Scott Walker, Governor Daniel L. Meyer, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



January 11, 2018

Ms. Cindy Bennett 124 East Clark Street Unity, WI 54488

Subject: Notification of Private Well Test Results, 124 East Clark Street, Unity

Dear Ms. Bennett:

Thank you for allowing the Wisconsin Department of Natural Resources (DNR) to collect groundwater samples from your potable well, as part of a Screening Site Inspection (SSI) for the Unity Auto Mart (UAM) site. As stated in a previous letter to you dated August 2, 2017, the purpose of the SSI was to confirm results of separate sampling by the U.S. Environmental Protection Agency (EPA) Removals program, using laboratory methods that are highly defensible, so that eligibility for potential funding under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) program may be determined. The results of sampling conducted by the EPA Removals program were sent to you in a letter dated October 25, 2017. This letter is to notify you of the results of the separate sampling conducted under the SSI.

The well was sampled for chlorinated Volatile Organic Compounds (VOCs) on August 23, 2017. Attached is a copy of the laboratory report for your potable well sample. The results show that tetrachloroethene was detected (prior to carbon treatment) at a concentration of 100 micrograms per liter ( $\mu$ g/l), which exceeds the groundwater quality standard of 5.0 ug/l for this compound. Trichloroethene was also detected, at a concentration of 6.2 ug/l, also exceeding its groundwater quality standard of 5.0 ug/l. The VOC compounds cis-1,2-dichloroethene and trans-1,2-dichloroethene were also detected in your water sample; however, these compounds were detected below state groundwater standards.

If you have questions about the purpose or results of the separate SSI sampling, please contact me at (715) 839-3748 or via email at mae.willkom@wisconsin.gov.

Sincerely,

-mae Willfor

Mae Willkom Hydrogeologist DNR Site Assessment Team



Case: 47156		Contract: EPW	/14030		SDG: E	E4414		Lab Code:	CHM		
Sample Number: E4417	Meth	od: Trace Volatiles		Matrix: W	Vater		MA Number:				
Sample Location: PW-1	pH: 1	.0		Sample D	ate: 08/23/20	17	Sample	Time: 09:35:00			
% Moisture:				% Solids:	0						
			an an a sta Usara an airte								
Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level		
Dichlorodifluoromethane	Target	0.75		ug/L	0.75		1.0	YES	S3VE		
Chloromethane	Target	0.50		ug/L	0.50		1.0	YES	S3VE		
Bromomethane	Target	0.50			0.50		1.0	YES	SIVE		
Chloroethane	Target	0.50		119/1.	0.50	U	1.0	YES	S3VE		
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
Acetone	Target	3.1	J	ug/L	3.1	J	1.0	YES	S3VE		
Carbon disulfide	Target	0.50	Ŭ	ug/L	0.50	U	1.0	YES	S3VE		
Methyl Acetate	Target	0.50	U	ug/L	0.50		1.0	YES	S3VE		
trans_1 2-Dichloroethene	Target	0.30	T T	ug/L ug/L	0.30	T	1.0	VES	SIVE		
Methyl tert-butyl Ether	Target	0.50	U		0.50	U	1.0	YES	S3VE		
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
cis-1,2-Dichloroethene	Target	15		ug/L	15		1.0	YES	S3VE		
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VE		
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
Chloroform	Target	0.50		ug/L	0.50		1.0	YES	S3VE		
Cyclobexane	Target	0.50	U	ug/L	0.50		1.0	YES	SIVE		
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
Benzene	Target	0.29	J	ug/L	0.29	J	1.0	YES	S3VE		
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
Trichloroethene	Target	6.2		ug/L	6.2		1.0	YES	· S3VE		
Methylcyclohexane	Target	0.50	U	ug/L	0.50		1.0	YES	S3VE		
I,2-Dichloropropane	Target	0.50	U II	ug/L	0.50		1.0	VES	SIVE		
cis-1.3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VE		
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50		1.0	YES	S3VE		
2 Havanona	Target	5.0	II	ug/L	5.0		10.0	YES VES	SIVE		
Dibromochloromethane	Target	0.50	U	11g/L	0.50	U	1.0	YES	S3VE		
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
o-xylene	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE		
m,p-xylene	Target	0.50	U	ug/L	0.50		1.0	YES	S3VE		
Bromoform	Target	0.50	U II		0.50	U	1.0	YES	S3VE		
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE		
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50		1.0	YES	S3VE		
1,2-Dibromo-3-chloropropane	Target	0.50	U 11	ug/L ug/I	0.50	U TT	1.0	VES	SAAE		
1.2.3-Trichlorobenzene	Target	0.50	U U	ug/L	0.50	U	1.0	YES	S3VE		
Total Alkanes	TIC			ug/L			1.0	YES	NV		

Scott Walker, Governor Daniel L. Meyer, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



January 11, 2018

Scott B. and April Blume 501 South Russell St. Unity, WI 54488

Subject: Notification of Private Well Test Results, 501 South Russell St., Unity

Dear Mr. and Mrs. Blume:

Thank you for allowing the Wisconsin Department of Natural Resources (DNR) to collect groundwater samples from your potable well, as part of a Screening Site Inspection (SSI) for the Unity Auto Mart (UAM) site. As stated in a previous letter to you dated August 2, 2017, the purpose of the SSI was to confirm results of separate sampling by the U.S. Environmental Protection Agency (EPA) Removals program, using laboratory methods that are highly defensible, so that eligibility for potential funding under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) program may be determined. This letter is to notify you of the results of the sampling conducted under the SSI.

The potable well at 501 South Russell Street was sampled for chlorinated volatile organic compounds on August 23, 2017. Attached is a copy of the laboratory report received by DNR. The analytical test results show that no chlorinated volatile organic compounds were found in the water sample collected from the well.

If you have questions about these results or the SSI sampling, please feel free to contact me at (715) 839-3748 or via email at mae.willkom@wisconsin.gov.

Sincerely,

Mae Willow

Mae Willkom Hydrogeologist DNR Site Assessment Team



.

Case: 47156		Contract: EPW14030		SDG: E	24414		Lab Code: CHM					
	·											
Sample Number: E4419	Meth	od: Trace Volatiles		Matrix: W	ater		MA Number:					
Sample Location: PW-3	pH: 1	.0		Sample D	ate: 08/23/20	17	Sample Time: 17:47:00					
% Moisture:				% Solids:	0							
		<u> </u>							-			
Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validatio Level			
Dichlorodifluoromethane	Target	0.50	<u> </u>	ug/L	0.50	Ŭ	1.0	YES	S3VE			
Chloromethane	Target	0.50	<u> </u>	ug/L	0.50	<u> </u>	1.0 -	YES	S3VE			
Vinyl chloride	Target	0.50		ug/L	0.50	<u> </u>	1.0	YES	S3VE			
Bromomethane	Target	0.50	<u> </u>		0.50		1.0	YES	S3VE			
Trichlorofluoromothono	Target	0.50	<u> </u>		0.50		1.0	IES VES	S3VE			
1 1 Dishlorosthono	Target	0.50			0.50		1.0	VES	375			
1 1 2 Trichloro 1 2 2	Target	0.50	TT		0.50		1.0	VEG	831/E			
trifluoroethane	Taiget	0.00		ug/L	0.50		1.0	1123	D D D D D			
Acetone	Target	5.0	U	ug/L	2.9	J	1.0	YES	S3VE			
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE			
Methyl Acetate	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE			
Methylene chloride	Target	0.50	<u> </u>	ug/L	0.50	<u> </u>	1.0	YES	S3VE			
trans-1,2-Dichloroethene	Target	0.50	Ŭ	ug/L	0.50	U	1.0	YES	S3VE			
Methyl tert-butyl Ether	Target	0.50	<u> </u>	ug/L	0.50	<u>U</u>	1.0	YES	S3VE			
1,1-Dichloroethane	Target	0.50	<u> </u>	ug/L	0.50		1.0	YES	S3VE			
cis-1,2-Dichloroethene	Target	0.50	<u> </u>	ug/L			1.0	YES	S3VE			
2-Butanone	1arget	5.0		ug/L	5.0	<u> </u>	1.0	YES	S3VE			
Chloroform	Target	0.50			0.50		1.0	VE	53VE			
1 1 1 Trichloroethane	Target	0.50			0.50	U U	1.0	VES	53VE			
Cyclohexane	Target	0.50	<u> </u>	ng/L	0.50		1.0	YES	S3VE			
Carbon tetrachloride	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE			
Benzene	Target	0,50	Ū	ug/L	0.50	U	1.0	YES	S3VE			
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE			
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE			
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE			
1,2-Dichloropropane	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE			
Bromodichloromethane	Target	0.50	U	ug/L	0.50	<u> </u>	1.0	YES	S3VE			
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE			
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VE			
Toluene	Target	0.50	<u> </u>	ug/L	0.50	<u> </u>	1.0	YES	S3VE			
trans-1,3-Dichloropropene	Target	0.50	<u> </u>	ug/L	0.50	<u> </u>	1.0	YES	<u>S3VE</u>			
1,1,2-1richloroethane	Target	0.50	<u> </u>	ug/L	0.50		1.0	YES	S3VE			
1etrachloroetnene	Target	<u> </u>			0.50		1.0	YES	53VE			
	Target	5.0	U		0.50		1.0		<u>02VE</u>			
1.2 Dibromoethane	Target	0.50	<u> </u>	<u>ug/L</u> 110/[	0.50		1.0	VES	S3VE			
Chlorobenzene	Target	0.50	<u> </u>		0.50		1.0	YES	S3VE			
Ethylbenzene	Target	0.50	<u> </u>	ug/L	0.50	Ū	1.0	YES	S3VE			
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE			
m,p-xylene	Target	0.50	U	ug/L	0.50	Ū	1.0	YES	S3VE			
Styrene	Target	0,50	U	ug/L	0.50	U	1.0	YES .	S3VE			
Bromoform	Target	0.50	U U	ug/L	0.50	U	1.0	YES	S3VE			
Isopropylbenzene	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE			
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE			
1,3-Dichlorobenzene	Target	0.50	<u> </u>	ug/L	0,50	U	1.0	YES	S3VE			
1,4-Dichlorobenzene	Target	0,50	<u>U ·</u>	ug/L	0.50	<u> </u>	1.0	YES	S3VE			
1,2-Dichlorobenzene	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE			
1,2-Dibromo-3-chloropropane	Target	0.50		ug/L	0.50	U	1.0	YES	<u>S3VE</u>			
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50		1.0	YES VEC	53VE			
1,2,3-Irichlorobenzene	TIC	0.50	U		0.50	U	1.0	<u>IES</u>	53VE			
Total Alkanes							1.0	150	11 1			

Scott Walker, Governor Daniel L. Meyer, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



January 11, 2018

Ms. Melissa Brust 131 North Madison St. Unity, WI 54488

# Subject: Notification of Private Well Test Results 131 North Madison St., Unity, WI

Dear Mr. Danaher:

Thank you for allowing the Wisconsin Department of Natural Resources (DNR) to collect groundwater samples from your potable well, as part of a Screening Site Inspection (SSI) for the Unity Auto Mart (UAM) site. The purpose of the SSI was to confirm results of separate sampling by the U.S. Environmental Protection Agency (EPA) Removals program, using laboratory methods that are highly defensible, so that eligibility for potential funding under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) program may be determined. The results of sampling conducted by the EPA Removals program were sent to you in a letter dated October 25, 2017. This letter is to notify you of the results of the separate sampling conducted under the SSI.

The well was sampled for chlorinated Volatile Organic Compounds (VOCs) on August 23, 2017. Attached is a copy of the laboratory report for your potable well sample. The results show that the following contaminants were detected (prior to carbon treatment):

- Tetrachloroethene at a concentration of 490 micrograms per liter (μg/l), which exceeds the groundwater quality standard of 5.0 ug/l for this compound.
- Trichloroethene at a concentration of 31 ug/l, which exceeds the groundwater quality standard of 5.0 ug/l for this compound.
- Cis-1,2-dichloroethene at a concentration of 120 ug/l, which exceeds the groundwater quality standard of 70 ug/l for this compound.

If you have questions about the purpose or results of the separate SSI sampling, please contact me at (715) 839-3748 or via email at mae.willkom@wisconsin.gov.

Sincerely,

Mae Willitom

Mae Willkom Hydrogeologist DNR Site Assessment Team



Case: 47156		Contract: EPV	V14030	•	SDG: E	24414	Lab Code: CHM				
Sample Number: E4421	Meth	od: Trace Volatiles		Matrix: W	Vater		MA Number:				
Sample Location: PW-5	pH: 1	1.0		Sample D	ate: 08/23/20	17	Sample	Time: 14:10:00			
% Moisture:				% Solids:	0						
Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level		
Dichlorodifluoromethane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Chloromethane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Vinyl chloride	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Bromomethane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Chloroethane	Target	20	Ŭ	ug/L	20	Ŭ ·	40.0	YES	S3VE		
Trichlorofluoromethane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,1-Dichloroethene	Target	20		ug/L	20		40.0	YES	S3VE		
1,1,2-1fichloro-1,2,2- trifluoroethane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Acetone	Target	200	U	ug/L	200	U	40.0	YES	S3VE		
Carbon disulfide	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Methyl Acetate	Target	20 .	U	ug/L	20	U	40.0	YES	S3VE		
Methylene chloride	Target	20	U	ug/L	20	0	40.0	YES	S3VE		
trans-1,2-Dichloroethene	Target	20	U	ug/L	20	0	40.0	YES	S3VE		
Methyl tert-butyl Ether	Target	20	U	ug/L	20		40.0	YES	S3VE		
I,I-Dichlosothane	Target	20	U U	ug/L	20	U	40.0	YES	S3VE		
2 Putenone	Target	120	TT	ug/L	120	TT	40.0	YES	S3VE		
Bromochloromethane	Target	200	U TT	ug/L	200	U TT	40.0	IES VEC	SOVE		
Chloroform	Target	20	U TI	ug/L ug/L	20	U	40.0	VES	83VE		
1 1 1-Trichloroethane	Target	20	<u> </u>	11g/L	20	U U	40.0	VES	S3VE		
Cyclohexane	Target	20	U	11g/L	20	U	40.0	YES	S3VE		
Carbon tetrachloride	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Benzene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,2-Dichloroethane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Trichloroethene	Target	31		ug/L	31		40.0	YES	S3VE		
Methylcyclohexane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,2-Dichloropropane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Bromodichloromethane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
cis-1,3-Dichloropropene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
4-Methyl-2-pentanone	Target	200	U	ug/L	200	U	40.0	YES	S3VE		
. Toluene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
trans-1,3-Dichloropropene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,1,2-1richloroethane	Larget	20	U	ug/L	20	U	40.0	YES	S3VE		
	Target	490	TI	ug/L	490	TT	40.0	YES	. S3VE		
Dibromochloromethane	Target	200	U TT	ug/L	200		40.0	IES VEQ	SOVE		
1.2-Dibromoethane	Target	20	<u> </u>		20	U II	40.0	VES	83VE		
Chlorobenzene	Target	20	U		20	U	40.0	YES	SIVE		
Ethylbenzene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
o-Xylene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
m,p-Xylene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Styrene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Bromoform	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Isopropylbenzene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,1,2,2-Tetrachloroethane	Target	20	U	ug/L	20	·U	40.0	YES	S3VE		
1,3-Dichlorobenzene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,4-Dichlorobenzene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,2-Dichlorobenzene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,2-Dibromo-3-chloropropane	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,2,4-trichlorobenzene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
1,2,3-Trichlorobenzene	Target	20	U	ug/L	20	U	40.0	YES	S3VE		
Total Alkanes	TIC			ug/L			40.0	YES	NV		

Scott Walker, Governor Daniel L. Meyer, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



January 18, 2018

Ms. Denise Cliver, Personal Representative of the Estate of Lorin Cliver Gin Mill Tavern 210 West Clark St. Unity, WI 54488

Subject: Notification of Private Well Test Results, 210 West Clark St., Unity

Dear Ms. Cliver:

The Wisconsin Department of Natural Resources (DNR) collected groundwater samples from the potable well at the Gin Mill Tavern, formerly owned by Lorin Cliver, as part of a Screening Site Inspection (SSI) for the Unity Auto Mart (UAM) site. As stated in a previous letter to Mr. Cliver dated August 2, 2017, the purpose of the SSI was to confirm results of separate sampling by the U.S. Environmental Protection Agency (EPA) Removals program, using laboratory methods that are highly defensible, so that eligibility for potential funding under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) program may be determined. The results of sampling conducted by the EPA Removals program were sent to Gin Mill Tavern in a letter dated October 25, 2017. This letter is to notify you of the results of the separate sampling conducted under the SSI.

The well was sampled for chlorinated Volatile Organic Compounds (VOCs) on August 23, 2017. Attached is a copy of the laboratory report for your potable well sample. The results show that the following contaminants were detected (5prior to carbon treatment):

- Tetrachloroethene at a concentration of 230 micrograms per liter (µg/l), which exceeds the groundwater quality standard of 5.0 ug/l for this compound.
- Trichloroethene at a concentration of 21 ug/l, which exceeds the groundwater quality standard of 5.0 ug/l for this compound.
- Cis-1,2-dichloroethene at a concentration of 80 ug/l, which exceeds the groundwater quality standard of 70 ug/l for this compound.

If you have questions about the purpose or results of the separate SSI sampling, please contact me at (715) 839-3748 or via email at mae.willkom@wisconsin.gov.

Sincerely,

Mae Willkom

Mae Willkom Hydrogeologist DNR Site Assessment Team

Naturally WISCONSIN



Case: 47156		Contract: EPW	/14030		SDG: E	24414	Lab Code: CHM				
	4										
Sample Number: E4418	Meth	od: Trace Volatiles		Matrix: W	Vater		MA Number:				
Sample Location: PW-2	pH: 1	.0		Sample D	ate: 08/23/20	17	Sample	Time: 15:12:00			
% Moisture:				% Solids:	0						
Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validatio Level		
Dichlorodifluoromethane	- Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
Chloromethane	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
Vinyl chloride	Target	5.0		ug/L	5.0		10.0	YES	S3VE		
Chloroothono	Target	5.0		ug/L	5.0		10.0	VES	S3VE S2VE		
Trichlorofluoromethane	Target	5.0			5.0	U U	10.0	YES	S3VE		
1.1-Dichloroethene	Target	5.0	U U	ug/L	5.0	U U	10.0	YES	S3VE		
1,1,2-Trichloro-1,2,2-	Target	5.0	U U	ug/L	5.0	U	10.0	YES	S3VE		
trifluoroethane	Lugor		Ŭ		0.0		1		55,12		
Acetone	Target	50	U	ug/L	50	U	10.0	YES	S3VE		
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
Methylene chloride	Target	5.0	U	ug/L	5.0	U	10.0	YES	_ S3VE		
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
cis-1,2-Dichloroethene	Target	80		ug/L	80		10.0	YES	S3VE		
2-Butanone	Target	50	U	ug/L	50	U	10.0	YES	S3VE		
Bromochloromethane	Target	5.0	U	ug/L	5.0		10.0	YES	S3VE		
Chloroform	Target	5.0	U	ug/L	5.0		10.0	YES	SJVE		
I,I,I-Irichloroethane	Target	5.0	U · II	ug/L	5.0		10.0	YES	S3VE COVE		
Carbon tatrashlarida	Target	5.0	U		5.0		10.0	VEQ	C3VE		
Benzene	Target	5.0	U II		5.0	U	10.0	VES	SAME		
1.2-Dichloroethane	Target	5.0	U		5.0		10.0	YES	SAVE		
Trichloroethene	Target	21		119/1.	21		10.0	YES	S3VE		
Methylcyclohexane	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
1.2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
4-Methyl-2-pentanone	Target	50	U	ug/L	50	U	10.0	YES	S3VE		
Toluene	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
Tetrachloroethene	Target	230		ug/L	230	D	40.0	YES	S3VE		
2-Hexanone	Target	50	<u> </u>	ug/L	50	U	10.0	YES	S3VE		
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0		10.0	YES	S3VE		
Chlorobenzene	Target	5.0	<u> </u>	ug/L	5.0		10.0	YES	SJVE		
Einyidenzene	Target	5.0	U	ug/L ug/T	5.0		10.0	VEC	SIVE		
0-XyICIIC m p xylene	Target	5.0	<u>т</u>	ug/L ug/T	5.0	TI	10.0	VEQ	C31/E		
Styrepe	Target	5.0	U	110/1	5.0	II	10.0	VEG	SAME		
Bromoform	Target	5.0	U	110/[.	5.0	TI	10.0	YES	SIVE		
Isopropylbenzene	Target	5.0	<u> </u>	ug/L	5.0	U	10.0	YES	SIVE		
1.1.2.2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	Ŭ	10.0	YES	S3VE		
1.3-Dichlorobenzene	Target	5.0	Ŭ	ug/L	5.0	U	10.0	YES	S3VE		
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	10.0	YES	S3VE		
Silane, methoxytrimethyl-	TIC	9.0	J	ug/L	9.0	J ·	10.0	YES	NV		

Scott Walker, Governor Daniel L. Meyer, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



January 11, 2018

Patrick S. and Dana L. Phillips 181 South Russell St. Unity, WI 54488

Subject: Notification of Private Well Test Results, 181 South Russell St., Unity

Dear Mr. and Mrs. Phillips:

Thank you for allowing the Wisconsin Department of Natural Resources (DNR) to collect groundwater samples from your potable well, as part of a Screening Site Inspection (SSI) for the Unity Auto Mart (UAM) site. As stated in a previous letter to you dated August 2, 2017, the purpose of the SSI was to confirm results of separate sampling by the U.S. Environmental Protection Agency (EPA) Removals program, using laboratory methods that are highly defensible, so that eligibility for potential funding under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) program may be determined. This letter is to notify you of the results of the sampling conducted under the SSI.

The potable well at 181 South Russell Street was sampled for chlorinated volatile organic compounds on August 23, 2017. Attached is a copy of the laboratory report received by DNR. The analytical test results show that no chlorinated volatile organic compounds were found in the water sample collected from the well.

If you have questions about these results or the SSI sampling, please feel free to contact me at (715) 839-3748 or via email at mae.willkom@wisconsin.gov.

Sincerely,

Mac Willow

Mae Willkom Hydrogeologist DNR Site Assessment Team



Case: 47156		Contract: EPW14030			SDG: I	24414	Lab Code: CHM			
				•						
Sample Number: E4422	Meth	od: Trace Volatiles		Matrix: W	/ater		MA Nu	mber:		
Sample Location: PW-6	pH:	1.0		Sample D	ate: 08/23/20	17.	Sample	Time: 17:34:00		
% Moisture:				% Solids:	0					
			, ,		,		····			
Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validatio Level	
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
Vinyl chloride	Target	0.50	U	ug/L	. 0.50	<u> </u>	1.0	YES	S3VE	
Bromomethane	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE	
Chloroethane	Target	0.50	<u>U</u>	ug/L,	. 0.50	<u> </u>	1.0	YES	S3VE	
Trichlorofluoromethane	larget	0.50	<u> </u>	ug/L	0.50		1.0	YES	S3VE	
I,I-Dichloroethene	Target	0.50		ug/L	0.50	<u> </u>	1.0	YES	S3VE	
1,1,2-1richloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VE	
Carbon disulfide	Target	0.50	U	ug/L	0.50	Ū	1.0	YES	S3VE	
Methyl Acetate	Target	0.50	UU	ug/L	0.50	U	1.0	YES	S3VE	
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
Methyl tert-butyl Ether	Target	0.50	<u>U</u>	ug/L	0.50	U	1.0	YES	S3VE	
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	· S3VE	
2-Butanone	Target	5.0	<u> </u>	ug/L	5.0	U	1.0	YES	S3VE	
Bromochloromethane	Target	0.50	U	ug/L	0.50	<u> </u>	1.0	YES	S3VE	
Chloroform	Target	0.50	<u> </u>	ug/L_	0.50	<u> </u>	1.0	YES	S3VE	
1,1,1-Trichloroethane	Target	0.50	<u>U</u>	ug/L	0.50	<u> </u>	1.0	YES	S3VE	
Cyclohexane	Target	0.50	U	ug/L	0.50	<u> </u>	1.0	YES	<u>S3VE</u>	
Carbon tetrachloride	Target	0.50	<u> </u>	ug/L	0.50		1.0	YES	S3VE	
Benzene	Target	0.50	U		0.50		1.0	YES VES	53YB	
Trichloroothono	Target	0.50			0.50		1.0	TES	<u>83VE</u>	
Methylavalohevane	Target	0.50			0.50		1.0	TES VEQ	SOVE COVE	
1.2-Dichloropropage	Target	0.50	. II		0.50		1.0	VEQ	03VE	
Bromodichloromethane	Target	0.50		110/L	0.50	<u> </u>	1.0	VES	S3VE	
cis-1 3-Dichloropropene	Target	0.50	<u> </u>	11g/L	0.50	U.	1.0	YES	<u>S3VE</u>	
4-Methyl-2-pentanone	Target	5.0	U U	ug/L	5.0	U	1.0	YES	S3VE	
Toluene	Target	0.50	U	ug/L	0.50	Ū	1.0	YES	S3VE	
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VE	
Dibromochloromethane	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE	
1,2-Dibromoethane	Target	0.50	<u> </u>	ug/L	0.50	Ŭ.	1.0	YES	S3VE	
Chlorobenzene	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE	
Ethylbenzene	Target	0.50		ug/L	0.50		1.0	YES	<u>S3VE</u>	
0-Xylene	Target	0.50			0.50	<u> </u>	1.0	YES	<u>S3VE</u>	
m,p-Aylene	Target	0.50			0.50	U TT	1.0	VEQ 1	S3VE Catur	
Bromoform	Target	0.50	<u> </u>	<u>ug/L</u>	0.50		1.0		<u></u>	
Isopropulbenzene	Target	0.50		ug/L 110/I	0.50		1.0	VRQ	21/20 21/20	
1 1 2 2-Tetrachloroethane	Taroet	0.50		<u>110/ľ</u>	0.50	11	1.0	YES	SAAR	
1.3-Dichlorobenzene	Target	0.50	<u> </u>		0.50		1.0	YES	S3VE	
1.4-Dichlorobenzene	Target	0.50	Ū	ug/L	0,50	U U	1.0	YES	S3VE	
1,2-Dichlorobenzene	Target	0.50	Ū	ug/L	0.50	Ū I	1.0	YES	S3VE	
,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	Ū	1.0	YES	S3VE	
1,2,4-trichlorobenzene	Target	0.50	<u> </u>	ug/L	0.50	U	1.0	YES	S3VE	
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE	
Total Alkanes	TIC			ug/L			1.0	YES	NV	

٠

Scott Walker, Governor Daniel L. Meyer, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



January 11, 2018

Postal Building and Leasing Co. 720 Olive Street Suite 1630 St. Louis, MO 63101 Unity, WI 54488

### Subject: Notification of Private Well Test Results 102 South Front Street, Unity, WI

Dear Property Manager:

Thank you for allowing the Wisconsin Department of Natural Resources (DNR) to collect groundwater samples from your potable well, as part of a Screening Site Inspection (SSI) for the Unity Auto Mart (UAM) site. As stated in a previous letter to you dated August 2, 2017, the purpose of the SSI was to confirm results of separate sampling by the U.S. Environmental Protection Agency (EPA) Removals program, using laboratory methods that are highly defensible, so that eligibility for potential funding under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) program may be determined. The results of sampling conducted by the EPA Removals program were sent to you in a letter dated October 24, 2017. This letter is to notify you of the results of the separate sampling conducted under the SSI.

The well was sampled for chlorinated Volatile Organic Compounds (VOCs) on August 23, 2017. Attached is a copy of the laboratory report for your potable well sample. The results show that tetrachloroethene was detected (prior to carbon treatment) at a concentration of 97 micrograms per liter (µg/l), which exceeds the groundwater quality standard of 5.0 ug/l for this compound. Trichloroethene was also detected, at a concentration of 8.0 ug/l, also exceeding its groundwater quality standard of 5.0 ug/l. The VOC compounds cis-1,2-dichloroethene and trans-1,2-dichloroethene were also detected in your water sample; however, these compounds were detected below state groundwater standards.

If you have questions about the purpose or results of the separate SSI sampling, please contact me at (715) 839-3748 or via email at mae.willkom@wisconsin.gov.

Sincerely,

mac Willow

Mae Willkom Hydrogeologist DNR Site Assessment Team

Naturally WISCONSIN



Case: 47156		Contract: EPW	/14030		SDG: I	24414	Lab Code: CHM						
Sample Number: E4420	Meth	od: Trace Volatiles	7	Matrix: W	/ater		MA Number:						
Sample Location: PW-4	pH:	1.0		Sample D	ate: 08/23/20	17	Sample	Time: 09:15:00					
% Moisture:				% Solids:	0		<b>f</b>						
Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validati Level				
Dichlorodifluoromethane	Target	3.1		ug/L	3.1		1.0	YES	S3VE				
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Trichlorofluoromethene	Target	0.50		ug/L	0.50		1.0	YES	S3VE				
1 1 Disblorosthane	Target	0.50		ug/L	0.50		1.0	YES	S3VE				
1,1-Dicilioroethene	Target	0.50		ug/L	0.50		1.0	IES VES	53VE				
trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	IES	53VE				
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VE				
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Methylene chloride	Target	0.50	Ŭ	ug/L	0.50	Ŭ	1.0	YES	S3VE				
trans-1,2-Dichloroethene	Target	0.72	**	ug/L	0.72		1.0	YES	S3VE				
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50		1.0	YES	S3VE				
1,1-Dichloroethane	Target	0.50	0	ug/L	0.50		1.0	YES	S3VE				
2 Putenono	Target	23	TT	ug/L	23		20.0	YES	SSVE				
Bromochloromathone	Torget	0.50		ug/L	0.50		1.0	IES VEC	03VE				
Chloroform	Target	0.50	TI TI	ug/L	0.50	TI	1.0	VES	SAME				
1.1.1-Trichloroethane	Target	0.50	U	11g/L	0.50	U U	1.0	YES	SIVE				
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Benzene	Target	0.53		ug/L	0.53		1.0	YES	S3VE				
1,2-Dichloroethane	Target ·	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Trichloroethene	Target	8.0		ug/L	8.0		1.0	YES	S3VE				
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	<u>U</u>	1.0	YES	S3VE				
4-Methyl-2-pentanone	Target	5.0	<u> </u>	ug/L	5.0	U	1.0	YES	S3VE				
Toluene	Target	0.50	U	ug/L	0.50		1.0	YES	S3VE				
1 1 2 Trichloroethane	Target	0.50	U	ug/L	0.50		1.0	YES	S3VE				
Tetrachloroethene	Target	97	U		97	D	20.0	VES	SAME				
2-Hexanone	Target	50	TT	110/1	50		1.0	YES	S3VE				
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
1.2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
o-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
m,p-xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Styrene	Target	0.50	U	ug/L	0.50	·U	1.0	YES	S3VE				
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VE				
1,3-Dichlorobenzene	Target	0.50	<u>U</u>	ug/L	0.50		1.0	YES	S3VE				
1,4-Dichlorobenzene	Target	0.50	U		0.50	U	1.0	YES	SJVE				
2-Dibromo-3-chloropropana	Target	0.50	<u>U</u>		0.50		1.0	TES	03ME				
1.2.4.trichlorohenzene	Target	0.50	U	110/1	0.50	U TT	1.0	VEQ	S3VE				
1.2.3-Trichlorohenzene	Target	0.50	<u>U</u>		0.50	U U	1.0	YES	SAVE				
Silane methoxytrimethyl-	TIC	12	U	110/1	12	T	1.0	YES	NV				
Shano, moulony annouly -	110	1.4	3	481	1.4	J	1.0	110	TAA				

Scott Walker, Governor Daniel L. Meyer, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



January 11, 2018

Tom and Angela Smith 240 S. Washington St. Unity, WI 54488

SUBJECT:	Vapor Sampling Results - Contaminant Detection Below DNR Screening Level
PROPERTY:	110 N. Front St., Unity, WI
SITE:	Unity Ground Water a/k/a Unity Auto Mart, 102 N. Front St., Unity, WI
· ·	DNR BRRTS #: 02-37-000290

Dear Mr. and Mrs. Smith:

Thank you for allowing the Wisconsin Department of Natural Resources (DNR) to collect sub-slab vapor and indoor air samples from your home, as part of a Screening Site Inspection for the Unity Auto Mart (UAM) site. Included in this letter are the findings of that investigation.

As you are aware, this investigation was conducted because of the potential for contaminant vapors from the former Unity Auto Mart property to migrate through soils, accumulate beneath the foundation of your home, and possibly enter your indoor air. The primary contaminants of concern at the former UAM property are chlorinated volatile organic compounds, including tetrachloroethene (also known as "perchloroethene," or PCE), trichloroethene (TCE), cis-and trans-1,2-dichloroethene (DCE) and vinyl chloride (VC). The purpose of the investigation and the potential concerns to neighboring residents were described in the original letter sent to your home.

On August 23, 2017, an environmental consultant hired by DNR installed a sampling device into the floor of your foundation and collected a soil vapor sample. The sample was then submitted to the U.S. EPA Chicago Regional Laboratory, where it underwent laboratory analysis for 11 different volatile organic compounds (VOCs), including PCE, TCE, cis- and trans-1,2-DCE, and VC.

#### **Your Test Results**

Attached is a copy of the laboratory report for your sub-slab and indoor air samples. The results show that small amounts of PCE were detected in the samples taken from beneath your foundation and from your indoor air. Although this contaminant was detected in a small amount in soil vapors beneath your foundation floor and in your indoor air, the levels at which it was detected are such that they do not pose a threat to you or your family. This is called "a detection below screening level" and is explained in the enclosed fact sheet.

At this time, there does not appear to be a risk associated with contaminant vapors entering your home from beneath the foundation.



Tom and Angela Smith January 11, 2018 Page 2

The laboratory report also shows very low levels of volatile organic compounds (VOCs), other than those listed above, in soil vapors from beneath your home and in your indoor air. This is likely due to trace amounts of VOCs from products such as paints, adhesives, fragrances, etc. that are commonly found in the typical home or office, and unrelated to the activities that took place at the Unity Auto Mart site in the past.

Please feel free to contact me at the number below if you have any questions about these results.

Sincerely,

mae Willkom

Mae Willkom Hydrogeologist DNR Remediation and Redevelopment 1300 West Clairemont Ave., Eau Claire, WI 54701 Ph: (715) 839-3748

# Understanding Chemical Vapor Intrusion Testing Results

#### **RR-977**

October 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. The VAL is a chemical compound's numerical value that represents a health hazard risk to no more than 1 in 100,000 people during a lifetime of exposure. If test results show chemical concentrations in your air below the VAL then adverse health effects are extremely rare, even if you were to breathe the chemical at this concentration for your entire life.

Test results showing chemical concentrations in the air at or above the VAL prompt DNR to recommend that exposure 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 greatly exceeds 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.

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.



#### 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.



<u>A Note about Measurement Units</u>: 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  $\mu g/m3$  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

This document contains information about certain state statutes and administrative rules but does not necessarily include all of the details found in the statutes and rules. Readers should consult the actual language of the statutes and rules to answer specific questions. The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Equal Opportunity Office, Department of Interior, Washington, D.C. 20240. This publication is available in alternative format upon request. Please call 608-267-3543 for more information.



TechLaw Inc ESAT Region 5 536 South Clark Street, Suite 734 Chicago, IL 60605 (312) 353-2964 (312) 353-5814 (Fax) www.techlawinc.com

Superfund, US EPA Region 5	Project:	Unity Groundwater (WI)	
77 West Jackson Boulevard	Project Number:	47156	Reported:
Chicago II., 60604	Project Manager:	Howard Pham	Oet-05-17 12:50

### Air Toxics by GC/MS TechLaw - ESAT Contract

#### SS-2 (E170806-01) Air Sampled: Aug-23-17 11:30 Received: Aug-24-17 10:51

Analyte	Result	Flags / Qualifiers	MDI.	Reporting Lund	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.00248			0.00125	mg/m3 Air	5	E17H003	Aug-28-17	Aug-29-17
Dichlorotetrafluoroethane	ŧ.			0.00177	n	11	v	н	
Vinyl chloride	U			0.00065		. "		п	н
Trichlorofluoromethane	t.			0.00142			v		u
cis-1,2-Dichloroethene	ť			0.00101	"	н		~	
1,1,1-Trichloroethane	Ľ			0.00138	v		"	*	0
Carbon Tetrachloride	r			0.00159		н	11	49	н
Trichloroethene	U			0.00136	**	п	р	•	
Tetrachloroethene	0.00188			0.00172	9	н	n	n	н
1,1.2-Trichloro-1,2,2-Trifluoroethane	U			0.00194	и		н	и	n
trans-1,2-Dichloroethene	U			0.00101	н	*	н	н	n

1A-1 (E170806-02) Air Sampled: Aug-23-17 11:05 Received: Aug-24-17 10:51

Result	Flags / Qualifiers	MDI.	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
0.00251			0.00050	mg/m3 Air	2	E1711003	Aug-28-17	Aug-28-17
t.			0.00071		н	н	**	
U			0.00026	н	*	н	n	п
0.00150			0.00057	۳	v	н	n	н
U			0.00040	u		н	н	"
U			0.00055	н	w		н	н
0.00082			0,00064	р	14	н		n
ť.			0.00054	н			. 11	м
l'			0.00069	n	n	•		
0.00095			0.00078	н	н		н	"
ť			0.00040		30	v	п	И
	Result 0.00251 U U 0.00150 U U 0.00082 U U 0.00082 U U 0.00095 U	Flags /   Result Qualifiers   0.00251 1   U 1   0.00150 1   U 1   0.00082 1   U 0.00082   U 1   U 0.00082   U 1   U 1	Elags / Result Qualifiers MDL.   0.00251 1   U 0.00150   U 0.00082   U 0.00082   U 0.00095	Hags / Qualifiers MDL Reporting Limit   0.00251 0.00050   U 0.00026   0.00150 0.00057   U 0.00055   0.00082 0.00064   U 0.00055   0.00054 0.00054   U 0.00055   0.00054 0.00054   U 0.00054	Efags / Qualifiers Reporting Limit Units   0.00251 0.00050 mg/m3 Air   U 0.00071 "   U 0.00026 "   U 0.00057 "   U 0.00057 "   U 0.00055 "   U 0.00055 "   U 0.00055 "   U 0.00055 "   U 0.00054 "   U 0.00054 "   U 0.00078 "   U 0.00078 "	Lings / Qualifiers Reporting Limit Units Dilution   0.00251 0.00050 mg/m3 Air 2   U 0.00071 " "   U 0.00050 mg/m3 Air 2   U 0.00050 mg/m3 Air 2   U 0.00071 " "   U 0.00057 " "   U 0.00057 " "   U 0.00055 " "   U 0.00064 " "   U 0.00054 " "   U 0.00064 " "   U 0.00069 " "   U 0.00078 " "	Hags / Qualifiers Reporting Limit Units Dilution Batch   0.00251 0.00050 mg/m3 Air 2 E1711003   U 0.00071 " " "   U 0.00056 " " "   U 0.00071 " " "   U 0.00057 " " "   U 0.00057 " " "   U 0.00055 " " "   U 0.00055 " " "   U 0.00054 " " "   U 0.00054 " " "   U 0.00054 " " "   U 0.00078 " " "	Hags / Qualifiers Reporting Limit Units Dilution Batch Prepared   0.00251 0.00050 mg/m3 Air 2 E1711003 Aug-28-17   U 0.00071 " " " "   U 0.00050 mg/m3 Air 2 E1711003 Aug-28-17   U 0.00071 " " " " "   U 0.00057 " " " " "   U 0.00057 " " " " " "   U 0.00055 "



TechLaw Inc ESAT Region 5 536 South Clark Street, Suite 734 Chicago, IL 60605 (312) 353-2964 (312) 353-5814 (Fax) www.techlawinc.com

Superfund, US EPA Region 5	Project: Unity Groundwater (WI)	
77 West Jackson Boulevard	Project Number: 47156	Reported:
Chicago IL, 60604	Project Manager: Howard Pham	Oct-05-17 12:50
and the second sec		and the second

### Air Toxics by GC/MS TechLaw - ESAT Contract

#### IA-2 (E170806-03) Air Sampled: Aug-23-17 11:35 Received: Aug-24-17 10:51

Analyte	Result	Flags / Qualifiers	MDI.	Reporting 1.imit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.00235			0 00050	mg/m3 Air	2	E17H003	Aug-28-17	Aug-28-17
Dichlorotetrafluoroethane	1°			0.00071	<u>n</u>	н		п	н
Vinyl chloride	U			0.00026	<u>ب</u> ب	п	н	n	н
Trichlorofluoromethane	0.00123			0.00057			н	11	н
cis-1,2-Dichloroethene	0.00050			0.00040	ш	11		п	н
1,1,1-Trichloroethane	ι			0.00055		п	н	24	н
Carbon Tetrachloride	0.00089			0,00064	н	ч	п	н	- n
Trichloroethene	ť			0.00054	•	*		н	
Tetrachloroethene	0.00322			0.00069	n	rt	1	"	п
1.1.2-Trichloro-1,2,2-Trifluoroethane	U			0.00078		*	*		ч
trans-1,2-Dichloroethene	U			0.(10040	н	۳		P	- 4

#### IA-3 (E170806-04) Air Sampled: Aug-23-17 11:36 Received: Aug-24-17 10:51

Analyte	Result	Flags / Oualifiers	MDL	Reporting	Units	Dilution	Batch	Prenared	Analyzed
Dichlorodifluoromethane	0.00208	Quanters		0.00050	mg/m3 Air	2	E17H004	Aug-29-17	Aug-29-17
Dichlorotetrafluoroethane	U.			0.00071	н	· •	•	"	n
Vinyl chloride	t.			0.00026	п	r,	*	'n	"
Trichlorofluoromethane	0.00113			0.00057	н	н	۳		1-
cis-1,2-Dichloroethene	0.00046			0.00040	11	н	h		n
1,1,1-Trichloroethane	£.			0.00055		n		п	n
Carbon Tetrachloride	0.00084			0.00064		*	н	н	н
Trichloroethene	Ľ			0.00054	P	•	н	н	"
Tetrachloroethene	0.00284			0.00069		**			"
t,1,2-Trichloro-1,2,2-Trifluoroethane	ı.			0.00078	b.		v	•	
trans-1,2-Dichloroethene	t.			0.00040	u		н	11	"