



March 1, 2019

Alphonse Jr. and Margaret Uselding
1756 North Holden Street
Port Washington, WI 53074

Subject: Environmental Investigation Sampling Results
BRRTS#: 02-46-548092

Dear Mr. Uselding:

In accordance with Wisconsin Department of Natural Resources (WDNR) regulation NR 716.14, EnviroForensics, LLC (EnviroForensics) is providing the results of environmental samples collected from your property located at 105-107 North Franklin Street in Port Washington, Wisconsin on February 14-15, 2019. The sampling activities are part of an environmental investigation being performed for the Harborview Cleaners facility located at 134 East Grand Avenue in Port Washington, Wisconsin at the direction of the WDNR. The chemicals of concern for the investigation are the dry cleaning solvent tetrachloroethene (PCE) and its associated breakdown products.

Sampling Results

Three (3) indoor air samples were collected from your property located at 105-107 North Franklin Street. One (1) outdoor air sample was also collected for quality control purposes. The sample locations are shown on the attached figure. One soil gas sample was collected to determine the concentrations of the chemicals of concern emitted in the sub-slab depressurization system (SSDS) exhaust. The results of the samples are summarized and compared to WDNR standards on the attached **Table 1**. The laboratory report that relates to the samples are also attached.

As listed on the attached table, PCE was detected in basement samples 6348-105-IA-B and 6348-107-IA-B at concentrations of 41.8 and 9.09 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), respectively. PCE was also detected in first floor air sample 6348-105-IA-1 at a concentration of $13.2 \mu\text{g}/\text{m}^3$. These PCE concentrations are *all below* the WDNR's vapor action level (VAL) for small commercial buildings of $180 \mu\text{g}/\text{m}^3$. No other chemicals of concern were detected in the indoor air samples.

Soil gas sample 6348-EP-2 contained PCE at a concentration of $52.9 \mu\text{g}/\text{m}^3$, and trichloroethene (TCE) at a concentration of $317 \mu\text{g}/\text{m}^3$. These results confirm that the sub-slab depressurization system continues to capture sub-slab vapor as intended.

The concentrations of PCE in the basement and first floor air samples are all below the VAL for the first time since the sampling program began. These results demonstrate that remediation at the Harborview Cleaners property has reduced the vapor intrusion risk in your building. The next air sampling event is tentatively scheduled for August 2019.

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 bkappen@enviroforensics.com and rhoverman@enviroforensics.com. The WDNR project manager, John Feeney, can be reached at 920-893-8523. We greatly appreciate your help and patience with this matter.

Sincerely,
EnviroForensics, LLC

A handwritten signature in blue ink, appearing to read "Brian Kappen".

Brian Kappen, PG
Project Manager

Rob Hoverman, LPG
Senior Project Manager

Attachments: Vapor Intrusion Sample Locations Figure
Sample Results Summary Table
Laboratory Analytical Report

Copy: John Feeney, Wisconsin Department of Natural Resources
Rob Thiboldeaux, Department of Health Services

VAPOR INTRUSION SAMPLE LOCATIONS
103 through 109 N. Franklin Street, Port Washington, Wisconsin



Legend

○ Indoor/Outdoor Air Sample

★ Sub-Slab Vapor Sample

IA-B = Basement

IA-1 = 1st Floor

IA = 2nd Floor



TABLE 1
VAPOR INTRUSION ASSESSMENT RESULTS SUMMARY - 105-107 NORTH FRANKLIN STREET

Harborview Cleaners
 134 E. Grand Avenue
 Port Washington, Wisconsin

Sample Identification	Sample Location	Sample Date	Exposure Criteria	Mitigation	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
INDOOR/OUTDOOR AIR									
Small Commercial Vapor Action Level					180	8.8	NE	NE	28
6348-OA	Outdoor	1/13/2016	Small Commercial	Pre	4.75	<1.07	<3.96	<3.96	<0.64
		5/24/2016		Post	6.92	<1.07	<3.96	<3.96	<0.64
		11/2/2016		Post	16.9	<1.07	<3.96	<3.96	<0.64
		8/8/2017		Post	<3.19	<1.07	<19.8	<39.6	<1.28
		2/27/2018		Post	<3.19	<1.07	<19.8	<39.6	<1.28
		2/15/2019		Post	<3.19	<1.07	<19.8	<39.6	<1.28
6348-105-IA-B	Basement	12/2/2015	Small Commercial	Pre	852	<1.07	<19.8	<39.6	<1.28
		1/13/2016		Pre	1,130	<1.07	<3.96	<3.96	<0.64
		5/24/2016		Post	4,260	<1.07	<3.96	<3.96	<0.64
		11/2/2016		Post	402	<1.07	<3.96	<3.96	<0.64
		8/8/2017		Post	303	<1.07	<19.8	<39.6	<1.28
		2/27/2018		Post	324	<1.07	<19.8	<39.6	<1.28
		2/15/2019		Post	41.8	<1.07	<19.8	<39.6	<1.28
6348-107-IA-B	Basement	12/2/2015	Small Commercial	Pre	265	<1.07	<19.8	<39.6	<1.28
		1/13/2016		Pre	504	<1.07	<3.96	<3.96	<0.64
		5/24/2016		Post	1,420	<1.07	<3.96	<3.96	<0.64
		11/2/2016		Post	188	<1.07	<3.96	<3.96	<0.64
		8/8/2017		Post	165	<1.07	<19.8	<39.6	<1.28
		2/27/2018		Post	13.5	<1.07	<19.8	<39.6	<1.28
		2/15/2019		Post	9.09	<1.07	<19.8	<39.6	<1.28
6348-105/107-IA-1	1st Floor	12/2/2015	Small Commercial	Pre	199	<1.07	<19.8	<39.6	<1.28
6348-105-IA-1	1st Floor	1/13/2016	Small Commercial	Pre	296	<1.07	<3.96	<3.96	<0.64
		5/24/2016		Post	1,480	<1.07	<3.96	<3.96	<0.64
		11/2/2016		Post	277	<1.07	<3.96	<3.96	<0.64
		8/8/2017		Post	132	<1.07	<19.8	<39.6	<1.28
		2/27/2018		Post	53.0	<1.07	<19.8	<39.6	<1.28
		2/15/2019		Post	13.2	<1.07	<19.8	<39.6	<1.28
6348-107-IA-1	1st Floor	1/13/2016	Small Commercial	Pre	178	<1.07	<3.96	<3.96	<0.64
SUB-SLAB VAPOR									
Small Commercial Vapor Risk Screening Level					6,000	293	NE	NE	933
6348-107-SSV-1	Basement	12/3/2015	Small Commercial	Pre	142	<10.7	<198	<396	<12.8
		1/13/2016		Pre	326	<10.7	<39.6	<39.6	<6.4
6348-EP-2	Basement	11/2/2016	NA	Post	4,480	107	<39.6	<39.6	<6.4
		8/8/2017		Post	317	146	<198	<396	<12.8
		2/27/2018		Post	120	<10.7	<198	<396	<12.8
		2/15/2019		Post	52.9	317	<198	<396	<12.8

Notes:

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

Samples analyzed according to EPA Method TO-15

The Vapor Risk Screening/Action Levels are calculated in accordance with WDNR Publication RR-800 and subsequent guidance documents.

NA = not applicable for comparison to screening levels (SSDS exhaust sample)

NE = Screening/action level not established

Bolded values are above detection limits

Bolded and orange shaded values exceed the applicable screening or action level for small commercial buildings



EnvisionAir
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Mr. Kyle Vander Heiden
Enviroforensics
N16 W. 23390 Stone Ridge Dr
Suite G
Waukesha, WI 53188

February 28, 2019

EnvisionAir Project Number: 2019-144
Client Project Name: 6348

Dear Mr. Vander Heiden,

Please find the attached analytical report for the samples received February 21, 2019. 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 "Stanley A. Hunnicutt".

Stanley A Hunnicutt

Project Manager
EnvisionAir, LLC



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Client Name: ENVIROFORENSICS
Project ID: 6348
Client Project Manager: KYLE VANDER HEIDEN
EnvisionAir Project Number: 2019-144

Sample Summary

Canister Pressure / Vacuum

<u>Laboratory Sample Number:</u>	<u>Sample Description:</u>	<u>Matrix:</u>	<u>START</u>	<u>START</u>	<u>End Date</u>	<u>End Time</u>	<u>Date</u>	<u>Time</u>	<u>Initial Field</u>	<u>Final Field</u>	<u>Lab</u>
			<u>Date</u>	<u>Time</u>							<u>Collected:</u>
19-623	6348-105-IA-1	A	2/14/19	8:55	2/15/19	8:50	2/21/19	13:20	-29	-5	-5
19-624	6348-105-IA-B	A	2/14/19	9:05	2/15/19	9:02	2/21/19	13:20	-29	0	0
19-625	6348-107-IA-B	A	2/14/19	9:00	2/15/19	8:53	2/21/19	13:20	-29	0	0
19-626	6348-OA	A	2/14/19	8:45	2/15/19	8:45	2/21/19	13:20	-29	-4	-4
19-627	6348-EP-2	A	2/15/19	9:16	2/15/19	9:21	2/21/19	13:20	-28	-2	-2



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Client Name: ENVIROFORENSICS
Project ID: 6348
Client Project Manager: KYLE VANDER HEIDEN
EnvisionAir Project Number: 2019-144

Analytical Method: TO-15
Analytical Batch: 022219AIR

Client Sample ID: 6348-105-IA-1
Envision Sample Number: 19-623
Sample Matrix: AIR

Sample Collection START Date/Time: 2/14/19 8:55
Sample Collection END Date/Time: 2/15/19 8:50
Sample Received Date/Time: 2/21/19 13:20

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	13.2	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	90%		
Analysis Date/Time:	2-22-19/20:44		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6348
Client Project Manager: KYLE VANDER HEIDEN
EnvisionAir Project Number: 2019-144

Analytical Method: TO-15
Analytical Batch: 022219AIR

Client Sample ID: 6348-105-IA-B
Envision Sample Number: 19-624
Sample Matrix: AIR

Sample Collection START Date/Time: 2/14/19 9:05
Sample Collection END Date/Time: 2/15/19 9:02
Sample Received Date/Time: 2/21/19 13:20

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	41.8	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	2-22-19/21:18		
Analyst Initials	tjg		



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Project ID: 6348
Client Project Manager: KYLE VANDER HEIDEN
EnvisionAir Project Number: 2019-144

Analytical Method: TO-15
Analytical Batch: 022219AIR

Client Sample ID: 6348-107-IA-B
Envision Sample Number: 19-625
Sample Matrix: AIR

Sample Collection START Date/Time: 2/14/19 9:00
Sample Collection END Date/Time: 2/15/19 8:53
Sample Received Date/Time: 2/21/19 13:20

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	9.09	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	2-22-19/21:52		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6348
Client Project Manager: KYLE VANDER HEIDEN
EnvisionAir Project Number: 2019-144

Analytical Method: TO-15
Analytical Batch: 022219AIR

Client Sample ID: 6348-OA **Sample Collection START Date/Time:** 2/14/19 8:45
Envision Sample Number: 19-626 **Sample Collection END Date/Time:** 2/15/19 8:45
Sample Matrix: AIR **Sample Received Date/Time:** 2/21/19 13:20

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	< 3.19	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	87%		
Analysis Date/Time:	2-22-19/15:36		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6348
Client Project Manager: KYLE VANDER HEIDEN
EnvisionAir Project Number: 2019-144

Analytical Method: TO-15
Analytical Batch: 022419AIR

Client Sample ID: 6348-EP-2
Envision Sample Number: 19-627
Sample Matrix: AIR

Sample Collection START Date/Time: 2/15/19 9:16
Sample Collection END Date/Time: 2/15/19 9:21
Sample Received Date/Time: 2/21/19 13:20

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 198	198	
Tetrachloroethene	52.9	31.9	
trans-1,2-Dichloroethene	< 396	396	
Trichloroethene	317	10.7	
Vinyl Chloride	< 12.8	12.8	
4-bromofluorobenzene (surrogate)	85%		
Analysis Date/Time:	2-24-19/16:50		
Analyst Initials	tjg		

TO-15 Quality Control Data

EnvisionAir Batch Number: 022219AIR

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	94%		
Analysis Date/Time:	2-22-19/11:25		
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>
Vinyl Chloride	10.4	9.89	10	104%	99%	5.0%	
trans-1,2-Dichloroethene	10.4	9.99	10	104%	100%	4.0%	
cis-1,2-Dichloroethene	9.45	8.86	10	95%	89%	6.4%	
Trichloroethene	10.2	9.85	10	102%	99%	3.5%	
Tetrachloroethene	9.43	9.91	10	94%	99%	5.0%	
4-bromofluorobenzene (surrogate)	92%	94%					
Analysis Date/Time:	2-22-19/10:14	2-22-19/10:51					
Analyst Initials	tjg	tjg					

TO-15 Quality Control Data

EnvisionAir Batch Number: 022419AIR

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	97%		
Analysis Date/Time:	2-24-19/13:45		
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>
Vinyl Chloride	10.2	10.4	10	102%	104%	1.9%	
trans-1,2-Dichloroethene	9.03	9.93	10	90%	99%	9.5%	
cis-1,2-Dichloroethene	9.17	9.15	10	92%	92%	0.2%	
Trichloroethene	9.91	10	10	99%	100%	0.9%	
Tetrachloroethene	9.15	9.28	10	92%	93%	1.4%	
4-bromofluorobenzene (surrogate)	108%	102%					
Analysis Date/Time:	2-24-19/12:01	2-24-19/12:38					
Analyst Initials	tjg	tjg					



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Flag Number

Comments

CHAIN OF CUSTODY RECORD

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

Client: <u>EnviroForensics, LLC</u>	P.O. Number: <u>2019-0161</u>
Report Address: <u>N16 W23390 Stone Ridge Dr Suite 6 Waukegan, WI 53188</u>	Project Name or Number: <u>6348</u>
Report To: <u>K. Vander Heiden / B. Kappen</u>	Sampled by: <u>KV</u>
Phone: <u>(262) 290-4001</u>	QA/QC Required: (circle if applicable) Level III <input checked="" type="checkbox"/> Level IV <input checked="" type="checkbox"/> IA <u>only</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 (Specify in notes)



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
6348-105-IA-1	6LC	2/14/19	08:55	2/15/19	08:50					14114	05307	-29	-5	-5	19-623
6348-105-IA-B	6LC	2/14/19	09:05	2/15/19	09:02					17894	07442	-29	0	0	19-624
6348-107-IA-B	6LC	2/14/19	09:00	2/15/19	08:53					16023	03065	-29	0	0	19-625
6348-OA	6LC	2/14/19	08:45	2/15/19	08:45					4695	05297	-29	-4	-4	19-626
6348-EP-2	1LC	2/15/19	09:16	2/15/19	09:21					2235	0025	-28	-2	-2	19-627

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
	2/15/19	1400	FedEx	2/21/19	1320
			<i>From Hummel</i>		