Midwest Environmental Legacy Management Group

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Germantown, WI 53022
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March 7, 2024

Stoughton Conservation Club
984 Collins Road
Stoughton, WI 53589

To whom it may concern:

As required by the Unilateral Administrative Order for clean-up of the Hagen Farm Landfill, Waste Management of Wisconsin, Inc. (WMWI) samples the well at the above referenced facility (PW09) on an annual basis, typically in August. This letter transmits the results from laboratory analysis of a follow-up sample collected from that water supply well on February 21, 2024. The follow-up sample was collected and analyzed for volatile organic compounds (VOCs) to assess the concentration of a specific compound (vinyl chloride) that was quantified at a concentration of 0.02 micrograms/liter (ug/L) in the prior (August 2023) sample.

As presented in the following summary table, the vinyl chloride concentration was the only result that attained or exceeded groundwater or drinking water criteria in laboratory analysis of the sample from February 21, 2024.

		Regulatory Criteria		
Parameter	Concentration	PAL	ES	MCL
Vinyl chloride	0.023 ug/L	0.02 ug/L	0.2 ug/L	2 ug/L

Analytical results for water samples collected from the well are also sent to the United States Environmental Protection Agency (USEPA) and the Wisconsin Department of Natural Resources (WDNR) for review. The regulatory criteria indicated in the table above are the Preventive Action Limit (PAL) and Enforcement Standard (ES) for Public Health Groundwater Quality Standards from Table 1 of Chapter NR 140.10 Wis. Adm. Code (Groundwater Quality) and the Federal Maximum Contaminant Level (MCL) established in the National Primary Drinking Water Regulations.

The identified vinyl chloride result is consistent with the prior (August 2023) result, with regard to the concentrations established as the ES or MCL, and below the concentrations that would indicate that the water is potentially unsafe for consumption over time (i.e., ES and MCL).

You may contact Christopher Black from the USEPA if you would like additional information regarding this correspondence. Mr. Black is the USEPA representative providing regulatory oversite for the Hagen Farm Landfill and can be contacted via telephone at (312) 886-1451.

Sincerely,

Waste Management of Wisconsin, Inc.

Ryan J. Baeten, PE
District Manager

cc: Christopher Black, USEPA
Bruce LeRoy, WDNR

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Baeten
Waste Management
W124 N9355 Boundary Road
Menomonee Falls, Wisconsin 53051

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JOB DESCRIPTION

Hagen Farms - Groundwater

JOB NUMBER

480-217279-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

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Definitions/Glossary

Client: Waste Management
Project/Site: Hagen Farms - Groundwater

Job ID: 480-217279-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-217279-1 Eurofins Buffalo

Job Narrative
480-217279-1

Receipt
The samples were received on 2/23/2024 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-701670 recovered outside acceptance criteria, low biased, for 2-Hexanone. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported. The associated samples are impacted: PW09 (480-217279-1), FIELD BLANK (480-217279-2) and TRIP BLANK (480-217279-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client: Waste Management
Project/Site: Hagen Farms - Groundwater

Job ID: 480-217279-1

Client Sample ID: PW09
Date Collected: 02/21/24 10:10
Date Received: 02/23/24 10:40

Lab Sample ID: 480-217279-1
Matrix: Water

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Vinyl chloride	0.023		0.020	0.013	0.0040	ug/L		02/25/24 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
TBA-d9 (Surr)	*96*		*50 - 150*		*02/25/24 11:35*	*1*
Dibromofluoromethane (Surr)	*96*		*50 - 150*		*02/25/24 11:35*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	2.7	0.82	ug/L		02/23/24 23:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.70	0.21	ug/L		02/23/24 23:20	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		02/23/24 23:20	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		02/23/24 23:20	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		02/23/24 23:20	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		02/23/24 23:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		02/23/24 23:20	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		02/23/24 23:20	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		02/23/24 23:20	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		02/23/24 23:20	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		02/23/24 23:20	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		02/23/24 23:20	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		02/23/24 23:20	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		02/23/24 23:20	1
2-Hexanone	ND	^c	5.0	4.1	1.2	ug/L		02/23/24 23:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		02/23/24 23:20	1
Acetone	ND		10	10	3.0	ug/L		02/23/24 23:20	1
Benzene	ND		1.0	1.4	0.41	ug/L		02/23/24 23:20	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		02/23/24 23:20	1
Bromoform	ND		1.0	0.87	0.26	ug/L		02/23/24 23:20	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		02/23/24 23:20	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		02/23/24 23:20	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		02/23/24 23:20	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		02/23/24 23:20	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		02/23/24 23:20	1
Chloroform	ND		1.0	1.1	0.34	ug/L		02/23/24 23:20	1
Chloromethane	ND		1.0	1.2	0.35	ug/L		02/23/24 23:20	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		02/23/24 23:20	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		02/23/24 23:20	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		02/23/24 23:20	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		02/23/24 23:20	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		02/23/24 23:20	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		02/23/24 23:20	1
Methylene Chloride	ND		1.0	1.5	0.44	ug/L		02/23/24 23:20	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		02/23/24 23:20	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		02/23/24 23:20	1
Styrene	ND		1.0	2.4	0.73	ug/L		02/23/24 23:20	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		02/23/24 23:20	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		02/23/24 23:20	1
Toluene	ND		1.0	1.7	0.51	ug/L		02/23/24 23:20	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		02/23/24 23:20	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		02/23/24 23:20	1

Client: Waste Management
Project/Site: Hagen Farms - Groundwater

Job ID: 480-217279-1

Client Sample ID: PW09
Date Collected: 02/21/24 10:10
Date Received: 02/23/24 10:40

Lab Sample ID: 480-217279-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Trichloroethene	ND		1.0	1.5	0.46	ug/L		02/23/24 23:20	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		02/23/24 23:20	1
Vinyl chloride	ND		1.0	3.0	0.90	ug/L		02/23/24 23:20	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		02/23/24 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*02/23/24 23:20*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*02/23/24 23:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/23/24 23:20*	*1*