



March 17, 2021

Jennifer Schkirkie
105 Warren Street
Portage, WI 53901

**Subject: Vapor Intrusion Sampling Results – 105 Warren Street, Portage, Wisconsin
BRRTS: 02-11-512824**

Dear Ms. Schkirkie:

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, EnviroForensics, LLC. (EnviroForensics) is providing the results of environmental samples collected from your property located at 105 Warren Street in Portage, Wisconsin. The samples were collected on March 2-3, 2021. The sampling activities are part of an environmental investigation being performed for the Portage Cleaners facility located at 104 West Wisconsin Street in Portage 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:

Portage Cleaners
104 West Wisconsin Street
Portage, WI

Sampling Results

Two indoor air samples designated 6493-105 Warren-IA-B and 6493-105 Warren-IA-1 were collected from within the basement and first floor, respectively. For quality control purposes a sample of outdoor ambient air designated 6493-105 Warren-OA-1 was collected. Additionally, one (1) sub-slab vapor sample designated 6493-105 Warren-SSV-1 was collected from beneath the basement floor of your building. The sampling locations are depicted on the attached **Figure 1**. The results of the vapor samples are summarized and compared to WDNR standards on the attached **Table 1** with the previous results. A copy of the laboratory report that relates to the vapor samples is also attached.

PCE was detected in the sub-slab vapor sample, but at a concentration below the Vapor Risk Screening Level (VRSL). No other compounds were detected in the sub-slab sample. The indoor air results did not contain any compounds of concern.

Mitigation of potential vapors at your property is *not* necessary and we do *not* recommend any further testing. If you have any questions or concerns, please contact us at 262-510-0612 or by email at rhoverman@enviroforensics.com. The WDNR project manager, Larry Lester, can be reached at 608-275-3465. We greatly appreciate your help and patience with this matter.

Sincerely,
EnviroForensics, LLC

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

Rob Hoverman, LPG
Senior Project Manager

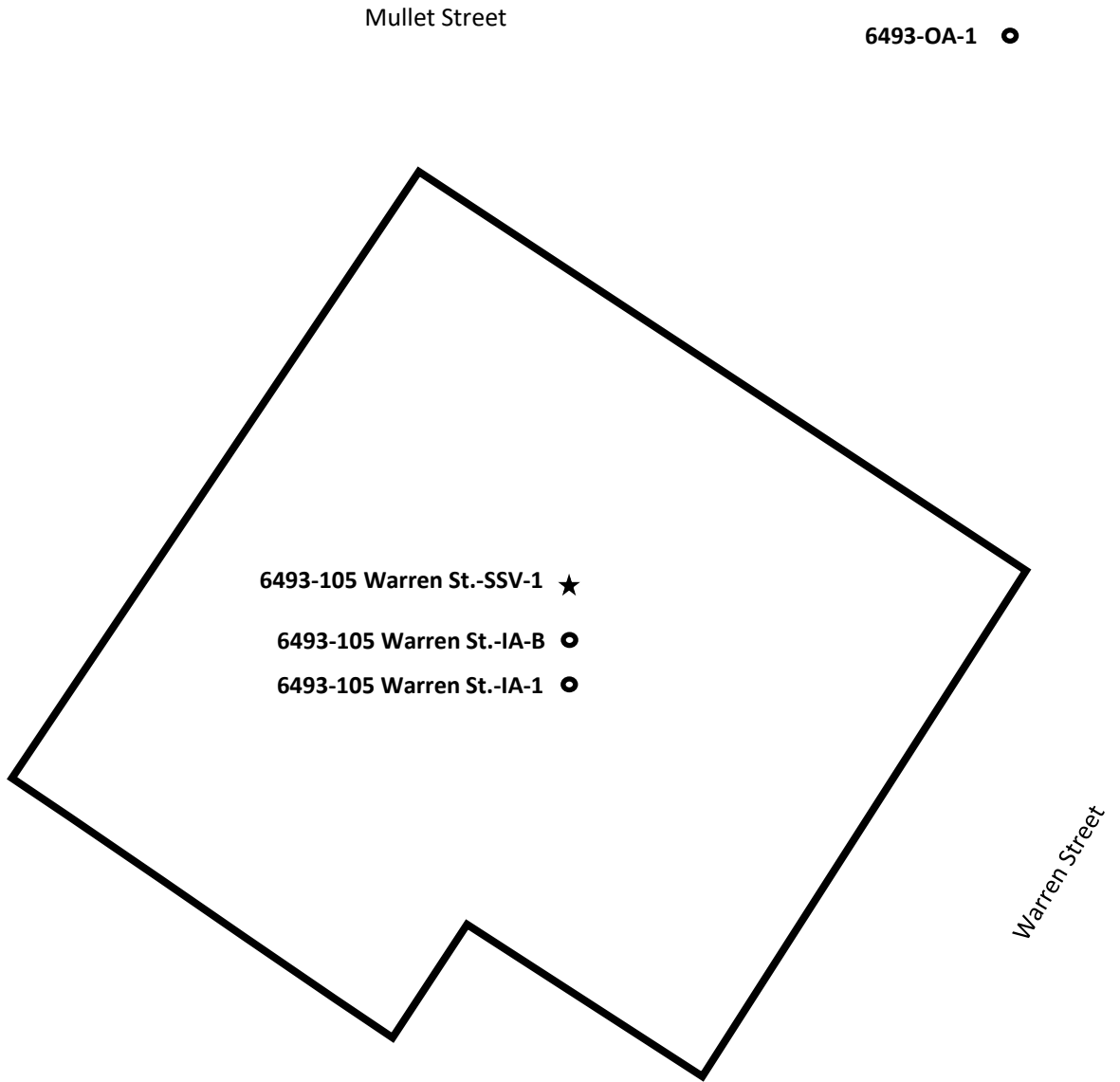
A handwritten signature in blue ink, appearing to read "Rebecca Brown".

Rebecca Brown
Field Professional

Attachments: Figure 1 – Vapor Intrusion Sampling Locations
Table 1 – Vapor Intrusion Assessment Results Summary
Laboratory Analytical Report

Copy: Larry Lester, Wisconsin Department of Natural Resources

FIGURE 1
VAPOR INTRUSION SAMPLE LOCATIONS
105 Warren Street, Portage Wisconsin



Legend

- = Indoor/Outdoor Air Sample
- IA-B = Basement
- IA-1 = 1st Floor
- SSV-1 = Sub-Slab Vapor
- ★ = Sub-Slab Vapor Sampling Port Location



**TABLE 1
VAPOR INTRUSION ASSESSMENT ANALYTICAL RESULTS**

Portage Cleaners
104 E. Wisconsin St
Portage, WI 53901

Sample Address	Sample Identification	Sample Date	Applicable Criteria	Mitigation	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride	
INDOOR/OUTDOOR AIR										
Residential Vapor Action Limit²					42	2.1	NE	NE	1.7	
Small Commercial Vapor Action Limit¹					180	8.8	NE	NE	28	
105 Warren St.	6493-105 Warren St-IA-B	09/07/17	Residential	No	<3.19	55.3	<19.8	<39.6	<1.28	
		12/06/17			<3.19	<1.07	<19.8	<39.6	<1.28	
		09/30/20			<3.19	<1.07	<19.8	<39.6	<1.28	
		1/25/2021			<3.19	<1.07	<19.8	<39.6	<1.28	
		3/3/2021			<3.19	<1.07	<19.8	<39.6	<1.28	
	6493-105 Warren St-IA-1	09/07/17	Residential	No	<3.19	76.4	<19.8	<39.6	<1.28	
		12/06/17			<3.19	<1.07	<19.8	<39.6	<1.28	
		09/30/20			<3.19	<1.07	<19.8	<39.6	<1.28	
		1/25/2021			<3.19	<1.07	<19.8	<39.6	<1.28	
	6493-OA-1		09/07/17	Residential	No	<3.19	<1.07	<19.8	<39.6	<1.28
			12/06/17			<3.19	<1.07	<19.8	<39.6	<1.28
			09/30/20			<3.19	<1.07	<19.8	<39.6	<1.28
1/25/2021			<3.19			<1.07	<19.8	<39.6	<1.28	
3/3/2021			<3.19			<1.07	<19.8	<39.6	<1.28	
SUB-SLAB VAPOR										
Residential Vapor Risk Screening Level²					1,400	70	NE	NE	57	
Small Commercial Vapor Risk Screening Level¹					6,000	290	NE	NE	930	
105 Warren St.	6493-105 Warren St-SSV-1	9/7/2017	Residential	No	10.9	3.28	<19.8	<39.6	<1.28	
		12/6/2017			50.9	<10.7	<198	<396	<12.8	
		9/30/2020			25.2	<10.7	<198	<396	<12.8	
		1/26/2021			5.49	<1.07	<19.8	<39.6	<1.28	
		3/3/2021			13.4	<1.07	<19.8	<39.6	<1.28	

Notes:

¹ The vapor risk screening levels for small commercial structures are calculated in accordance with the procedures described in WDNR Publication RR-800 and subsequent guidance

² The vapor risk screening levels for residential structures are calculated in accordance with the procedures described in WDNR Publication RR-800 and subsequent guidance

Samples analyzed according to EPA Method TO-15

All concentrations reported in units in micrograms per cubic meter = µg/m³

Only detected compounds are listed

Bolded values are above method detection limits

Bolded and blue shaded values exceed the residential Vapor Risk Screening Level

Bolded and orange shaded values exceed the small commercial Vapor Risk Screening Level

NE = Not Established

IA = Indoor Air

OA = Outdoor Air





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

March 9, 2021

EnvisionAir Project Number: 2021-120
Client Project Name: 6493 – Portage Cleaners

Dear Mr. Hoverman,

Please find the attached analytical report for the samples received March 4, 2021. 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



EnvisionAir
 1441 Sadlier Circle West Drive
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Client Name: ENVIROFORENSICS
Project ID: 6493 PORTAGE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2021-120

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>							
21-631	6493-105 WARREN ST-IA-B	A	3/2/21	10:00	3/3/21	10:00	3/4/21	15:30	-29	0	0
21-632	6493-105 WARREN ST-IA-1	A	3/2/21	9:59	3/3/21	9:58	3/4/21	15:30	-27	-4	-4
21-633	6493-OA-1	A	3/2/21	9:55	3/3/21	9:53	3/4/21	15:30	-29	0	0
21-634	6493-105 WARREN ST-SSV-1	A	3/3/21	10:02	3/3/21	10:10	3/4/21	15:30	-30	-5	-5



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Client Name: ENVIROFORENSICS
Project ID: 6493 PORTAGE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2021-120

Analytical Method: TO-15
Analytical Batch: 030221AIR

Client Sample ID: 6493-105 WARREN ST-
 IA-B
Sample Collection START Date/Time: 3/2/21 10:00
Sample Collection END Date/Time: 3/3/21 10:00
EnvisionAir Sample Number: 21-631
Sample Matrix: AIR
Sample Received Date/Time: 3/4/21 15:30

<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)	98%		
Analysis Date/Time:	3-5-21/04:36		
Analyst Initials	tjg		



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Project ID: 6493 PORTAGE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2021-120

Analytical Method: TO-15
Analytical Batch: 030221AIR

Client Sample ID: 6493-105 WARREN ST-
 IA-1
EnvisionAir Sample Number: 21-632
Sample Matrix: AIR

Sample Collection START Date/Time: 3/2/21 9:59
Sample Collection END Date/Time: 3/3/21 9:58
Sample Received Date/Time: 3/4/21 15:30

<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)	107%		
Analysis Date/Time:	3-5-21/05:17		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6493 PORTAGE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2021-120

Analytical Method: TO-15
Analytical Batch: 030221AIR

Client Sample ID: 6493-OA-1
EnvisionAir Sample Number: 21-633
Sample Matrix: AIR

Sample Collection START Date/Time: 3/2/21 9:55
Sample Collection END Date/Time: 3/3/21 9:53
Sample Received Date/Time: 3/4/21 15:30

<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)	91%		
Analysis Date/Time:	3-5-21/06:39		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6493 PORTAGE CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2021-120

Analytical Method: TO-15
Analytical Batch: 030721AIR

Client Sample ID: 6493-105 WARRANT
 ST-SSV-1

Sample Collection START Date/Time: 3/3/21 10:02
Sample Collection END Date/Time: 3/3/21 10:10
Sample Received Date/Time: 3/4/21 15:30

EnvisionAir Sample Number: 21-634
Sample Matrix: AIR

<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	13.4	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichloroethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	100%		
Analysis Date/Time:	3-7-21/11:47		
Analyst Initials	tjg		

TO-15 Quality Control Data

EnvisionAir Batch Number: 030221AIR

<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:	3-4-21/16:39		
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	9.55	9.03	10	96%	90%	5.6%	
trans-1,2-Dichloroethene	10	9.73	10	100%	97%	2.7%	
cis-1,2-Dichloroethene	10.3	9.22	10	103%	92%	11.1%	
Trichloroethene	10	10.2	10	100%	102%	2.0%	
Tetrachloroethene	9.86	9.56	10	99%	96%	3.1%	
4-bromofluorobenzene (surrogate)	98%	100%					
Analysis Date/Time:	3-4-21/15:16	3-4-21/16:03					
Analyst Initials	tjg	tjg					

TO-15 Quality Control Data

EnvisionAir Batch Number: 030721AIR

<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)	107%		
Analysis Date/Time:	3-7-21/11:09		
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	10.6	10.2	10	106%	102%	3.8%	
trans-1,2-Dichloroethene	9.9	9.89	10	99%	99%	0.1%	
cis-1,2-Dichloroethene	9.75	9.27	10	98%	93%	5.0%	
Trichloroethene	9.13	9.45	10	91%	95%	3.4%	
Tetrachloroethene	9.31	9.61	10	93%	96%	3.2%	
4-bromofluorobenzene (surrogate)	97%	103%					
Analysis Date/Time:	3-7-21/09:44	3-7-21/10:31					
Analyst Initials	tjg	tjg					



EnvisionAir
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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:

Report *r hover more*
Address: *enviroforensics.com*

Report To: *R Harman*

Phone: *762-790-4001*

Invoice Address: *accynts*
problesevinforensics.com

Desired TAT: (Please Circle One)
1 day 2 days 3 days 5 days

P.O. Number: *2021-0119*

Project Name or Number: *6493*
Portage Cleaners

Sampled by: *R Brown*

QA/QC Required: (circle if applicable)
Level III Level IV

Reporting Units needed: (circle)
mg/m³ PPBV PPMV

Media type:
1LC = 1 Liter Canister
6LC = 6 Liter Canister
TB = Tedlar Bag
TD = Thermal Desorption Tube



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

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REQUESTED PARAMETERS

TO-15 Full List (Specify in notes)

TO-15 Short List

Canister Pressure / Vacuum

Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp Start)	Coll. Time (Grab/Comp Start)	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
6493-105 Warren St - IA-B	6LC	3-2-21	10:00	3-3-21	10:00	16102	7302	-29	0	0	21-631
6493-105 Warren St - IA-1	↓	↓	9:59	↓	9:58	17894	5721	-27	-4	-4	21-632
6493-0A-1	↓	↓	9:55	↓	9:53	91568	7624	-29	0	0	21-633
6493-105 Warren St - SSV-1	1LC	3-3-21	10:02	3-3-21	10:10	18924	010-1	-30	-5	-5	21-634

Comments: Short list: PCE, TCE, CDCE, tDCE, VC

Relinquished by: <i>RHL</i>	Date: <i>3-3-21</i>	Time: <i>10:00</i>	Received by: <i>Fred EX</i>	Date: <i>3-3-21</i>	Time: <i>16:00</i>
			<i>Team supported</i>	<i>3/4/21</i>	<i>1530</i>