AECOM Environment

Second Quarter 2022 – April, May, June
Operation, Maintenance, and Monitoring Report

CHEM-TROL Site
NYSDEC Site No. 9-15-015
Report.hw915015.2022-07-08.2Q2022OMM

Site:
CHEM-TROL Site
4800 Lake Avenue
Blasdell, New York 14219

Submitted to:
NYSDEC
Region 9 Office
270 Michigan Avenue
Buffalo, NY 14203

Prepared for:
SC Holdings, Inc.
600 New Ludlow Road
South Hadley, MA 01075

Prepared by:
AECOM
1 John James Audubon Parkway, Suite 210
Amherst, New York 14228

July 8, 2022

AECOM Project No. 60652207.3

AECOM
1 John James Audubon Pkwy
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Amherst, NY 14228

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www.aecom.com

July 8, 2022

SUBMITTED VIA ELECTRONIC MAIL

Mr. Glenn May, PG
NYSDEC
Region 9 Office
270 Michigan Avenue
Buffalo, NY 14203

RE: S.C. Holdings, Inc., 4818 Lake Avenue, Blasdell, New York 14219
Second Quarter 2022 Operation, Maintenance, and Monitoring Report
Chem-Trol Site, NYSDEC Site No. 9-15-015, Report.hw915015.2022-07-08.2Q2022OMM

Dear Mr. May:

Enclosed please find the Second Quarter 2022 (2Q22 – April, May, June) Operation, Maintenance, and Monitoring Report for the "Chem-Trol" project site. AECOM is submitting this quarterly monitoring report on behalf of our client, SC Holdings, Inc.

The enclosed report contains the following information for 2Q22:

- Operation, Maintenance and Monitoring Checklists
- Summary Tables of Analytical Results and Flow Readings
- Copies of Analytical Results and Chain-of-Custody Forms

A summary of each month within 2Q22 is as follows:

April 2022

AECOM collected the monthly monitoring samples on April 25, 2022; analytical data were received on May 10, 2022. As presented on Table 1 (April 25, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

May 2022

AECOM collected the monthly monitoring samples on May 24, 2022; analytical data were received on June 3, 2022. As presented on Table 1 (May 24, 2022), there was an exceedance of the discharge requirements for o-chlorotoluene observed in the aqueous effluent sample based on concentration but not on mass loading. A cleaning of the air stripper trays was immediately scheduled for first available opportunity (June 7, 2022).

June 2022

On June 7, 2022, AECOM performed pressure washing and mechanical cleaning of the air stripper trays.

AECOM collected the monthly monitoring samples on June 15, 2022; analytical data were received on June 27, 2022. As presented on Table 1 (June 15, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

On June 21, 2022, AECOM collected the 2Q22 quarterly groundwater levels.

If you have any questions regarding the information presented in this report please contact me at (716) 923-1300.

Very truly yours,
AECOM

James L. Kaczor
Project Manager

Enclosure

cc: Ryan Donovan (SC Holdings, Inc.) (electronic copy)
60652207 Project File

April 2022

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: Sean P. Connelly Weather/Temperature: Overcast, 73 F
Date: 4/25/2022 Arrival Time: 15:30 Departure Time: 16:30

Reason for Service: Inspect system and perform monthly sampling

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	Wood lintel decaying, header exposed.
Siding	X	Metal trim missing from lintel.
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks		None
Building Heater	X	Heater is on.
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	Pump is currently down
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter	**X**	

Effluent Discharge

Outfall	**X**	
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	296 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	180 Inches
Flow Meter Reading	28,538,117 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	261 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	30 Inches H2O

Effluent Flow

Total System Meter Reading	73,166,706 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D
- pH by MCAWW SM18-20 4500-H+B

pH measurements must be made in the field:

Influent pH 7.0 (field test strip)
Effluent pH 7.0 (field test strip)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival.

Total system flow was timed at 3.5 gpm on system totalizer flow meter. During the visit, EW-2, and EW-3 influent valves were individually closed to test flow by reading response on transducer elevation; noted rise in transducer elevation when valve was closed and drop when valve was opened confirming well was pumping for EW-2 and EW-3. EW-1 is currently down.

The SVE building overhead door flashing has wind and header damage.

The AS building overhead door flashing needs replacement.

The most recent round of water levels (1Q2022) was collected on March 15, 2022.

The air stripper trays were last mechanically cleaned on March 17, 2022.

The monthly samples were collected today, April 25, 2022, by AECOM.

Table 1
April 25, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	5,403	5,403	144,000	gpd	NA	NA	NA
pH	7.0	7.6	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
o-Chlorotoluene	2,500	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Iron - Total	1,630	1,100	3,000	ug/L	0.05	3.61	lbs/day
TSS	< 4.0	8.4	20	mg/L	0.38		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured March 24, 2022 through April 25, 2022.*

Table 2
April 25, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 4/25/2022	units	Prior Report 3/24/2022
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	296	Inches	296
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	1
Water Level Above Transducer	180	Inches	189
Flow Meter Reading	28,538,117	gallons	28,538,117
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	261	Inches	214
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	30.0	inches H_2O	15.0
Effluent Flow			
Total System Meter Reading	73,166,706	gallons	72,999,200
Average System Flow Since Prior Report	5,403	gpd	
	225.1	gph	
	3.8	gpm	
Influent o-Chlorotoluene concentration	2,500	ug/L	
Current month mass removal	1.6	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

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ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-197131-1
Client Project/Site: ChemTrol Site - Monthly
Sampling Event: ChemTrol Monthly Groundwater

For:
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Attn: Ryan Donovan

Authorized for release by:
5/10/2022 9:33:44 AM

Ryan VanDette, Project Manager II
(716)504-9830
Ryan.VanDette@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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

Case Narrative

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Job ID: 480-197131-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-197131-1

Comments
No additional comments.

Receipt
The samples were received on 4/26/2022 8:30 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 3.9º C.

GC/MS VOA
Method 624.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: Influent (480-197131-2), (480-197131-D-2 MS) and (480-197131-D-2 MSD). Elevated reporting limits (RLs) are provided.

Method 624.1: Due to the high concentration of 2-Chlorotoluene, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 480-623173 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

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

General Chemistry
Method SM 2540D: Reanalysis of the following sample was performed outside of the analytical holding time due to confirmation of historical failure : Effluent (480-197131-1).

Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-197131-1) and Influent (480-197131-2).

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

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Client Sample ID: Effluent — Lab Sample ID: 480-197131-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1100		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Suspended Solids	8.4		4.0		mg/L	1		SM 2540D	Total/NA
Total Suspended Solids	4.8	H	4.0		mg/L	1		SM 2540D	Total/NA
pH	7.6	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	20.9	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-197131-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2500	F1	13		ug/L	40		624.1	Total/NA
Iron	1630		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.0	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	21.0	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-197131-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Client Sample ID: Effluent

Date Collected: 04/25/22 16:00
Date Received: 04/26/22 08:30

Lab Sample ID: 480-197131-1

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			04/26/22 15:16	1
1,1-Dichloroethane	ND		5.0		ug/L			04/26/22 15:16	1
1,1-Dichloroethene	ND		5.0		ug/L			04/26/22 15:16	1
Benzene	ND		5.0		ug/L			04/26/22 15:16	1
Chlorobenzene	ND		5.0		ug/L			04/26/22 15:16	1
Chloroethane	ND		5.0		ug/L			04/26/22 15:16	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			04/26/22 15:16	1
Toluene	ND		5.0		ug/L			04/26/22 15:16	1
Trichloroethene	ND		5.0		ug/L			04/26/22 15:16	1
o-Chlorotoluene	ND		5.0		ug/L			04/26/22 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*		*04/26/22 15:16*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*04/26/22 15:16*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*04/26/22 15:16*	*1*
Toluene-d8 (Surr)	*101*		*77 - 120*		*04/26/22 15:16*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1100**		50.0		ug/L		04/27/22 09:17	05/02/22 22:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**8.4**		4.0		mg/L			04/30/22 22:40	1
Total Suspended Solids	**4.8**	**H**	4.0		mg/L			05/04/22 18:00	1
pH	**7.6**	**HF**	0.1		SU			04/29/22 18:05	1
Temperature	**20.9**	**HF**	0.001		Degrees C			04/29/22 18:05	1

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Client Sample ID: Influent

Date Collected: 04/25/22 16:15
Date Received: 04/26/22 08:30

Lab Sample ID: 480-197131-2

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15		ug/L			04/26/22 15:40	40
1,1-Dichloroethane	ND		24		ug/L			04/26/22 15:40	40
1,1-Dichloroethene	ND		34		ug/L			04/26/22 15:40	40
Benzene	ND		24		ug/L			04/26/22 15:40	40
Chlorobenzene	ND		19		ug/L			04/26/22 15:40	40
Chloroethane	ND		35		ug/L			04/26/22 15:40	40
cis-1,2-Dichloroethene	ND		23		ug/L			04/26/22 15:40	40
Toluene	ND		18		ug/L			04/26/22 15:40	40
Trichloroethene	ND		24		ug/L			04/26/22 15:40	40
o-Chlorotoluene	**2500**	**F1**	13		ug/L			04/26/22 15:40	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*68 - 130*		*04/26/22 15:40*	*40*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*04/26/22 15:40*	*40*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*04/26/22 15:40*	*40*
Toluene-d8 (Surr)	*101*		*77 - 120*		*04/26/22 15:40*	*40*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1630**		50.0		ug/L		04/27/22 09:17	05/02/22 22:39	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			04/30/22 22:40	1
pH	**7.0**	**HF**	0.1		SU			04/29/22 18:08	1
Temperature	**21.0**	**HF**	0.001		Degrees C			04/29/22 18:08	1

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Client Sample ID: Trip Blank

Date Collected: 04/25/22 00:00
Date Received: 04/26/22 08:30

Lab Sample ID: 480-197131-3

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			04/26/22 16:04	1
1,1-Dichloroethane	ND		5.0		ug/L			04/26/22 16:04	1
1,1-Dichloroethene	ND		5.0		ug/L			04/26/22 16:04	1
Benzene	ND		5.0		ug/L			04/26/22 16:04	1
Chlorobenzene	ND		5.0		ug/L			04/26/22 16:04	1
Chloroethane	ND		5.0		ug/L			04/26/22 16:04	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			04/26/22 16:04	1
Toluene	ND		5.0		ug/L			04/26/22 16:04	1
Trichloroethene	ND		5.0		ug/L			04/26/22 16:04	1
o-Chlorotoluene	ND		5.0		ug/L			04/26/22 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*68 - 130*		*04/26/22 16:04*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*04/26/22 16:04*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*		*04/26/22 16:04*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*04/26/22 16:04*	*1*

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-623173/8
Matrix: Water
Analysis Batch: 623173

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			04/26/22 12:43	1
1,1-Dichloroethane	ND		5.0		ug/L			04/26/22 12:43	1
1,1-Dichloroethene	ND		5.0		ug/L			04/26/22 12:43	1
Benzene	ND		5.0		ug/L			04/26/22 12:43	1
Chlorobenzene	ND		5.0		ug/L			04/26/22 12:43	1
Chloroethane	ND		5.0		ug/L			04/26/22 12:43	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			04/26/22 12:43	1
Toluene	ND		5.0		ug/L			04/26/22 12:43	1
Trichloroethene	ND		5.0		ug/L			04/26/22 12:43	1
o-Chlorotoluene	ND		5.0		ug/L			04/26/22 12:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*68 - 130*		*04/26/22 12:43*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*04/26/22 12:43*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*04/26/22 12:43*	*1*
Toluene-d8 (Surr)	*99*		*77 - 120*		*04/26/22 12:43*	*1*

Lab Sample ID: LCS 480-623173/6
Matrix: Water
Analysis Batch: 623173

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	20.0		ug/L		100	52 - 162
1,1-Dichloroethane	20.0	19.5		ug/L		98	59 - 155
1,1-Dichloroethene	20.0	19.7		ug/L		98	1 - 234
Benzene	20.0	19.8		ug/L		99	37 - 151
Chlorobenzene	20.0	20.4		ug/L		102	37 - 160
Chloroethane	20.0	21.7		ug/L		108	14 - 230
Toluene	20.0	20.9		ug/L		104	47 - 150
Trichloroethene	20.0	19.9		ug/L		99	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*
Toluene-d8 (Surr)	*103*		*77 - 120*

Lab Sample ID: 480-197131-2 MS
Matrix: Water
Analysis Batch: 623173

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		800	850		ug/L		106	52 - 162
1,1-Dichloroethane	ND		800	854		ug/L		107	59 - 155
1,1-Dichloroethene	ND		800	864		ug/L		108	1 - 234
Benzene	ND		800	843		ug/L		105	37 - 151
Chlorobenzene	ND		800	839		ug/L		105	37 - 160
Chloroethane	ND		800	944		ug/L		118	14 - 230

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-197131-2 MS
Matrix: Water
Analysis Batch: 623173

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	ND		800	861		ug/L		108	47 - 150
Trichloroethene	ND		800	825		ug/L		103	71 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*
Dibromofluoromethane (Surr)	*102*		*75 - 123*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*
Toluene-d8 (Surr)	*101*		*77 - 120*

Lab Sample ID: 480-197131-2 MSD
Matrix: Water
Analysis Batch: 623173

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		800	802		ug/L		100	52 - 162	6	15
1,1-Dichloroethane	ND		800	797		ug/L		100	59 - 155	7	15
1,1-Dichloroethene	ND		800	799		ug/L		100	1 - 234	8	15
Benzene	ND		800	809		ug/L		101	37 - 151	4	15
Chlorobenzene	ND		800	822		ug/L		103	37 - 160	2	15
Chloroethane	ND		800	913		ug/L		114	14 - 230	3	15
Toluene	ND		800	840		ug/L		105	47 - 150	2	15
Trichloroethene	ND		800	812		ug/L		101	71 - 157	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*68 - 130*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*
Toluene-d8 (Surr)	*102*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-623313/1-A
Matrix: Water
Analysis Batch: 624223

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 623313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		04/27/22 09:17	05/02/22 15:49	1

Lab Sample ID: LCS 480-623313/2-A
Matrix: Water
Analysis Batch: 624223

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 623313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10880		ug/L		109	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-624002/1
Matrix: Water
Analysis Batch: 624002

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			04/30/22 22:40	1

Lab Sample ID: LCS 480-624002/2
Matrix: Water
Analysis Batch: 624002

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			4360	4327		mg/L		99	88 - 110		

Lab Sample ID: MB 480-624608/1
Matrix: Water
Analysis Batch: 624608

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			05/04/22 18:00	1

Lab Sample ID: LCS 480-624608/2
Matrix: Water
Analysis Batch: 624608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			4350	4341		mg/L		100	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-623937/1
Matrix: Water
Analysis Batch: 623937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100	99 - 101		

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

GC/MS VOA

Analysis Batch: 623173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-197131-1	Effluent	Total/NA	Water	624.1	
480-197131-2	Influent	Total/NA	Water	624.1	
480-197131-3	Trip Blank	Total/NA	Water	624.1	
MB 480-623173/8	Method Blank	Total/NA	Water	624.1	
LCS 480-623173/6	Lab Control Sample	Total/NA	Water	624.1	
480-197131-2 MS	Influent	Total/NA	Water	624.1	
480-197131-2 MSD	Influent	Total/NA	Water	624.1	

Metals

Prep Batch: 623313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-197131-1	Effluent	Total Recoverable	Water	200.7	
480-197131-2	Influent	Total Recoverable	Water	200.7	
MB 480-623313/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-623313/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 624223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-623313/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	623313
LCS 480-623313/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	623313

Analysis Batch: 624318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-197131-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	623313
480-197131-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	623313

General Chemistry

Analysis Batch: 623937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-197131-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-197131-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-623937/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 624002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-197131-1	Effluent	Total/NA	Water	SM 2540D	
480-197131-2	Influent	Total/NA	Water	SM 2540D	
MB 480-624002/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-624002/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 624608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-197131-1	Effluent	Total/NA	Water	SM 2540D	
MB 480-624608/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-624608/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Client Sample ID: Effluent
Date Collected: 04/25/22 16:00
Date Received: 04/26/22 08:30

Lab Sample ID: 480-197131-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	623173	04/26/22 15:16	ATG	TAL BUF
Total Recoverable	Prep	200.7			623313	04/27/22 09:17	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	624318	05/02/22 22:23	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	624002	04/30/22 22:40	CSS	TAL BUF
Total/NA	Analysis	SM 2540D		1	624608	05/04/22 18:00	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	623937	04/29/22 18:05	RDA	TAL BUF

Client Sample ID: Influent
Date Collected: 04/25/22 16:15
Date Received: 04/26/22 08:30

Lab Sample ID: 480-197131-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		40	623173	04/26/22 15:40	ATG	TAL BUF
Total Recoverable	Prep	200.7			623313	04/27/22 09:17	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	624318	05/02/22 22:39	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	624002	04/30/22 22:40	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	623937	04/29/22 18:08	RDA	TAL BUF

Client Sample ID: Trip Blank
Date Collected: 04/25/22 00:00
Date Received: 04/26/22 08:30

Lab Sample ID: 480-197131-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	623173	04/26/22 16:04	ATG	TAL BUF

Laboratory References:
TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	o-Chlorotoluene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
200.7	Preparation, Total Recoverable Metals	EPA	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-197131-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-197131-1	Effluent	Water	04/25/22 16:00	04/26/22 08:30
480-197131-2	Influent	Water	04/25/22 16:15	04/26/22 08:30
480-197131-3	Trip Blank	Water	04/25/22 00:00	04/26/22 08:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: S. Connelly	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-171545-28522.1
Client Contact: Chad Moose	Phone: (716) 595 0870	E-Mail: Ryan.VanDette@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: Tullytown Landfill 444 Oxford Valley Road	Due Date Requested:			
City: Morrisville	TAT Requested (days): STD			
State, Zip: PA, 19067	Compliance Project: Δ Yes Δ No			
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 11231631			
Email: cmoose@wm.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwate	Project #: 48002447			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	624.1_PREC - 624	2540D - Total Suspended Solids	SM4500_H+ - pH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
Effluent	4/25/22	1600	G	Water	N	N	1	3	1	1		
Influent	4/25/22	1615	G	Water	N	N	1	3	1	1		
Trip Blank	4/25/22	-	-	Water	N	N		1				

480-197131 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	S. Connelly	4/26/22 @ 0830			4/26/22 @ 0830	TAB
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks: 3.9 #1 ICE

Ver: 06/08/2021

May 2022

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: Sean P. Connelly, Collin Horrocks Weather/Temperature: Mostly Sunny, 65 F
Date: 5/24/2022 Arrival Time: 11:30 Departure Time: 13:00

Reason for Service: Inspect system and perform monthly sampling

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	Wood lintel decaying, header exposed.
Siding	X	Metal trim missing from lintel.
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks		None
Building Heater	X	Turned heater off
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	Pump is currently down
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter	**X**	

Effluent Discharge

Outfall	**X**	Good Flow
Cleanout	**X**	Cleaned out/ dug out outflow discharge

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	289 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	174 Inches
Flow Meter Reading	28,538,192 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	195 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	31 Inches H2O

Effluent Flow

Total System Meter Reading	73,308,590 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D
- pH by MCAWW SM18-20 4500-H+B

pH measurements must be made in the field:

Influent pH 7.0 (field test strip)
Effluent pH 7.0 (field test strip)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival.

Total system flow was timed at 3.0 gpm on system totalizer flow meter. During the visit, EW-2, and EW-3 influent valves were individually closed to test flow by reading response on transducer elevation; noted rise in transducer elevation when valve was closed and drop when valve was opened confirming well was pumping for EW-2 and EW-3. EW-1 is currently down.

The SVE building overhead door flashing has wind and header damage.

The AS building overhead door flashing needs replacement.

The most recent round of water levels (1Q2022) was collected on March 15, 2022.

The air stripper trays were last mechanically cleaned on March 17, 2022.

The monthly samples were collected today, May 24, 2022, by AECOM.

Table 1
May 24, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	4,893	4,893	144,000	gpd	NA	NA	NA
pH	6.9	7.6	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
o-Chlorotoluene	2,700	**110**	10	ug/L	0.0045	0.012	lbs/day
Iron - Total	1,490	457	3,000	ug/L	0.02	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.16		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured April 25, 2022 through May 24, 2022.*

Table 2
May 24, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 5/24/2022	units	Prior Report 4/25/2022
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	289	Inches	296
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	174	Inches	180
Flow Meter Reading	28,538,117	gallons	28,538,117
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	195	Inches	261
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	31.0	inches H_2O	30.0
Effluent Flow			
Total System Meter Reading	73,308,590	gallons	73,166,706
Average System Flow Since Prior Report	4,893	gpd	
	203.9	gph	
	3.4	gpm	
Influent o-Chlorotoluene concentration	2,500	ug/L	
Current month mass removal	1.3	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

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ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-198264-1
Client Project/Site: ChemTrol Site - Monthly
Sampling Event: ChemTrol Monthly Groundwater

For:
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Attn: Ryan Donovan

Authorized for release by:
6/3/2022 4:03:21 PM

Ryan VanDette, Project Manager II
(716)504-9830
Ryan.VanDette@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Waste Management
Job ID: 480-198264-1
Project/Site: ChemTrol Site - Monthly

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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

Case Narrative

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

Job ID: 480-198264-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-198264-1

Comments
No additional comments.

Receipt
The samples were received on 5/24/2022 1:30 PM. 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 3.6º C.

GC/MS VOA
Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-198264-2). Elevated reporting limits (RLs) are provided.

Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Effluent (480-198264-1). Elevated reporting limits (RLs) are provided.

Method 624.1: The results reported for the following sample do not concur with results previously reported for this site: Effluent (480-198264-1). Reanalysis was performed, and the result(s) confirmed.

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

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

General Chemistry
Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-198264-1) and Influent (480-198264-2).

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

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

Client Sample ID: Effluent — Lab Sample ID: 480-198264-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene - DL	110		5.0		ug/L	2		624.1	Total/NA
Iron	457		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.6	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.5	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-198264-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2700		13		ug/L	40		624.1	Total/NA
Iron	1490		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	6.9	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.6	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-198264-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

Client Sample ID: Effluent

Date Collected: 05/24/22 12:00
Date Received: 05/24/22 13:30

Lab Sample ID: 480-198264-1

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			05/25/22 18:35	1
1,1-Dichloroethane	ND		5.0		ug/L			05/25/22 18:35	1
1,1-Dichloroethene	ND		5.0		ug/L			05/25/22 18:35	1
Benzene	ND		5.0		ug/L			05/25/22 18:35	1
Chlorobenzene	ND		5.0		ug/L			05/25/22 18:35	1
Chloroethane	ND		5.0		ug/L			05/25/22 18:35	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			05/25/22 18:35	1
Toluene	ND		5.0		ug/L			05/25/22 18:35	1
Trichloroethene	ND		5.0		ug/L			05/25/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*		*05/25/22 18:35*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*05/25/22 18:35*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*		*05/25/22 18:35*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*05/25/22 18:35*	*1*

Method: 624.1 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Chlorotoluene	**110**		5.0		ug/L			05/27/22 16:41	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*		*05/27/22 16:41*	*2*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/27/22 16:41*	*2*
4-Bromofluorobenzene (Surr)	*94*		*76 - 123*		*05/27/22 16:41*	*2*
Toluene-d8 (Surr)	*102*		*77 - 120*		*05/27/22 16:41*	*2*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**457**		50.0		ug/L		05/31/22 09:53	06/01/22 13:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			05/31/22 13:23	1
pH	**7.6**	**HF**	0.1		SU			05/26/22 18:36	1
Temperature	**18.5**	**HF**	0.001		Degrees C			05/26/22 18:36	1

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

Client Sample ID: Influent

Date Collected: 05/24/22 12:20
Date Received: 05/24/22 13:30

Lab Sample ID: 480-198264-2

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15		ug/L			05/25/22 18:59	40
1,1-Dichloroethane	ND		24		ug/L			05/25/22 18:59	40
1,1-Dichloroethene	ND		34		ug/L			05/25/22 18:59	40
Benzene	ND		24		ug/L			05/25/22 18:59	40
Chlorobenzene	ND		19		ug/L			05/25/22 18:59	40
Chloroethane	ND		35		ug/L			05/25/22 18:59	40
cis-1,2-Dichloroethene	ND		23		ug/L			05/25/22 18:59	40
Toluene	ND		18		ug/L			05/25/22 18:59	40
Trichloroethene	ND		24		ug/L			05/25/22 18:59	40
o-Chlorotoluene	**2700**		13		ug/L			05/25/22 18:59	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*68 - 130*		*05/25/22 18:59*	*40*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*05/25/22 18:59*	*40*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*05/25/22 18:59*	*40*
Toluene-d8 (Surr)	*100*		*77 - 120*		*05/25/22 18:59*	*40*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1490**		50.0		ug/L		05/31/22 09:53	06/01/22 13:26	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			05/31/22 13:23	1
pH	**6.9**	**HF**	0.1		SU			05/26/22 18:33	1
Temperature	**18.6**	**HF**	0.001		Degrees C			05/26/22 18:33	1

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

Client Sample ID: Trip Blank
Date Collected: 05/24/22 00:00
Date Received: 05/24/22 13:30

Lab Sample ID: 480-198264-3
Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			05/25/22 19:23	1
1,1-Dichloroethane	ND		5.0		ug/L			05/25/22 19:23	1
1,1-Dichloroethene	ND		5.0		ug/L			05/25/22 19:23	1
Benzene	ND		5.0		ug/L			05/25/22 19:23	1
Chlorobenzene	ND		5.0		ug/L			05/25/22 19:23	1
Chloroethane	ND		5.0		ug/L			05/25/22 19:23	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			05/25/22 19:23	1
Toluene	ND		5.0		ug/L			05/25/22 19:23	1
Trichloroethene	ND		5.0		ug/L			05/25/22 19:23	1
o-Chlorotoluene	ND		5.0		ug/L			05/25/22 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*05/25/22 19:23*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*05/25/22 19:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*05/25/22 19:23*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*05/25/22 19:23*	*1*

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-627613/8
Matrix: Water
Analysis Batch: 627613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			05/25/22 17:47	1
1,1-Dichloroethane	ND		5.0		ug/L			05/25/22 17:47	1
1,1-Dichloroethene	ND		5.0		ug/L			05/25/22 17:47	1
Benzene	ND		5.0		ug/L			05/25/22 17:47	1
Chlorobenzene	ND		5.0		ug/L			05/25/22 17:47	1
Chloroethane	ND		5.0		ug/L			05/25/22 17:47	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			05/25/22 17:47	1
Toluene	ND		5.0		ug/L			05/25/22 17:47	1
Trichloroethene	ND		5.0		ug/L			05/25/22 17:47	1
o-Chlorotoluene	ND		5.0		ug/L			05/25/22 17:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*68 - 130*		*05/25/22 17:47*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*05/25/22 17:47*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*05/25/22 17:47*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*05/25/22 17:47*	*1*

Lab Sample ID: LCS 480-627613/6
Matrix: Water
Analysis Batch: 627613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	20.7		ug/L		103	52 - 162
1,1-Dichloroethane	20.0	21.0		ug/L		105	59 - 155
1,1-Dichloroethene	20.0	21.2		ug/L		106	1 - 234
Benzene	20.0	20.1		ug/L		100	37 - 151
Chlorobenzene	20.0	20.1		ug/L		101	37 - 160
Chloroethane	20.0	21.2		ug/L		106	14 - 230
Toluene	20.0	20.3		ug/L		102	47 - 150
Trichloroethene	20.0	20.5		ug/L		102	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*68 - 130*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*
Toluene-d8 (Surr)	*101*		*77 - 120*

Lab Sample ID: MB 480-627970/9
Matrix: Water
Analysis Batch: 627970

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			05/27/22 16:07	1
1,1-Dichloroethane	ND		5.0		ug/L			05/27/22 16:07	1
1,1-Dichloroethene	ND		5.0		ug/L			05/27/22 16:07	1
Benzene	ND		5.0		ug/L			05/27/22 16:07	1
Chlorobenzene	ND		5.0		ug/L			05/27/22 16:07	1
Chloroethane	ND		5.0		ug/L			05/27/22 16:07	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-627970/9
Matrix: Water
Analysis Batch: 627970

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		5.0		ug/L			05/27/22 16:07	1
Toluene	ND		5.0		ug/L			05/27/22 16:07	1
Trichloroethene	ND		5.0		ug/L			05/27/22 16:07	1
o-Chlorotoluene	ND		5.0		ug/L			05/27/22 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*05/27/22 16:07*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/27/22 16:07*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*05/27/22 16:07*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*05/27/22 16:07*	*1*

Lab Sample ID: LCS 480-627970/7
Matrix: Water
Analysis Batch: 627970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	19.1		ug/L		96	52 - 162
1,1-Dichloroethane	20.0	19.5		ug/L		98	59 - 155
1,1-Dichloroethene	20.0	18.9		ug/L		95	1 - 234
Benzene	20.0	19.1		ug/L		96	37 - 151
Chlorobenzene	20.0	19.2		ug/L		96	37 - 160
Chloroethane	20.0	19.8		ug/L		99	14 - 230
Toluene	20.0	19.2		ug/L		96	47 - 150
Trichloroethene	20.0	19.4		ug/L		97	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*68 - 130*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*
Toluene-d8 (Surr)	*101*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-628003/1-A
Matrix: Water
Analysis Batch: 628380

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 628003

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		05/31/22 09:53	06/01/22 14:17	1

Lab Sample ID: LCS 480-628003/2-A
Matrix: Water
Analysis Batch: 628380

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 628003

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10440		ug/L		104	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 480-198264-1 MS
Matrix: Water
Analysis Batch: 628380

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 628003

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	457		10000	10490		ug/L		100	70 - 130

Lab Sample ID: 480-198264-1 MSD
Matrix: Water
Analysis Batch: 628380

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 628003

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	457		10000	10600		ug/L		101	70 - 130	1	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-628165/1
Matrix: Water
Analysis Batch: 628165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			05/31/22 13:23	1

Lab Sample ID: LCS 480-628165/2
Matrix: Water
Analysis Batch: 628165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	309	298.4		mg/L		97	88 - 110

Lab Sample ID: 480-198264-1 DU
Matrix: Water
Analysis Batch: 628165

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		ND		mg/L		NC	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-627879/1
Matrix: Water
Analysis Batch: 627879

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

GC/MS VOA

Analysis Batch: 627613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198264-1	Effluent	Total/NA	Water	624.1	
480-198264-2	Influent	Total/NA	Water	624.1	
480-198264-3	Trip Blank	Total/NA	Water	624.1	
MB 480-627613/8	Method Blank	Total/NA	Water	624.1	
LCS 480-627613/6	Lab Control Sample	Total/NA	Water	624.1	

Analysis Batch: 627970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198264-1 - DL	Effluent	Total/NA	Water	624.1	
MB 480-627970/9	Method Blank	Total/NA	Water	624.1	
LCS 480-627970/7	Lab Control Sample	Total/NA	Water	624.1	

Metals

Prep Batch: 628003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198264-1	Effluent	Total Recoverable	Water	200.7	
480-198264-2	Influent	Total Recoverable	Water	200.7	
MB 480-628003/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-628003/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
480-198264-1 MS	Effluent	Total Recoverable	Water	200.7	
480-198264-1 MSD	Effluent	Total Recoverable	Water	200.7	

Analysis Batch: 628380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198264-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	628003
480-198264-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	628003
MB 480-628003/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	628003
LCS 480-628003/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	628003
480-198264-1 MS	Effluent	Total Recoverable	Water	200.7 Rev 4.4	628003
480-198264-1 MSD	Effluent	Total Recoverable	Water	200.7 Rev 4.4	628003

General Chemistry

Analysis Batch: 627879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198264-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-198264-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-627879/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 628165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198264-1	Effluent	Total/NA	Water	SM 2540D	
480-198264-2	Influent	Total/NA	Water	SM 2540D	
MB 480-628165/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-628165/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-198264-1 DU	Effluent	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Waste Management
Job ID: 480-198264-1
Project/Site: ChemTrol Site - Monthly

Client Sample ID: Effluent
Lab Sample ID: 480-198264-1
Date Collected: 05/24/22 12:00
Matrix: Water
Date Received: 05/24/22 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	627613	05/25/22 18:35	ATG	TAL BUF
Total/NA	Analysis	624.1	DL	2	627970	05/27/22 16:41	ATG	TAL BUF
Total Recoverable	Prep	200.7			628003	05/31/22 09:53	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	628380	06/01/22 13:07	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	628165	05/31/22 13:23	SAK	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	627879	05/26/22 18:36	RDA	TAL BUF

Client Sample ID: Influent
Lab Sample ID: 480-198264-2
Date Collected: 05/24/22 12:20
Matrix: Water
Date Received: 05/24/22 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		40	627613	05/25/22 18:59	ATG	TAL BUF
Total Recoverable	Prep	200.7			628003	05/31/22 09:53	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	628380	06/01/22 13:26	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	628165	05/31/22 13:23	SAK	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	627879	05/26/22 18:33	RDA	TAL BUF

Client Sample ID: Trip Blank
Lab Sample ID: 480-198264-3
Date Collected: 05/24/22 00:00
Matrix: Water
Date Received: 05/24/22 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	627613	05/25/22 19:23	ATG	TAL BUF

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	o-Chlorotoluene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
200.7	Preparation, Total Recoverable Metals	EPA	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater ", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-198264-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-198264-1	Effluent	Water	05/24/22 12:00	05/24/22 13:30
480-198264-2	Influent	Water	05/24/22 12:20	05/24/22 13:30
480-198264-3	Trip Blank	Water	05/24/22 00:00	05/24/22 13:30

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: S. Connelly	Lab PM: Johnson, Orlette S	Carrier Tracking No(s):	COC No: 480-161927-28522.1
Client Contact: Chad Moose	Phone: (716)393-0870	E-Mail: Orlette.Johnson@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: Tullytown Landfill 444 Oxford Valley Road	Due Date Requested:			
City: Morrisville	TAT Requested (days): STD			
State, Zip: PA, 19067	Compliance Project: Δ Yes Δ No			
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: Purchase Order Requested			
Email: cmoose@wm.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwat	Project #: 48002447			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	624.1_PREC - 624	2540D - Total Suspended Solids	SM4500_H+ - pH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
Effluent	5/24/22	1200	G	Water	N	N	1	3	1	1		
Influent	5/24/22	1220	G	Water	N	N	1	3	1	1		
Trip Blank	5/24/22	—	—	Water	N	N		1				

480-198264 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/24/22 1330	Acom			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/24/22 1830	Company TVS

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.6 #1 WF

6/3/2022

June 2022

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: Rob Murphy, Collin Horrocks Weather/Temperature: Sunny, 73 F
Date: 6/15/2022 Arrival Time: 0800 Departure Time: 0945

Reason for Service: Inspect system and perform monthly sampling

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See Notes/Explanations section.
Building Exterior		
Overhead Door	X	Wood lintel decaying, header exposed.
Siding	X	Metal trim missing from lintel.
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks		None
Building Heater	X	Turned heater off
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	
Iron Removal Filter	**NA**	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	**X**	See Notes/Explanations section.
Gauges	**X**	Replaced Magnahelic Gauge (0 to 50 inches of water)
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	Pump is currently down
EW-1 Transducer	**X**	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter	**X**	

Effluent Discharge

Outfall	**X**	Good Flow
Cleanout	**X**	Cleaned out/ dug out outflow discharge

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	287 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	170 Inches
Flow Meter Reading	28,538,192 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	188 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	17 Inches H2O

Effluent Flow

Total System Meter Reading	73,392,310 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D
- pH by MCAWW SM18-20 4500-H+B

pH measurements must be made in the field:

Influent pH 7.0 (field test strip)
Effluent pH 7.0 (field test strip)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

The system was on upon arrival.

Total system flow was timed at 2.5 gpm on system totalizer flow meter. During the visit, EW-2, and EW-3 influent valves were individually closed to test flow by reading response on transducer elevation; noted rise in transducer elevation when valve was closed and drop when valve was opened confirming well was pumping for EW-2 and EW-3. EW-1 is currently down.

The SVE building overhead door flashing has wind and header damage.

The AS building overhead door flashing needs replacement.

The most recent round of water levels (1Q2022) was collected on March 15, 2022.

The air stripper trays were last mechanically cleaned on June 7, 2022.

The monthly samples were collected today, June 15, 2022, by AECOM.

Table 1
June 15, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	4,893	4,893	144,000	gpd	NA	NA	NA
pH	7.2	8.1	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
o-Chlorotoluene	3,900	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Iron - Total	1,420	599	3,000	ug/L	0.02	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.16		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured May 24, 2022 through June 15, 2022.*

Table 2
June 15, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 6/15/2022	units	Prior Report 5/24/2022
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	287	Inches	289
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	170	Inches	174
Flow Meter Reading	28,538,117	gallons	28,538,117
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	188	Inches	195
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	17.0	inches H_2O	31.0
Effluent Flow			
Total System Meter Reading	73,392,310	gallons	73,308,590
Average System Flow Since Prior Report	3,987	gpd	
	166.1	gph	
	2.8	gpm	
Influent o-Chlorotoluene concentration	3,900	ug/L	
Current month mass removal	1.2	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

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ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-199035-1
Client Project/Site: ChemTrol Site - Monthly
Sampling Event: ChemTrol Monthly Groundwater

For:
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Attn: Ryan Donovan

Authorized for release by:
6/27/2022 2:17:12 PM

Ryan VanDette, Project Manager II
(716)504-9830
Ryan.VanDette@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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

Case Narrative

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Job ID: 480-199035-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-199035-1

Comments
No additional comments.

Receipt
The samples were received on 6/15/2022 10:30 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 3.4º C.

GC/MS VOA
Method 624.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: Influent (480-199035-2), (480-199035-D-2 MS) and (480-199035-D-2 MSD). Elevated reporting limits (RLs) are provided.

Method 624.1: The results reported for the following sample do not concur with results previously reported for this site: Influent (480-199035-2). Reanalysis was performed, and the result(s) confirmed.

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

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

General Chemistry
Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-199035-1) and Influent (480-199035-2).

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

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Client Sample ID: Effluent — Lab Sample ID: 480-199035-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	599		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	8.1	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.3	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-199035-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	3900		13		ug/L	40		624.1	Total/NA
Iron	1420		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.2	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	18.8	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-199035-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Client Sample ID: Effluent

Date Collected: 06/15/22 09:00
Date Received: 06/15/22 10:30

Lab Sample ID: 480-199035-1

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			06/16/22 19:33	1
1,1-Dichloroethane	ND		5.0		ug/L			06/16/22 19:33	1
1,1-Dichloroethene	ND		5.0		ug/L			06/16/22 19:33	1
Benzene	ND		5.0		ug/L			06/16/22 19:33	1
Chlorobenzene	ND		5.0		ug/L			06/16/22 19:33	1
Chloroethane	ND		5.0		ug/L			06/16/22 19:33	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			06/16/22 19:33	1
Toluene	ND		5.0		ug/L			06/16/22 19:33	1
Trichloroethene	ND		5.0		ug/L			06/16/22 19:33	1
o-Chlorotoluene	ND		5.0		ug/L			06/16/22 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*68 - 130*		*06/16/22 19:33*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*06/16/22 19:33*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*06/16/22 19:33*	*1*
Toluene-d8 (Surr)	*103*		*77 - 120*		*06/16/22 19:33*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**599**		50.0		ug/L		06/17/22 09:03	06/18/22 02:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			06/22/22 15:50	1
pH	**8.1**	**HF**	0.1		SU			06/23/22 10:28	1
Temperature	**18.3**	**HF**	0.001		Degrees C			06/23/22 10:28	1

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Client Sample ID: Influent

Date Collected: 06/15/22 09:10
Date Received: 06/15/22 10:30

Lab Sample ID: 480-199035-2

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15		ug/L			06/16/22 19:57	40
1,1-Dichloroethane	ND		24		ug/L			06/16/22 19:57	40
1,1-Dichloroethene	ND		34		ug/L			06/16/22 19:57	40
Benzene	ND		24		ug/L			06/16/22 19:57	40
Chlorobenzene	ND		19		ug/L			06/16/22 19:57	40
Chloroethane	ND		35		ug/L			06/16/22 19:57	40
cis-1,2-Dichloroethene	ND		23		ug/L			06/16/22 19:57	40
Toluene	ND		18		ug/L			06/16/22 19:57	40
Trichloroethene	ND		24		ug/L			06/16/22 19:57	40
o-Chlorotoluene	**3900**		13		ug/L			06/16/22 19:57	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*68 - 130*		*06/16/22 19:57*	*40*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*06/16/22 19:57*	*40*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*06/16/22 19:57*	*40*
Toluene-d8 (Surr)	*104*		*77 - 120*		*06/16/22 19:57*	*40*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1420**		50.0		ug/L		06/17/22 09:03	06/18/22 02:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			06/22/22 15:50	1
pH	**7.2**	**HF**	0.1		SU			06/23/22 10:29	1
Temperature	**18.8**	**HF**	0.001		Degrees C			06/23/22 10:29	1

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Client Sample ID: Trip Blank
Date Collected: 06/15/22 00:00
Date Received: 06/15/22 10:30

Lab Sample ID: 480-199035-3
Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			06/16/22 20:21	1
1,1-Dichloroethane	ND		5.0		ug/L			06/16/22 20:21	1
1,1-Dichloroethene	ND		5.0		ug/L			06/16/22 20:21	1
Benzene	ND		5.0		ug/L			06/16/22 20:21	1
Chlorobenzene	ND		5.0		ug/L			06/16/22 20:21	1
Chloroethane	ND		5.0		ug/L			06/16/22 20:21	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			06/16/22 20:21	1
Toluene	ND		5.0		ug/L			06/16/22 20:21	1
Trichloroethene	ND		5.0		ug/L			06/16/22 20:21	1
o-Chlorotoluene	ND		5.0		ug/L			06/16/22 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*68 - 130*		*06/16/22 20:21*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*06/16/22 20:21*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*06/16/22 20:21*	*1*
Toluene-d8 (Surr)	*104*		*77 - 120*		*06/16/22 20:21*	*1*

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-630357/8
Matrix: Water
Analysis Batch: 630357

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			06/16/22 18:36	1
1,1-Dichloroethane	ND		5.0		ug/L			06/16/22 18:36	1
1,1-Dichloroethene	ND		5.0		ug/L			06/16/22 18:36	1
Benzene	ND		5.0		ug/L			06/16/22 18:36	1
Chlorobenzene	ND		5.0		ug/L			06/16/22 18:36	1
Chloroethane	ND		5.0		ug/L			06/16/22 18:36	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			06/16/22 18:36	1
Toluene	ND		5.0		ug/L			06/16/22 18:36	1
Trichloroethene	ND		5.0		ug/L			06/16/22 18:36	1
o-Chlorotoluene	ND		5.0		ug/L			06/16/22 18:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*68 - 130*		*06/16/22 18:36*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*06/16/22 18:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*		*06/16/22 18:36*	*1*
Toluene-d8 (Surr)	*103*		*77 - 120*		*06/16/22 18:36*	*1*

Lab Sample ID: LCS 480-630357/6
Matrix: Water
Analysis Batch: 630357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	16.6		ug/L		83	52 - 162
1,1-Dichloroethane	20.0	17.7		ug/L		88	59 - 155
1,1-Dichloroethene	20.0	16.8		ug/L		84	1 - 234
Benzene	20.0	17.5		ug/L		88	37 - 151
Chlorobenzene	20.0	17.7		ug/L		88	37 - 160
Chloroethane	20.0	18.6		ug/L		93	14 - 230
Toluene	20.0	18.4		ug/L		92	47 - 150
Trichloroethene	20.0	17.4		ug/L		87	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*
Dibromofluoromethane (Surr)	*90*		*75 - 123*
4-Bromofluorobenzene (Surr)	*94*		*76 - 123*
Toluene-d8 (Surr)	*102*		*77 - 120*

Lab Sample ID: 480-199035-2 MS
Matrix: Water
Analysis Batch: 630357

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		800	687		ug/L		86	52 - 162
1,1-Dichloroethane	ND		800	755		ug/L		94	59 - 155
1,1-Dichloroethene	ND		800	690		ug/L		86	1 - 234
Benzene	ND		800	733		ug/L		92	37 - 151
Chlorobenzene	ND		800	716		ug/L		90	37 - 160
Chloroethane	ND		800	804		ug/L		101	14 - 230

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-199035-2 MS
Matrix: Water
Analysis Batch: 630357

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	ND		800	756		ug/L		94	47 - 150
Trichloroethene	ND		800	706		ug/L		88	71 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*
Dibromofluoromethane (Surr)	*94*		*75 - 123*
4-Bromofluorobenzene (Surr)	*96*		*76 - 123*
Toluene-d8 (Surr)	*104*		*77 - 120*

Lab Sample ID: 480-199035-2 MSD
Matrix: Water
Analysis Batch: 630357

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		800	676		ug/L		84	52 - 162	2	15
1,1-Dichloroethane	ND		800	744		ug/L		93	59 - 155	1	15
1,1-Dichloroethene	ND		800	672		ug/L		84	1 - 234	3	15
Benzene	ND		800	697		ug/L		87	37 - 151	5	15
Chlorobenzene	ND		800	707		ug/L		88	37 - 160	1	15
Chloroethane	ND		800	803		ug/L		100	14 - 230	0	15
Toluene	ND		800	732		ug/L		92	47 - 150	3	15
Trichloroethene	ND		800	699		ug/L		87	71 - 157	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*68 - 130*
Dibromofluoromethane (Surr)	*93*		*75 - 123*
4-Bromofluorobenzene (Surr)	*96*		*76 - 123*
Toluene-d8 (Surr)	*103*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-630381/1-A
Matrix: Water
Analysis Batch: 630675

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 630381

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		06/17/22 09:03	06/18/22 00:15	1

Lab Sample ID: LCS 480-630381/2-A
Matrix: Water
Analysis Batch: 630675

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 630381

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10200		ug/L		102	85 - 115

QC Sample Results

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-631192/1
Matrix: Water
Analysis Batch: 631192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			06/22/22 15:50	1

Lab Sample ID: LCS 480-631192/2
Matrix: Water
Analysis Batch: 631192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			358	351.6		mg/L		98	88 - 110		

Lab Sample ID: 480-199035-1 DU
Matrix: Water
Analysis Batch: 631192

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-631322/1
Matrix: Water
Analysis Batch: 631322

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		101	99 - 101		

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

GC/MS VOA

Analysis Batch: 630357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199035-1	Effluent	Total/NA	Water	624.1	
480-199035-2	Influent	Total/NA	Water	624.1	
480-199035-3	Trip Blank	Total/NA	Water	624.1	
MB 480-630357/8	Method Blank	Total/NA	Water	624.1	
LCS 480-630357/6	Lab Control Sample	Total/NA	Water	624.1	
480-199035-2 MS	Influent	Total/NA	Water	624.1	
480-199035-2 MSD	Influent	Total/NA	Water	624.1	

Metals

Prep Batch: 630381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199035-1	Effluent	Total Recoverable	Water	200.7	
480-199035-2	Influent	Total Recoverable	Water	200.7	
MB 480-630381/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-630381/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 630675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199035-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	630381
480-199035-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	630381
MB 480-630381/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	630381
LCS 480-630381/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	630381

General Chemistry

Analysis Batch: 631192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199035-1	Effluent	Total/NA	Water	SM 2540D	
480-199035-2	Influent	Total/NA	Water	SM 2540D	
MB 480-631192/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-631192/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-199035-1 DU	Effluent	Total/NA	Water	SM 2540D	

Analysis Batch: 631322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199035-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-199035-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-631322/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Client Sample ID: Effluent

Lab Sample ID: 480-199035-1

Date Collected: 06/15/22 09:00
Matrix: Water
Date Received: 06/15/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	630357	06/16/22 19:33	ATG	TAL BUF
Total Recoverable	Prep	200.7			630381	06/17/22 09:03	VAK	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	630675	06/18/22 02:21	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	631192	06/22/22 15:50	SAK	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	631322	06/23/22 10:28	DLG	TAL BUF

Client Sample ID: Influent

Lab Sample ID: 480-199035-2

Date Collected: 06/15/22 09:10
Matrix: Water
Date Received: 06/15/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		40	630357	06/16/22 19:57	ATG	TAL BUF
Total Recoverable	Prep	200.7			630381	06/17/22 09:03	VAK	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	630675	06/18/22 02:25	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	631192	06/22/22 15:50	SAK	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	631322	06/23/22 10:29	DLG	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 480-199035-3

Date Collected: 06/15/22 00:00
Matrix: Water
Date Received: 06/15/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	630357	06/16/22 20:21	ATG	TAL BUF

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	o-Chlorotoluene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
200.7	Preparation, Total Recoverable Metals	EPA	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater ", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site - Monthly

Job ID: 480-199035-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-199035-1	Effluent	Water	06/15/22 09:00	06/15/22 10:30
480-199035-2	Influent	Water	06/15/22 09:10	06/15/22 10:30
480-199035-3	Trip Blank	Water	06/15/22 00:00	06/15/22 10:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Colin Hanous, R. Murphy	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-172608-28522.1
Client Contact: Chad Moose	Phone: 716-858-5636	E-Mail: Ryan.VanDette@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: Tullytown Landfill 444 Oxford Valley Road	Due Date Requested:			
City: Morrisville	TAT Requested (days): Standard			
State, Zip: PA, 19067	Compliance Project: Δ Yes Δ No			
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 11231631			
Email: cmoose@wm.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwate	Project #: 48002447			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL M - Hexane
B - NaOH N - None
ecahydrate
ecify)
Other:

480-199035 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	624.1_PREC - 624	2540D - Total Suspended Solids	SM4500_H+ - pH	Total Number of conta	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
Effluent	6/15/22	0900	G	Water			1	3	1	1	6	
Influent	6/15/22	0910	G	Water			1	3	1	1	6	
Trip Blank	6/15/22	—	G	Water				2			2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Drop off

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Colin Hanous	6/15/22 1050				
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6/15/22 1030	Company TAL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 3.4

Ver: 06/08/2021