

From: Rob Hoverman <rhoverman@enviroforensics.com>
Sent: Tuesday, November 8, 2022 3:58 PM
To: Schultz, Josie M - DNR
Cc: Lee Amundson
Subject: RE: 1404 S Webster
Attachments: 200030-0040-Fig.1 VI assessment locatrions.pdf; Econo Care - Allouez VI Table.pdf

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Josie,

As discussed, we conducted two rounds of vapor intrusion assessments and one sewer gas assessment for the former Econo Care Cleaners. Generally, these results, as shown on the attached **Table 1** show, were below their respective screening levels. One sample from 930 Derby contained TCE above its screening level. After receiving the results, EnviroForensics resurveyed chemicals from within the home. One product was identified as containing trichloroethene (TCE), and it was immediately removed from the home. Because TCE is not readily found as a constituent of concern at the site and a product was identified from the home with an exceedance of vapor action levels, it appears very unlikely there is a vapor risk scenario for the properties being assessed.

To confirm the product was the source of indoor air detections and that there is not likely a vapor risk, EnviroForensics developed this extended vapor intrusion assessment based on the previous vapor results and WDNR Guidance Documents RR-800 and RR-649. We propose to expand the scope of the preferential pathway evaluation from the two previously sampled manholes to include five (5) manholes. The additional sample locations will allow monitoring of up- and down-gradient sewer conditions contributing to potential vapor encroachment conditions and identifying or eliminating other properties for vapor intrusion assessments. **Figure 1** presents the sample locations.

Rather than collecting a grab sample that shows only a short snapshot of the conditions in the sewer, we recommend using Beacon® passive adsorbent samplers for a 28-day interval. Deploying a corresponding indoor air sample at each of the four (4) previously sampled structures allows for overlapping vapor data and potential sewer sources within the properties previously investigated. In addition, we propose a single-day 8-hour passive sewer sample from the sewer manholes on the same day as a sanitary sewer cleanout, sump pump crock, and sub-slab sampling from within each structure. The grab sample from the sewer

cleanout and the sub-slab will correlate with the sewer main conditions during the sample day. This plan will depend on coordinating all sampling locations on a single day. Assistance from the WDNR may be necessary for 1410 Webster as the owner was difficult for the first round and did not cooperate for the second round. The sampling plan for all locations is summarized below.

Sample Location	Summa Canister Grab Samples	Beacon Passive Samples
926 Derby Lane	3 – One within the sanitary line, one from the sump, and one SSV	2 – One 28-day sample from basement and 1 st floor each
930 Derby Lane	3 – One within the sanitary line, one from the sump, and one SSV	2 - One 28-day sample from basement and 1 st floor each
1404 S. Webster Lane	2 – One within the sanitary line and one SSV	1 - 28-day sample
1410 S. Webster Lane	3 – One within the sanitary line, one from the sump, and one SSV	2 -One 28-day sample from basement and 1 st floor each
Webster Manhole #1 (previously sampled)	None	2 - One 28 day and one 8 hour
Webster Manhole #2 (upgradient)	None	2 - One 28 day and one 8-hour
Derby Lane Manhole #1 (previously sampled)	None	2 - One 28 day and one 8-hour
Derby Lane Manhole #2	None	2 - One 28 day and one 8-hour
Derby Lane Manhole #3	None	2 - One 28 day and one 8-hour

Please let me know if you have any questions.

Rob Hoverman, Northern Midwest Regional Director
 EnviroForensics® | 414.630.0060

From: Rob Hoverman
Sent: Monday, November 7, 2022 9:23 AM
To: Schultz, Josie M - DNR <josie.schultz@wisconsin.gov>
Cc: Lee Amundson <lee.amundson@ki.com>
Subject: RE: 1404 S Webster

Josie,

I've attached the data tables, groundwater flow map, and a figure with all groundwater data.

Let me know if you have any immediate questions.

Rob Hoverman, Northern Midwest Regional Director
 EnviroForensics® | 414.630.0060

From: Schultz, Josie M - DNR <josie.schultz@wisconsin.gov>
Sent: Wednesday, November 2, 2022 3:31 PM
To: Rob Hoverman <rhoverman@enviroforensics.com>
Cc: Lee Amundson <lee.amundson@ki.com>
Subject: 1404 S Webster

Rob,

Thank you for the conversation this afternoon regarding the status of the 1404 S Webster site, BRRTS # 02-05-514372. As mentioned during the call, DNR is requesting you proceed with resampling of 930 S Derby and submit a workplan as soon as possible as there is an acute health risk concern with the TCE that was detected in indoor air. This should be performed concurrently with the resampling and expansion of the sanitary sewer investigation, and resampling of the other buildings. I'm also requesting submittal of the groundwater sampling results to the DNR.

Please let me know if you have any questions or concerns moving forward.

Thanks,
Josie

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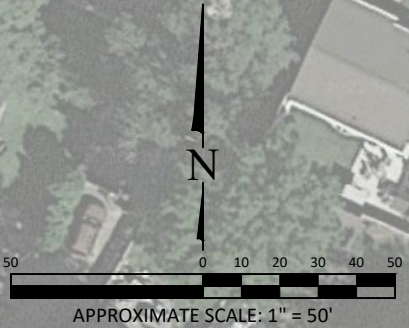
Josie M. Schultz

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- ### Legend
- Property boundary
 - Underground sanitary utility line
Arrow for flow direction
 - Structure to be assessed for vapor intrusion risk
 - SSG-1 Proposed sewer gas sample location



VAPOR INTRUSION ASSESSMENT LOCATIONS

1404 South Webster Avenue
Green Bay, Wisconsin

Date:	12/2/21
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	200030-0040

825 North Capital Avenue • Indianapolis, IN 46204
EnviroForensics.com

Figure	1
Project	200030

TABLE 1
VAPOR INTRUSION ASSESSMENT RESULTS SUMMARY

Former Econo Care Cleaners
1404 South Webster Avenue, Wisconsin

Address	Sample Identification	Sample Location	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
INDOOR/OUTDOOR AIR								
Residential Vapor Action Level				42	2.1	NE	NE	1.7
Small Commercial Vapor Action Level				180	8.8	NE	180	28
1324 S Webster	IA-1/AMB-1	Zone 1	8/19/2021	<0.278	<0.237	<0.197	<0.231	<0.148
			2/23/2022	<3.19	<1.07	<19.8	<39.6	<1.28
	IA-2/AMB-2	Zone 4	8/19/2021	<0.278	<0.237	<0.197	<0.231	<0.148
			2/23/2022	<3.19	<1.07	<19.8	<39.6	<1.28
	Kitchen	Kitchen	9/16/2021	<2.3	<1.9	NA	NA	NA
Play Area	Play Area	9/16/2021	<2.3	<1.9	NA	NA	NA	
Outdoor	Outdoor	9/16/2021	<2.3	<1.9	NA	NA	NA	
1404 S Webster	IA-1	Back Hallway	2/23/2022	<3.19	<1.07	<19.8	<39.6	<1.28
926 Derby	IA-B	Basement	4/12/2022	0.66 J	0.34 J	<0.30	<0.26	<0.13
			8/2/2022	1.0 J	<0.29	<0.29	<0.25	<0.13
	IA-1	Spare Bedroom	4/12/2022	0.52 J	<0.30	<0.30	1.4	<0.13
			8/2/2022	3.1	<0.29	<0.29	<0.25	<0.13
930 Derby	IA-B	Basement	2/24/2022	<3.19	<1.07	<19.8	<39.6	<1.28
			8/25/2022	3.2	5.2	<0.28	<0.25	<0.13
	IA-1	1st Floor	2/24/2022	<3.19	<1.07	<19.8	<39.6	<1.28
			8/25/2022	2.3	2.9	<0.38	<0.81	<1.28
	IA-2	2nd Floor	2/24/2022	<3.19	<1.07	<19.8	<39.6	<1.28
8/25/2022			2.9	2.8	<0.38	<0.81	<0.13	
1410 S Webster	IA-B	Basement	2/25/2022	<3.19	<1.07	<19.8	<39.6	<1.28
	IA-1	1st Floor	2/25/2022	<3.19	<1.07	<19.8	<39.6	<1.28
	IA-2	2nd Floor	2/25/2022	<3.19	<1.07	<19.8	<39.6	<1.28
Outdoor Air	OA	Outside	2/24/2022	<3.19	<1.07	<19.8	<39.6	<1.28
SUB-SLAB VAPOR								
Residential Vapor Risk Screening Level				1,400	70	NE	NE	57
Small Commercial Vapor Risk Screening Level				5,800	290	NE	5,800	930
1324 S Webster	VP-1	Between Zone 3 & 4	8/19/2021	3.5	<0.237	<0.197	<0.231	<0.148
	SSV-1		2/23/2022	<31.9	<10.7	<198	<396	<12.8
	VP-2	Between Zone 1 & 2	8/19/2021	0.61 J	<0.237	<0.197	<0.231	<0.148
	SSV-2		2/23/2022	133	<10.7	<198	<396	<12.8
1404 S Webster	SSV-1	Closet	2/23/2022	<31.9	<10.7	<198	<396	<12.8
926 Derby	SSV-1	Basement	4/12/2022	44.0	5.4	<0.39	<0.33	<0.17
			8/2/2022	323	3.7	<0.38	<0.33	<0.17
930 Derby	SSV-1	Basement	2/24/2022	111	<10.7	<198	<396	<12.8
930 Derby	SSV-1	Basement	8/25/2022	128	1.8	<0.38	<0.81	<0.16
1410 S Webster	SSV-1	Storage Closet	2/25/2022	<31.9	<10.7	<198	<396	<12.8
			8/2/2022	368	4.4	0.70 J	<0.32	<0.16
SUMP VAPOR								
Residential Vapor Risk Screening Level				1,400	70	NE	NE	57
930 Derby	SUMP	Basement	2/24/2022	<31.9	<10.7	<198	<396	<12.8
SANITARY SEWER GAS								
Residential Vapor Risk Screening Level				1,400	70	NE	NE	57
Small Commercial Vapor Risk Screening Level				5,800	290	NE	5,800	930
S Webster Ave	SSG-1	Webster Ave	2/24/2022	<31.9	<10.7	<198	<396	<12.8
Derby Lane	SSG-2	Derby Ln	2/24/2022	690	32.8	<198	<396	<12.8

Notes:

Vapor Action and Risk Screening Levels are calculated according to WDNR Publication RR-800 and subsequent vapor intrusion guidance

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

Samples analyzed according to EPA Method TO-15

NE = Screening/action level not established

Bolded values are above detection limits

Bolded and shaded values exceed the applicable screening or action level

J = Analyte concentration detected between the laboratory Reporting Limit and the laboratory Method Detection Limit