/15	1312	X				2540	-	-28	-2	-2	

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	9/25/15	1021	<u>[Signature]</u>	9/29/15	10:45

Understanding Chemical Vapor Intrusion Testing Results

PUB-RR-977

Apr 2014

From the Lab to You

Chemical vapor samples were taken from underneath your house or building and possibly indoors as well. These samples have been tested by a certified laboratory and a report was issued. The Wisconsin Department of Natural Resources (DNR) uses these test results to determine if people in the building are being exposed to chemical vapors coming from nearby contaminated soil or groundwater, and to decide what, if any, action is needed to prevent this exposure.

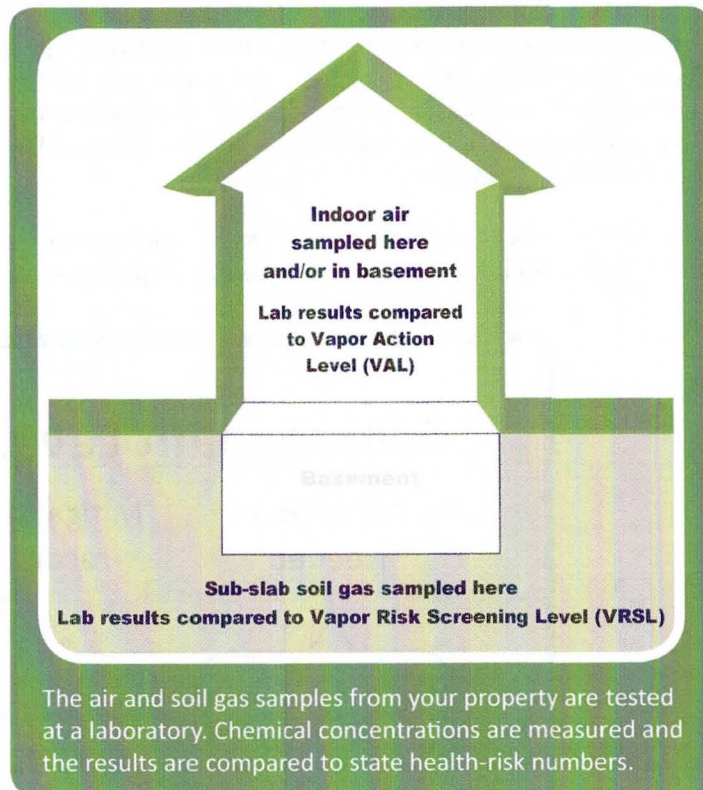
Indoor Air Testing Results

If indoor air samples were collected in your house or building, test results from the lab will be compared to the state Vapor Action Level (VAL) for chemicals of concern. If test results show chemical concentrations in your air below the VAL then adverse health effects are not expected, even if you were to breathe the chemical at this concentration for your whole life.

Test results showing chemical concentrations in the air at or above the VAL prompt DNR to recommend that exposures to these chemical vapors be reduced. If test results show concentrations significantly above the VAL, or more than one type of chemical vapor is identified in your indoor air, the risk from exposure increases. If the concentration of any indoor chemical vapor exceeds 10 times the VAL, DNR is concerned about even short-term exposure and will typically require immediate action to address the problem.

The VAL for each chemical is set by scientific research. It is protective of all people, including those who are most susceptible to adverse health effects. For cancer-causing chemicals, no more than 1 in 100,000 people breathing indoor air with chemical concentrations below the VAL are expected to get cancer from exposure to that chemical. Concentrations above the VAL are of greater concern.

If test results identify chemicals in your air that are not present in nearby soil or groundwater contamination, it is likely that these vapors are coming from some product or activity in or near your house or building. Many everyday consumer products (e.g., cleaners, solvents, polish, adhesives, lubricants, aerosols, insect repellants, etc.); combustion processes (e.g., smoking, home heating); fuels in attached garages; dry cleaned clothing or draperies; and occupant activities (e.g., craft hobbies), also release chemical vapors into the air.



The air and soil gas samples from your property are tested at a laboratory. Chemical concentrations are measured and the results are compared to state health-risk numbers.

Sub-slab Soil Gas Testing Results

Soil gas samples were collected from the ground beneath the concrete slab of your building foundation or basement. The lab measured the concentrations of various chemicals in these samples. DNR compares these measurements to the state Vapor Risk Screening Level (VRSL), which identifies the concentration of a chemical in soil gas that scientific research suggests can be a health risk if vapor enters a building. If soil gas measurements exceed the VRSL for a chemical of concern, action to reduce exposure is strongly recommended.

The VRSL is a higher number (higher chemical concentration) than the VAL because it is presumed that concrete building foundations and basement walls will prevent most soil gas from entering a building. Further, any soil gas that does enter a building through cracks, holes, sump pumps, drains, etc., will be diluted to some extent by the indoor air. So, people inside will not be breathing air that includes the full concentration of chemical vapors that exist in the ground.



Wisconsin Department of Natural Resources
P.O. Box 7921, Madison, WI 53707
dnr.wi.gov, search "Brownfields"



DNR generally relies on the test results of the sub-slab soil gas samples when determining what, if any, action should be taken related to chemical vapors coming from nearby soil or groundwater contamination. Indoor air quality is highly variable, and it is difficult to make a definitive decision about vapor intrusion based on indoor air sampling alone.

Follow-Up Actions

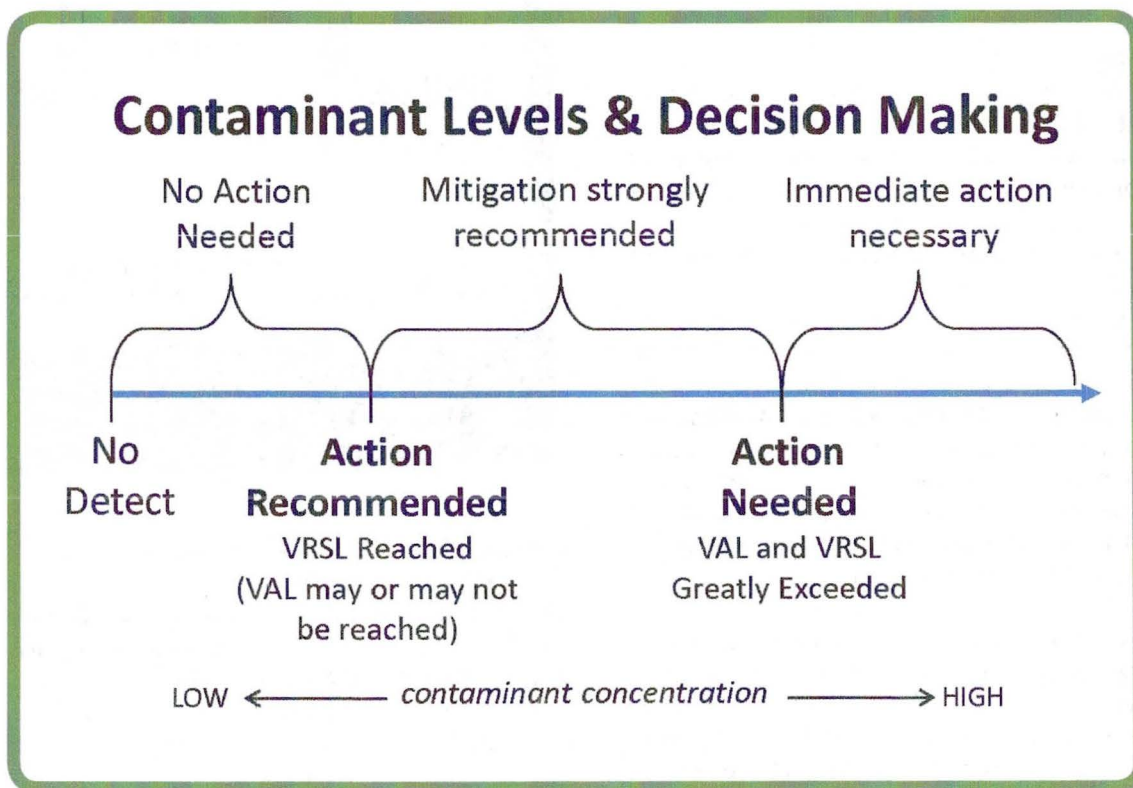
If your test results are less than a VAL for indoor air, or a VRSL for sub-slab soil gas, then the air in the house or building should not present a health concern. Follow-up sampling and testing may be necessary to confirm the results, but no other action is typically suggested.

When test results show soil gas chemical concentrations above a VRSL, both DNR and the Wisconsin Department of

Health Services recommend that owners take action to reduce potential exposure. This typically involves installing a vapor mitigation system that vents chemical vapors from beneath your home or building to the outdoors, similar to a radon mitigation system.

If indoor air concentrations exceed a VAL, but sub-slab concentrations are less than a VRSL, then the chemical vapors are most likely coming from indoor sources. Steps should be taken by the house or building owner to identify the products and practices causing the problem and implement appropriate remedies.

If soil gas mitigation is recommended, a representative of the party who is responsible for the soil or groundwater contamination will contact you to discuss your options.



A Note about Measurement Units: The lab report may include some unfamiliar technical language. The most important point to note is whether or not the test result for a specific chemical exceeds a VAL or VRSL, which are also sometimes referred to, generically, as "screening levels."

The concentration of gaseous pollutants in air is typically described in two different ways: 1) as units of mass per volume, where $\mu\text{g}/\text{m}^3$ represents micrograms of gaseous pollutant per cubic meter of ambient air; and 2) as parts per billion by volume (ppbv), where the volume of a gaseous pollutant is compared to a set volume of ambient air. These are the numbers that are compared to the VAL and VRSL.

For more information, visit dnr.wi.gov/topic/Brownfields/Vapor.html