

October 9, 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 September 25-26, 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 basement sub-slab depressurization system 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 30.4 and 6.85 micrograms per cubic meter ( $\mu g/m^3$ ), respectively. PCE was also detected in first floor air sample 6348-105-IA-1 at a concentration of 13.9  $\mu g/m^3$ . These PCE concentrations are *all below* the WDNR's vapor action level (VAL) for small commercial buildings of 180  $\mu g/m^3$ . No other chemicals of concern were detected in the indoor air samples. Soil gas sample 6348-EP-2 from the sub-slab depressurization system contained PCE at a concentration of 158  $\mu g/m^3$ .



The concentrations of PCE in the basement and first floor air samples are all below the VAL for the second consecutive sampling event. These results demonstrate that the basement sub-slab depressurization system and remediation at the Harborview Cleaners property has reduced the vapor intrusion risk in your building.

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** 

Brian Kappen, PG Project Manager Rob Hoverman, LPG Senior Project Manager

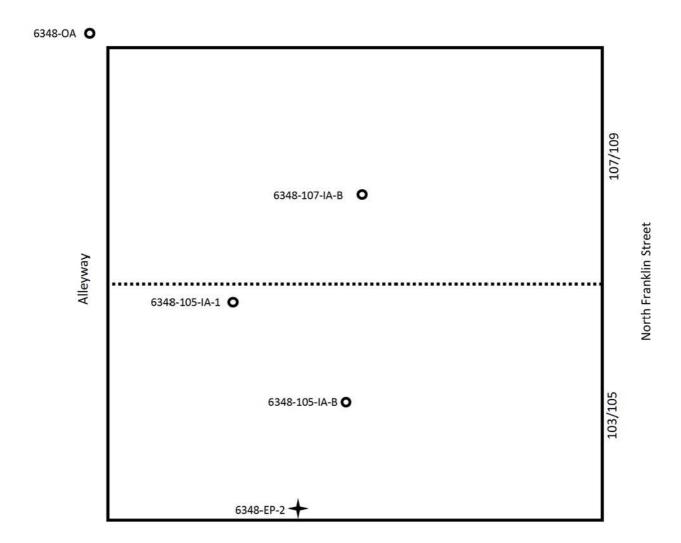
Attachments: Vapor Intrusion Sample Locations Figure

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

O Indoor/Outdoor Air Sample



IA-B = Basement IA-1 = 1<sup>st</sup> 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												
	Sman Com	1/13/2016	Action Level	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			
6348-OA	Outdoor	8/8/2017	Small Commercial	Post	<3.19	<1.07	<19.8	<39.6	<1.28			
3310 311	Guideoi	2/27/2018	onani commerciai	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			
		9/26/2019	Ď.	Post	<3.19	<1.07	<19.8	<39.6	<1.28			
		12/2/2015		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			
6348-105-IA-B	Basement	8/8/2017	Small Commercial	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				
		9/26/2019		Post	30.4	<1.07	<19.8	<39.6	<1.28			
		12/2/2015	Small Commercial	Pre	265	<1.07	<19.8	<39.6	<1.28			
	Basement	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			
6348-107-IA-B		11/2/2016		Post	188	<1.07	<3.96	<3.96	< 0.64			
0.548-107-IA-IS		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			
		9/26/2019		Post	6.85	<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			
		1/13/2016		Pre	296	<1.07	< 3.96	<3.96	< 0.64			
		5/24/2016		Post	1,480	<1.07	<3.96	<3.96	< 0.64			
4500 C 0000 0000 0000 0000	os naven	11/2/2016	Day order	Post	277	<1.07	<3.96	<3.96	< 0.64			
6348-105-IA-1	1st Floor	8/8/2017	Small Commercial	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			
		9/26/2019		Post	13.9	<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			
			1277	SLAB VAPOR								
Sı	mall Commer		sk Screening Level	n	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	The state of the s	Pre	326	<10.7	<39.6	<39.6	<6.4			
		11/2/2016 8/8/2017	1	Post	4,480	107	<39.6 <198	<39.6	<6.4			
6348-EP-2	Basement	2/27/2018	NA	Post Post	317 120	146 <10.7	<198	<396 <396	<12.8 <12.8			
0348-EP-2	basement	2/2//2018	NA.	Post	52.9			<396				
				POSE	54.9	317	<198	< 390	<12.8			

#### Notes:

Results reported in microgragms per cubic meter (µg/m³)

Samples analyzed according to EPA Method TO-15

The Vapor Risk Screeing/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





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

Mr. Brian Kappen Enviroforensics N16 W. 23390 Stone Ridge Dr Suite G Waukesha, WI 53188

October 8, 2019

EnvisionAir Project Number: 2019-622

Client Project Name: 6348

Dear Mr. Kappen,

Please find the attached analytical report for the samples received September 28, 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,

Stanley A Hunnicutt

Stanley O. Thunnicutt

Project Manager EnvisionAir, LLC



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Client Name: ENVIROFORENSICS

Project ID: 6348

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-622

#### Sample Summary

Canister Pressure / Vacuum

			START	START							Lab	
			Date	Time	<b>End Date</b>	<b>End Time</b>	Date	Time	<b>Initial Field</b>	Final Field	Received	
Laboratory Sample Number:	Sample Description:	Matrix:	Collected:	Collected:	Collected:	Collected:	Received:	Received	(in. Hg)	(in. Hg)	(in. Hg)	
19-2764	6348-EP-2	Α	9/26/19	10:45			9/28/19	14:00	-28	-3	-3	
19-2765	6348-107-IA-B	Α	9/25/19	10:45	9/26/19	10:45	9/28/19	14:00	-27	-3	-3	
19-2766	6348-105-IA-1	Α	9/25/19	10:50	9/26/19	10:50	9/28/19	14:00	-30	-8	-8	
19-2767	6348-105-IA-B	A	9/25/19	10:40	9/26/19	10:40	9/28/19	14:00	-29	-4	-4	
19-2768	6348-OA	Α	9/25/19	11:05	9/26/19	11:05	9/28/19	14:00	-29	-5	-5	



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Client Name: ENVIROFORENSICS

Project ID: 6348

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-622

Analytical Method: TO-15

Analytical Batch: 093019CAIR(2)

Client Sample ID: 6348-EP-2 Sample Collection START Date/Time: 9/26/19 10:45

Sample Collection END Date/Time:

Envision Sample Number: 19-2764 Sample Received Date/Time: 9/28/19 14:00

Sample Matrix: AIR

**Analyst Initials** 

Sample Results ug/m<sup>3</sup> Reporting Limit ug/m<sup>3</sup> Compounds Flag cis-1,2-Dichloroethene < 198 198 158 31.9 Tetrachloroethene trans-1,2-Dichloroethene < 396 396 Trichloroethene < 10.7 10.7 Vinyl Chloride < 12.8 12.8 4-bromofluorobenzene (surrogate) 110% Analysis Date/Time: 10-1-19/20:44

tjg



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Client Name: ENVIROFORENSICS

Project ID: 6348

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-622

Analytical Method: TO-15

Analytical Batch: 093019CAIR(1)

Client Sample ID: 6348-107-IA-B Sample Collection START Date/Time: 9/25/19 10:45

Sample Collection END Date/Time: 9/26/19 10:45 Sample Received Date/Time: 9/28/19 14:00

Envision Sample Number: 19-2765 Sample Matrix: AIR

Sample Results ug/m<sup>3</sup> Reporting Limit ug/m<sup>3</sup> Compounds Flag cis-1,2-Dichloroethene < 19.8 19.8 6.85 3.19 Tetrachloroethene trans-1,2-Dichloroethene < 39.6 39.6 Trichloroethene < 1.07 1.07

Vinyl Chloride < 1.28
4-bromofluorobenzene (surrogate) 94%
Analysis Date/Time: 9-30-19/18:30
Analyst Initials tjg



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**Client Name: ENVIROFORENSICS** 

Project ID: 6348

Client Project Manager: **BRIAN KAPPEN** 

**EnvisionAir Project Number:** 2019-622

**Analytical Method:** TO-15 **Analytical Batch:** 093019CAIR(1)

Client Sample ID: 6348-105-IA-1 Sample Collection START Date/Time: 9/25/19 10:50

> Sample Collection END Date/Time: 9/26/19 10:50 Sample Received Date/Time: 9/28/19 14:00

**Envision Sample Number:** 19-2766

Sample Matrix: AIR

Compounds	Sample Results ug/m³	Reporting Limit ug/m <sup>3</sup>	Flag
cis-1,2-Dichloroethene	< 19.8	19.8	14 SACES (1
Tetrachloroethene	13.9	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surro	ogate) 109%		
Analysis Date/Time:	9-30-19/19:06		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6348

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-622

Analytical Method: TO-15

Analytical Batch: 093019CAIR(1)

Client Sample ID: 6348-105-IA-B Sample Collection START Date/Time: 9/25/19 10:40

Sample Collection END Date/Time: 9/26/19 10:40 Sample Received Date/Time: 9/28/19 14:00

Envision Sample Number: 19-2767 Sample Matrix: AIR

Compounds Sample Results ug/m³ Reporting Limit ug/m³ Flag

Compounds	Sample Results ug/ms	Reporting Limit ug/ms	<u> </u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	30.4	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	

4-bromofluorobenzene (surrogate) 95%
Analysis Date/Time: 9-30-19/19:41
Analyst Initials tjg



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**Client Name: ENVIROFORENSICS** 

Project ID: 6348

Client Project Manager: **BRIAN KAPPEN** 

**EnvisionAir Project Number:** 2019-622

**Analytical Method:** TO-15

**Analytical Batch:** 093019CAIR(1)

Client Sample ID: 6348-OA Sample Collection START Date/Time: 9/25/19 11:05

> Sample Collection END Date/Time: 9/26/19 11:05 Sample Received Date/Time: 9/28/19 14:00

**Envision Sample Number:** 19-2768 AIR

Sample Matrix:

Compounds	Sample Results ug/m <sup>3</sup>	Reporting Limit ug/m <sup>3</sup>	Flag
cis-1,2-Dichloroethene	< 19.8	19.8	10 30000
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 (surr	ogate) 86%		
Analysis Date/Time:	9-30-19/17:54		



Analytical Report

**EnvisionAir** 

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### **TO-15 Quality Control Data**

EnvisionAir Batch Number: 093019CAIR(1)

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichlorethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	102%		
Analysis Date/Time:	9-30-19/16:43		
Analyst Initials	tjg		

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Vinyl Chloride	8.56	8.48	10	86%	85%	0.9%	
trans-1,2-Dichloroethene	11.2	10.7	10	112%	107%	4.6%	
cis-1,2-Dichloroethene	10.4	10.5	10	104%	105%	1.0%	
Trichloroethene	9.19	10.2	10	92%	102%	10.4%	
Tetrachloroethene	10.5	11.2	10	105%	112%	6.5%	
4-bromofluorobenzene (surrogate)	111%	114%					
Analysis Date/Time:	9-30-19/15:33	9-30-19/16:10					
Analyst Initials	tjg	tjg					



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Analytical Report

# **TO-15 Quality Control Data**

EnvisionAir Batch Number: 093019CAIR(2)

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichlorethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	92%		
Analysis Date/Time:	10-1-19/15:36		
Analyst Initials	tjg		

			LCS/D	LCS	LCSD		
LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	Conc(ppbv)	Rec.	Rec.	RPD	Flag
Vinyl Chloride	9.16	9.18	10	92%	92%	0.2%	
trans-1,2-Dichloroethene	11.1	11.6	10	111%	116%	4.4%	
cis-1,2-Dichloroethene	10.6	10.7	10	106%	107%	0.9%	
Trichloroethene	10.5	10.4	10	105%	104%	1.0%	
Tetrachloroethene	11.7	10.9	10	117%	109%	7.1%	
4-bromofluorobenzene (surrogate)	103%	96%					
Analysis Date/Time:	10-1-19/13:09	10-1-19/13:47					
Analyst Initials	tjg	tjg					



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Flag Number Comments

1100

400

# **CHAIN OF CUSTODY RECORD**

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

Client: Environovens Report bkayopen@envir Address: com	oforensic	Project	umber: 20 Name or N 6348		126	REQUESTE	D PARAME	TERS				
Report To: B. Kappe	n	Sample	ed by: B.	Capper	2	//			FI	V/I	SIC	NAIR
Phone: 262-745-5			Required:	(circle if applic	able)				_	4 7 1	310	VIANAII.
Invoice Address: accounts	com	Reporti	ing Units no	eeded: (circle	e) PPMV	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	//	Sampling Type: Soil-Gas: □ Sub-Slab: □				
Desired TAT: (Please Circle On 1 day 2 days 3 days Std (	e)	Media type	: 1LC = 1 Liter Co 6LC = 6 Liter Co TB = Tediar Bo TD = Thermal	anister anister ag Desorption Tube		To Is sull tiss		Indoor-Air:	Caniste	r Pressure /	vision-air.c	com
Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp	Coll. Time (Grab/Comp	Coll. Date (Comp. End)	Coll. Time (Comp. End)		Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
6348-EP-2	ILC	126/19	1045			X	2233	0084	-28	-3	-3	19-2764
6348-107-IA-B	6LC	9/25/19	1045	9/26/19	1045	X	80636	08008	-27	-3	-3	19-2765
6348-105-IA-1		1/25/19	1050	9/26/19	1050	X	14924	07618	-30	-3	-8	19-2766
6348-105-IA-E		9/25/19	1040	1/26/19	1040	X	0.000	07750	-29	-4	-4	19-2767
6348-04	64	1/25/19	1105	926/19	1105	X		08005	-29	-5	-5	19-2768
Comments:											H	
Relin	quished	by:			Date	Time	Rec	eived by:		Da	ite	Time

9/27/19

1100

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Staw Hunnicall