AECOM Environment

Third Quarter 2022 – July, August, September Operation, Maintenance, and Monitoring Report

CHEM-TROL Site
NYSDEC Site No. 9-15-015
Report.hw915015.2023-01-12.3Q2022OMM

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

Submitted to:
NYSDEC
Region 9 Office
700 Delaware Avenue
Buffalo, NY 14209

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

January 12, 2023

AECOM Project No. 60652207.3

AECOM
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Amherst, NY 14228

716 856 5636 tel
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January 12, 2023

SUBMITTED VIA ELECTRONIC MAIL

Mr. Glenn May, PG
NYSDEC
Region 9 Office
700 Delaware Avenue
Buffalo, NY 14209

RE: S.C. Holdings, Inc., 4818 Lake Avenue, Blasdell, New York 14219
Third Quarter 2022 Operation, Maintenance, and Monitoring Report
Chem-Trol Site, NYSDEC Site No. 9-15-015, Report.hw915015.2023-01-12.3Q2022OMM

Dear Mr. May:

Enclosed please find the Third Quarter 2022 (3Q22 – July, August, September) 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 3Q22:

- 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 3Q22 is as follows:

July 2022

AECOM collected the monthly monitoring samples on July 27, 2022; analytical data were received on August 26, 2022. As presented on Table 1 (July 27, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

August 2022

On August 18, 2022 AECOM visited the site and found that the system was on; however, the totalizer was not moving. The system was shut down to prevent potential pump damage. AECOM returned on August 23, 2022 to perform system tests and troubleshooting; the system was restarted that day. It was determined that measured water levels in the three pumping wells were above the pump intakes and the wells were not running dry.

AECOM collected the monthly monitoring samples on August 29, 2022; analytical data were received on September 13, 2022. As presented on Table 1 (August 29, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

September 2022

AECOM collected the monthly monitoring samples on September 12, 2022; analytical data were received on September 23, 2022. As presented on Table 1 (September 12, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

On September 15, 2022, AECOM performed pressure washing and mechanical cleaning of the air stripper trays.

On October 21, 2022 Matrix Environmental installed a new pump in EW-1 and adjusted the pumping flow for the system. On October 27, 2022, AECOM collected the 3Q22 quarterly groundwater levels, which were delayed from September 2022 pending the installation of the new pump in EW-1 and related adjustments to the pumping rate on the system.

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

July 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: Emily Au Weather/Temperature: Sunny, 77 F
Date: 7/27/2022 Arrival Time: 0930 Departure Time: 1100

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		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**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	278 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	28,538,192 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	184 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	12 Inches H2O

Effluent Flow

Total System Meter Reading	73,452,250 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 0.5 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 (2Q2022) was collected on June 21, 2022.

The air stripper trays were last mechanically cleaned on July 26, 2022.

The monthly samples were collected today, July 27, 2022, by AECOM.

Table 1
July 27, 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*	1,427	1,427	144,000	gpd	NA	NA	NA
pH	7.3	8.1	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
o-Chlorotoluene	3,100	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total	1,200	53	3,000	ug/L	0.00	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.05		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 June 15, 2022 through July 27, 2022.*

Table 2
July 27, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 7/27/2022	units	Prior Report 6/15/2022
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	278	Inches	287
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	180	Inches	170
Flow Meter Reading	28,538,192	gallons	28,538,117
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	184	Inches	188
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	12.0	inches H_2O	17.0
Effluent Flow			
Total System Meter Reading	73,452,250	gallons	73,392,310
Average System Flow Since Prior Report	1,427	gpd	
	59.5	gph	
	1.0	gpm	
Influent o-Chlorotoluene concentration	3,100	ug/L	
Current month mass removal	0.7	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: 480-200137-1
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:
8/26/2022 10:23:11 AM
Joshua Velez, Project Management Assistant I
Joshua.Velez@et.eurofinsus.com

Designee for

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: 480-200137-1

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: 480-200137-1

Job ID: 480-200137-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-200137-1

Comments
No additional comments.

Receipt
The samples were received on 7/27/2022 11:45 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 8.6º C.

GC/MS VOA
Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-200137-2). Elevated reporting limits (RLs) are provided.

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

Metals
Method 200.7 Rev 4.4: The method blank for preparation batch 480-637489 and analytical batch 480-638486 contained total Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 200.7 Rev 4.4: The Total Iron result reported for the following sample do not concur with results previously reported for this site: Effluent (480-200137-1). 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.

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 (480-200137-1) and Influent (480-200137-2).

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: 480-200137-1

Client Sample ID: Effluent — Lab Sample ID: 480-200137-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	52.8		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	20.4	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-200137-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	3100		13		ug/L	40		624.1	Total/NA
Iron	1200		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.3	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	20.4	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-200137-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

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

Job ID: 480-200137-1

Client Sample ID: Effluent

Date Collected: 07/27/22 10:00
Date Received: 07/27/22 11:45

Lab Sample ID: 480-200137-1

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			07/27/22 17:09	1
1,1-Dichloroethane	ND		5.0		ug/L			07/27/22 17:09	1
1,1-Dichloroethene	ND		5.0		ug/L			07/27/22 17:09	1
Benzene	ND		5.0		ug/L			07/27/22 17:09	1
Chlorobenzene	ND		5.0		ug/L			07/27/22 17:09	1
Chloroethane	ND		5.0		ug/L			07/27/22 17:09	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			07/27/22 17:09	1
Toluene	ND		5.0		ug/L			07/27/22 17:09	1
Trichloroethene	ND		5.0		ug/L			07/27/22 17:09	1
o-Chlorotoluene	ND		5.0		ug/L			07/27/22 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*		*07/27/22 17:09*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*07/27/22 17:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*76 - 123*		*07/27/22 17:09*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*07/27/22 17:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**52.8**		50.0		ug/L		08/24/22 09:05	08/24/22 22:57	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			08/01/22 09:43	1
pH	**8.1**	**HF**	0.1		SU			07/28/22 14:39	1
Temperature	**20.4**	**HF**	0.001		Degrees C			07/28/22 14:39	1

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

Job ID: 480-200137-1

Client Sample ID: Influent

Date Collected: 07/27/22 10:25
Date Received: 07/27/22 11:45

Lab Sample ID: 480-200137-2

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			07/27/22 17:33	40
1,1-Dichloroethane	ND		24		ug/L			07/27/22 17:33	40
1,1-Dichloroethene	ND		34		ug/L			07/27/22 17:33	40
Benzene	ND		24		ug/L			07/27/22 17:33	40
Chlorobenzene	ND		19		ug/L			07/27/22 17:33	40
Chloroethane	ND		35		ug/L			07/27/22 17:33	40
cis-1,2-Dichloroethene	ND		23		ug/L			07/27/22 17:33	40
Toluene	ND		18		ug/L			07/27/22 17:33	40
Trichloroethene	ND		24		ug/L			07/27/22 17:33	40
o-Chlorotoluene	**3100**		13		ug/L			07/27/22 17:33	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*68 - 130*		*07/27/22 17:33*	*40*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*07/27/22 17:33*	*40*
4-Bromofluorobenzene (Surr)	*95*		*76 - 123*		*07/27/22 17:33*	*40*
Toluene-d8 (Surr)	*102*		*77 - 120*		*07/27/22 17:33*	*40*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1200**		50.0		ug/L		08/01/22 08:48	08/01/22 20:34	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			08/01/22 09:43	1
pH	**7.3**	**HF**	0.1		SU			07/28/22 14:42	1
Temperature	**20.4**	**HF**	0.001		Degrees C			07/28/22 14:42	1

Client Sample Results

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

Job ID: 480-200137-1

Client Sample ID: Trip Blank

Date Collected: 07/27/22 00:00
Date Received: 07/27/22 11:45

Lab Sample ID: 480-200137-3

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			07/27/22 17:57	1
1,1-Dichloroethane	ND		5.0		ug/L			07/27/22 17:57	1
1,1-Dichloroethene	ND		5.0		ug/L			07/27/22 17:57	1
Benzene	ND		5.0		ug/L			07/27/22 17:57	1
Chlorobenzene	ND		5.0		ug/L			07/27/22 17:57	1
Chloroethane	ND		5.0		ug/L			07/27/22 17:57	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			07/27/22 17:57	1
Toluene	ND		5.0		ug/L			07/27/22 17:57	1
Trichloroethene	ND		5.0		ug/L			07/27/22 17:57	1
o-Chlorotoluene	ND		5.0		ug/L			07/27/22 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*68 - 130*		*07/27/22 17:57*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*07/27/22 17:57*	*1*
4-Bromofluorobenzene (Surr)	*95*		*76 - 123*		*07/27/22 17:57*	*1*
Toluene-d8 (Surr)	*103*		*77 - 120*		*07/27/22 17:57*	*1*

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

Lab Sample ID: MB 480-635063/8
Matrix: Water
Analysis Batch: 635063

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			07/27/22 13:01	1
1,1-Dichloroethane	ND		5.0		ug/L			07/27/22 13:01	1
1,1-Dichloroethene	ND		5.0		ug/L			07/27/22 13:01	1
Benzene	ND		5.0		ug/L			07/27/22 13:01	1
Chlorobenzene	ND		5.0		ug/L			07/27/22 13:01	1
Chloroethane	ND		5.0		ug/L			07/27/22 13:01	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			07/27/22 13:01	1
Toluene	ND		5.0		ug/L			07/27/22 13:01	1
Trichloroethene	ND		5.0		ug/L			07/27/22 13:01	1
o-Chlorotoluene	ND		5.0		ug/L			07/27/22 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*68 - 130*		*07/27/22 13:01*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*07/27/22 13:01*	*1*
4-Bromofluorobenzene (Surr)	*96*		*76 - 123*		*07/27/22 13:01*	*1*
Toluene-d8 (Surr)	*102*		*77 - 120*		*07/27/22 13:01*	*1*

Lab Sample ID: LCS 480-635063/6
Matrix: Water
Analysis Batch: 635063

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	18.9		ug/L		95	52 - 162
1,1-Dichloroethane	20.0	20.2		ug/L		101	59 - 155
1,1-Dichloroethene	20.0	20.2		ug/L		101	1 - 234
Benzene	20.0	20.4		ug/L		102	37 - 151
Chlorobenzene	20.0	19.9		ug/L		99	37 - 160
Chloroethane	20.0	18.2		ug/L		91	14 - 230
Toluene	20.0	20.3		ug/L		102	47 - 150
Trichloroethene	20.0	20.3		ug/L		101	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*68 - 130*
Dibromofluoromethane (Surr)	*93*		*75 - 123*
4-Bromofluorobenzene (Surr)	*94*		*76 - 123*
Toluene-d8 (Surr)	*101*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-635538/1-A
Matrix: Water
Analysis Batch: 635821

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		08/01/22 08:48	08/01/22 20:22	1

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

Lab Sample ID: LCS 480-635538/2-A
Matrix: Water
Analysis Batch: 635821

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	9780		ug/L		98	85 - 115

Lab Sample ID: MB 480-636074/1-A
Matrix: Water
Analysis Batch: 636338

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 636074

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		08/04/22 09:08	08/04/22 19:45	1

Lab Sample ID: LCS 480-636074/2-A
Matrix: Water
Analysis Batch: 636338

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 636074

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	9345		ug/L		93	85 - 115

Lab Sample ID: MB 480-638749/1-A
Matrix: Water
Analysis Batch: 639054

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 638749

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		08/24/22 09:05	08/24/22 22:42	1

Lab Sample ID: LCS 480-638749/2-A
Matrix: Water
Analysis Batch: 639054

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 638749

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	9389		ug/L		94	85 - 115

Lab Sample ID: LCSD 480-638749/3-A
Matrix: Water
Analysis Batch: 639054

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 638749

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	10000	9113		ug/L		91	85 - 115	3	20

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

Lab Sample ID: MB 480-635644/1
Matrix: Water
Analysis Batch: 635644

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			08/01/22 09:43	1

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

Lab Sample ID: LCS 480-635644/2
Matrix: Water
Analysis Batch: 635644

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			351	342.4		mg/L		97	88 - 110		

Lab Sample ID: 480-200137-1 DU
Matrix: Water
Analysis Batch: 635644

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 480-635356/1
Matrix: Water
Analysis Batch: 635356

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		101	99 - 101		

QC Association Summary

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

Job ID: 480-200137-1

GC/MS VOA

Analysis Batch: 635063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200137-1	Effluent	Total/NA	Water	624.1	
480-200137-2	Influent	Total/NA	Water	624.1	
480-200137-3	Trip Blank	Total/NA	Water	624.1	
MB 480-635063/8	Method Blank	Total/NA	Water	624.1	
LCS 480-635063/6	Lab Control Sample	Total/NA	Water	624.1	

Metals

Prep Batch: 635538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200137-2	Influent	Total Recoverable	Water	200.7	
MB 480-635538/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-635538/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 635821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200137-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	635538
MB 480-635538/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	635538
LCS 480-635538/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	635538

Prep Batch: 636074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-636074/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-636074/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 636338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-636074/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	636074
LCS 480-636074/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	636074

Prep Batch: 638749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200137-1	Effluent	Total Recoverable	Water	200.7	
MB 480-638749/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-638749/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 480-638749/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	

Analysis Batch: 639054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200137-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	638749
MB 480-638749/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	638749
LCS 480-638749/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	638749
LCSD 480-638749/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	638749

General Chemistry

Analysis Batch: 635356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200137-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-200137-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-635356/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

QC Association Summary

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

Job ID: 480-200137-1

General Chemistry

Analysis Batch: 635644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200137-1	Effluent	Total/NA	Water	SM 2540D	
480-200137-2	Influent	Total/NA	Water	SM 2540D	
MB 480-635644/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-635644/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-200137-1 DU	Effluent	Total/NA	Water	SM 2540D	

Lab Chronicle

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

Job ID: 480-200137-1

Client Sample ID: Effluent
Date Collected: 07/27/22 10:00
Date Received: 07/27/22 11:45

Lab Sample ID: 480-200137-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	635063	LCH	EET BUF	07/27/22 17:09
Total Recoverable	Prep	200.7			638749	NVK	EET BUF	08/24/22 09:05
Total Recoverable	Analysis	200.7 Rev 4.4		1	639054	LMH	EET BUF	08/24/22 22:57
Total/NA	Analysis	SM 2540D		1	635644	SAK	EET BUF	08/01/22 09:43
Total/NA	Analysis	SM 4500 H+ B		1	635356	ARR	EET BUF	07/28/22 14:39

Client Sample ID: Influent
Date Collected: 07/27/22 10:25
Date Received: 07/27/22 11:45

Lab Sample ID: 480-200137-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		40	635063	LCH	EET BUF	07/27/22 17:33
Total Recoverable	Prep	200.7			635538	NVK	EET BUF	08/01/22 08:48
Total Recoverable	Analysis	200.7 Rev 4.4		1	635821	BMB	EET BUF	08/01/22 20:34
Total/NA	Analysis	SM 2540D		1	635644	SAK	EET BUF	08/01/22 09:43
Total/NA	Analysis	SM 4500 H+ B		1	635356	ARR	EET BUF	07/28/22 14:42

Client Sample ID: Trip Blank
Date Collected: 07/27/22 00:00
Date Received: 07/27/22 11:45

Lab Sample ID: 480-200137-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	635063	LCH	EET BUF	07/27/22 17:57

Laboratory References:
EET 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: 480-200137-1

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: 480-200137-1

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

EET 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: 480-200137-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-200137-1	Effluent	Water	07/27/22 10:00	07/27/22 11:45
480-200137-2	Influent	Water	07/27/22 10:25	07/27/22 11:45
480-200137-3	Trip Blank	Water	07/27/22 00:00	07/27/22 11:45

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

Chain of Custody Record

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Client Information	Sampler: Emily Au	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-173949-28522.1
Client Contact: Chad Moose	Phone: 716-531-3312	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: STD	Analysis Requested	Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, M - Hexane, N - None, O - AsNaO2, P - Na2O4S
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#:		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 co	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
Effluent	7/27/22	1000	G	Water	N	N	1	3	1	1		
Influent	7/27/22	1025	G	Water	N	N	1	3	1	1		
Trip Blank	7/27/22	—	TRIP	Water	N	N		1				

480-200137 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) per contract

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	7/27/22 1145	AECOM	[signature]	7/27/22 1145	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 8.6 #1 ICE

Ver: 06/08/2021

August 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: Emily Au Weather/Temperature: Partly Cloudy, 88 F
Date: 8/29/2022 Arrival Time: 1230 Departure Time: 1500

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		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**	Outfall flowing slowly after system startup
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	270 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	169 Inches
Flow Meter Reading	28,538,192 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	175 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	15.5 Inches H2O

Effluent Flow

Total System Meter Reading	73,454,022 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 off upon arrival. Turned on system. System on at departure.

On August 18, 2022 AECOM visited the site and found that the system was on; however, the totalizer was not moving. Water was bubbling in air stripper but was not flowing in a measurable amount to outfall. The system was shut down to prevent pump damage due to unknown slow pumping. The weather had been recently dry with little precipitation, but it was unknown if that alone was the cause for the lack of pumping in the wells. AECOM returned on August 23, 2022 to perform system tests and troubleshooting. AECOM restarted the system which started at pump rates of approximately 1.3 gpm and measured water levels in the three pumping wells. AECOM compared depths to water to the water level above transducer readings from the building over several hours. The pumping rate was still low but it was determined that the water in the wells were drawn down but still above the pump set depths and that the pumps were not running dry. The system was left running at approximately 1 gpm.

Total system flow was timed at 1.1 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 (2Q2022) was collected on June 21, 2022.

The air stripper trays were last mechanically cleaned on July 26, 2022.

The monthly samples were collected today, August 29, 2022, by AECOM.

Table 1
August 29, 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*	1,427	1,427	144,000	gpd	NA	NA	NA
pH	7.2	7.9	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
o-Chlorotoluene	2,500	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total	254	242	3,000	ug/L	0.00	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.05		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 July 27, 2022 through August 29, 2022.*

Table 2
August 29, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 8/29/2022	units	Prior Report 7/27/2022
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	270	Inches	278
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	169	Inches	180
Flow Meter Reading	28,538,192	gallons	28,538,192
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	175	Inches	184
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	15.5	inches H_2O	12.0
Effluent Flow			
Total System Meter Reading	73,454,022	gallons	73,452,250
Average System Flow Since Prior Report	55	gpd	
	2.3	gph	
	0.0	gpm	
Influent o-Chlorotoluene concentration	2,500	ug/L	
Current month mass removal	0.0	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: 480-201102-1
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:
9/13/2022 9:45:59 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: 480-201102-1

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: 480-201102-1

Job ID: 480-201102-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-201102-1

Comments
No additional comments.

Receipt
The samples were received on 8/29/2022 3:30 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 7.4º C.

GC/MS VOA
Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-201102-2). Elevated reporting limits (RLs) are provided.

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

Metals
Method 200.7 Rev 4.4: The Total Iron result reported for the following sample do not concur with results previously reported for this site: Influent (480-201102-2). 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.

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 sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-201102-1).

Method SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Influent (480-201102-2).

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: 480-201102-1

Client Sample ID: Effluent — Lab Sample ID: 480-201102-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	242		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.9	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	19.2	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-201102-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2500		13		ug/L	40		624.1	Total/NA
Iron	254		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	19.9	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-201102-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

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

Job ID: 480-201102-1

Client Sample ID: Effluent

Date Collected: 08/29/22 14:00
Date Received: 08/29/22 15:30

Lab Sample ID: 480-201102-1

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			08/30/22 14:40	1
1,1-Dichloroethane	ND		5.0		ug/L			08/30/22 14:40	1
1,1-Dichloroethene	ND		5.0		ug/L			08/30/22 14:40	1
Benzene	ND		5.0		ug/L			08/30/22 14:40	1
Chlorobenzene	ND		5.0		ug/L			08/30/22 14:40	1
Chloroethane	ND		5.0		ug/L			08/30/22 14:40	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			08/30/22 14:40	1
Toluene	ND		5.0		ug/L			08/30/22 14:40	1
Trichloroethene	ND		5.0		ug/L			08/30/22 14:40	1
o-Chlorotoluene	ND		5.0		ug/L			08/30/22 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*68 - 130*		*08/30/22 14:40*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*08/30/22 14:40*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*08/30/22 14:40*	*1*
Toluene-d8 (Surr)	*98*		*77 - 120*		*08/30/22 14:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**242**		50.0		ug/L		08/31/22 08:47	08/31/22 22:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			09/02/22 11:01	1
pH	**7.9**	**HF**	0.1		SU			09/01/22 09:37	1
Temperature	**19.2**	**HF**	0.001		Degrees C			09/01/22 09:37	1

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

Job ID: 480-201102-1

Client Sample ID: Influent

Date Collected: 08/29/22 14:20
Date Received: 08/29/22 15:30

Lab Sample ID: 480-201102-2

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			08/30/22 15:03	40
1,1-Dichloroethane	ND		24		ug/L			08/30/22 15:03	40
1,1-Dichloroethene	ND		34		ug/L			08/30/22 15:03	40
Benzene	ND		24		ug/L			08/30/22 15:03	40
Chlorobenzene	ND		19		ug/L			08/30/22 15:03	40
Chloroethane	ND		35		ug/L			08/30/22 15:03	40
cis-1,2-Dichloroethene	ND		23		ug/L			08/30/22 15:03	40
Toluene	ND		18		ug/L			08/30/22 15:03	40
Trichloroethene	ND		24		ug/L			08/30/22 15:03	40
o-Chlorotoluene	**2500**		13		ug/L			08/30/22 15:03	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*68 - 130*		*08/30/22 15:03*	*40*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*08/30/22 15:03*	*40*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*08/30/22 15:03*	*40*
Toluene-d8 (Surr)	*98*		*77 - 120*		*08/30/22 15:03*	*40*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**254**		50.0		ug/L		08/31/22 08:47	08/31/22 22:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			09/02/22 11:01	1
pH	**7.2**	**HF**	0.1		SU			09/06/22 09:26	1
Temperature	**19.9**	**HF**	0.001		Degrees C			09/06/22 09:26	1

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

Job ID: 480-201102-1

Client Sample ID: Trip Blank
Date Collected: 08/29/22 14:05
Date Received: 08/29/22 15:30

Lab Sample ID: 480-201102-3
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			08/30/22 15:27	1
1,1-Dichloroethane	ND		5.0		ug/L			08/30/22 15:27	1
1,1-Dichloroethene	ND		5.0		ug/L			08/30/22 15:27	1
Benzene	ND		5.0		ug/L			08/30/22 15:27	1
Chlorobenzene	ND		5.0		ug/L			08/30/22 15:27	1
Chloroethane	ND		5.0		ug/L			08/30/22 15:27	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			08/30/22 15:27	1
Toluene	ND		5.0		ug/L			08/30/22 15:27	1
Trichloroethene	ND		5.0		ug/L			08/30/22 15:27	1
o-Chlorotoluene	ND		5.0		ug/L			08/30/22 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*68 - 130*		*08/30/22 15:27*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*08/30/22 15:27*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*08/30/22 15:27*	*1*
Toluene-d8 (Surr)	*98*		*77 - 120*		*08/30/22 15:27*	*1*

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

Job ID: 480-201102-1

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

Lab Sample ID: MB 480-639624/8
Matrix: Water
Analysis Batch: 639624

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			08/30/22 13:19	1
1,1-Dichloroethane	ND		5.0		ug/L			08/30/22 13:19	1
1,1-Dichloroethene	ND		5.0		ug/L			08/30/22 13:19	1
Benzene	ND		5.0		ug/L			08/30/22 13:19	1
Chlorobenzene	ND		5.0		ug/L			08/30/22 13:19	1
Chloroethane	ND		5.0		ug/L			08/30/22 13:19	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			08/30/22 13:19	1
Toluene	ND		5.0		ug/L			08/30/22 13:19	1
Trichloroethene	ND		5.0		ug/L			08/30/22 13:19	1
o-Chlorotoluene	ND		5.0		ug/L			08/30/22 13:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*68 - 130*		*08/30/22 13:19*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*08/30/22 13:19*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*08/30/22 13:19*	*1*
Toluene-d8 (Surr)	*99*		*77 - 120*		*08/30/22 13:19*	*1*

Lab Sample ID: LCS 480-639624/6
Matrix: Water
Analysis Batch: 639624

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	23.2		ug/L		116	52 - 162
1,1-Dichloroethane	20.0	20.6		ug/L		103	59 - 155
1,1-Dichloroethene	20.0	21.7		ug/L		109	1 - 234
Benzene	20.0	20.0		ug/L		100	37 - 151
Chlorobenzene	20.0	20.1		ug/L		100	37 - 160
Chloroethane	20.0	21.8		ug/L		109	14 - 230
Toluene	20.0	20.1		ug/L		101	47 - 150
Trichloroethene	20.0	20.5		ug/L		103	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*68 - 130*
Dibromofluoromethane (Surr)	*105*		*75 - 123*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*
Toluene-d8 (Surr)	*100*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-639716/1-A
Matrix: Water
Analysis Batch: 639997

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 639716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		08/31/22 08:47	08/31/22 21:44	1

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

Lab Sample ID: LCS 480-639716/2-A
Matrix: Water
Analysis Batch: 639997

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 639716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			10000	9911		ug/L		99	85 - 115		

Lab Sample ID: 480-201102-1 MS
Matrix: Water
Analysis Batch: 639997

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 639716

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	242		10000	10060		ug/L		98	70 - 130		

Lab Sample ID: 480-201102-1 MSD
Matrix: Water
Analysis Batch: 639997

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 639716

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	242		10000	9940		ug/L		97	70 - 130	1	20

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

Lab Sample ID: MB 480-640183/1
Matrix: Water
Analysis Batch: 640183

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			09/02/22 11:01	1

Lab Sample ID: LCS 480-640183/2
Matrix: Water
Analysis Batch: 640183

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			330	326.4		mg/L		99	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-640007/1
Matrix: Water
Analysis Batch: 640007

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		101	99 - 101		

Lab Sample ID: LCS 480-640354/1
Matrix: Water
Analysis Batch: 640354

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: 480-201102-1

GC/MS VOA

Analysis Batch: 639624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total/NA	Water	624.1	
480-201102-2	Influent	Total/NA	Water	624.1	
480-201102-3	Trip Blank	Total/NA	Water	624.1	
MB 480-639624/8	Method Blank	Total/NA	Water	624.1	
LCS 480-639624/6	Lab Control Sample	Total/NA	Water	624.1	

Metals

Prep Batch: 639716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total Recoverable	Water	200.7	
480-201102-2	Influent	Total Recoverable	Water	200.7	
MB 480-639716/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-639716/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
480-201102-1 MS	Effluent	Total Recoverable	Water	200.7	
480-201102-1 MSD	Effluent	Total Recoverable	Water	200.7	

Analysis Batch: 639997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	639716
480-201102-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	639716
MB 480-639716/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	639716
LCS 480-639716/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	639716
480-201102-1 MS	Effluent	Total Recoverable	Water	200.7 Rev 4.4	639716
480-201102-1 MSD	Effluent	Total Recoverable	Water	200.7 Rev 4.4	639716

General Chemistry

Analysis Batch: 640007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total/NA	Water	SM 4500 H+ B	
LCS 480-640007/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 640183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total/NA	Water	SM 2540D	
480-201102-2	Influent	Total/NA	Water	SM 2540D	
MB 480-640183/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-640183/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 640354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-640354/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

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

Job ID: 480-201102-1

Client Sample ID: Effluent

Lab Sample ID: 480-201102-1

Date Collected: 08/29/22 14:00
Matrix: Water
Date Received: 08/29/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	639624	ATG	EET BUF	08/30/22 14:40
Total Recoverable	Prep	200.7			639716	VAK	EET BUF	08/31/22 08:47
Total Recoverable	Analysis	200.7 Rev 4.4		1	639997	LMH	EET BUF	08/31/22 22:27
Total/NA	Analysis	SM 2540D		1	640183	SAK	EET BUF	09/02/22 11:01
Total/NA	Analysis	SM 4500 H+ B		1	640007	ARR	EET BUF	09/01/22 09:37

Client Sample ID: Influent

Lab Sample ID: 480-201102-2

Date Collected: 08/29/22 14:20
Matrix: Water
Date Received: 08/29/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		40	639624	ATG	EET BUF	08/30/22 15:03
Total Recoverable	Prep	200.7			639716	VAK	EET BUF	08/31/22 08:47
Total Recoverable	Analysis	200.7 Rev 4.4		1	639997	LMH	EET BUF	08/31/22 22:46
Total/NA	Analysis	SM 2540D		1	640183	SAK	EET BUF	09/02/22 11:01
Total/NA	Analysis	SM 4500 H+ B		1	640354	ARR	EET BUF	09/06/22 09:26

Client Sample ID: Trip Blank

Lab Sample ID: 480-201102-3

Date Collected: 08/29/22 14:05
Matrix: Water
Date Received: 08/29/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	639624	ATG	EET BUF	08/30/22 15:27

Laboratory References:

EET 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: 480-201102-1

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: 480-201102-1

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

EET 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: 480-201102-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-201102-1	Effluent	Water	08/29/22 14:00	08/29/22 15:30
480-201102-2	Influent	Water	08/29/22 14:20	08/29/22 15:30
480-201102-3	Trip Blank	Water	08/29/22 14:05	08/29/22 15:30

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: Emily Au	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-174869-28522.1
Client Contact: Chad Moose	Phone: 716-531-3312	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: STD.			
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, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, 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	8/29/22	1400	G	Water			1	3	1	1		
Influent	8/29/22	1420	G	Water			1	3	1	1		
Trip Blank	8/29/22	1405	TRIP	Water				1				

480-201102 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
[signature]	8/29/2022 1530	AECOM	[signature]	8/29/22 1530	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 7.4 #1 ICE

Ver: 06/08/2021

September 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: Emily Au Weather/Temperature: light rain, 74 F
Date: 9/12/2022 Arrival Time: 0930 Departure Time: 1030

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**	Flowing slowly
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	274 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	179 Inches
Flow Meter Reading	28,538,192 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	197 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	20 Inches H2O

Effluent Flow

Total System Meter Reading	73,458,671 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 at arrival.

Total system flow was timed at 1.2 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 (2Q2022) was collected on June 21, 2022.

The air stripper trays were last mechanically cleaned on July 26, 2022.

The monthly samples were collected today, September 12, 2022, by AECOM.

The annual grass mowing has been completed since the last monthly sampling.

The flow through the system has been slow recently. AECOM called subcontractor Matrix Environmental to schedule a site visit and troubleshoot.

Table 1
September 12, 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*	358	358	144,000	gpd	NA	NA	NA
pH	6.9	7.8	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0000	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0000	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
o-Chlorotoluene	2,000	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
Iron - Total	2,820	< 50	3,000	ug/L	< 0.00	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.01		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 August 29, 2022 through September 12, 2022.*

Table 2
September 12, 2022 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 9/12/2022	units	Prior Report 8/29/2022
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	274	Inches	270
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	179	Inches	169
Flow Meter Reading	28,538,192	gallons	28,538,192
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	197	Inches	175
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	15.5	inches H_2O	15.5
Effluent Flow			
Total System Meter Reading	73,458,671	gallons	73,454,022
Average System Flow Since Prior Report	358	gpd	
	14.9	gph	
	0.2	gpm	
Influent o-Chlorotoluene concentration	2,500	ug/L	
Current month mass removal	0.0	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: 480-201517-1
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:
9/23/2022 9:04:47 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: 480-201517-1

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: 480-201517-1

Job ID: 480-201517-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-201517-1

Comments
No additional comments.

Receipt
The samples were received on 9/12/2022 11:00 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 4.6º C.

GC/MS VOA
Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-201517-2). Elevated reporting limits (RLs) are provided.

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

Metals
Method 200.7 Rev 4.4: The total Iron results reported for the following samples do not concur with results previously reported for this site: Effluent (480-201517-1) and Influent (480-201517-2). 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.

General Chemistry
Method 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 (480-201517-1) and Influent (480-201517-2).

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: 480-201517-1

Client Sample ID: Effluent — Lab Sample ID: 480-201517-1

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.8	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	21.2	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-201517-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2000		13		ug/L	40		624.1	Total/NA
Iron	2820		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	21.2	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-201517-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

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

Job ID: 480-201517-1

Client Sample ID: Effluent

Date Collected: 09/12/22 09:40
Date Received: 09/12/22 11:00

Lab Sample ID: 480-201517-1

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			09/12/22 18:50	1
1,1-Dichloroethane	ND		5.0		ug/L			09/12/22 18:50	1
1,1-Dichloroethene	ND		5.0		ug/L			09/12/22 18:50	1
Benzene	ND		5.0		ug/L			09/12/22 18:50	1
Chlorobenzene	ND		5.0		ug/L			09/12/22 18:50	1
Chloroethane	ND		5.0		ug/L			09/12/22 18:50	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/12/22 18:50	1
Toluene	ND		5.0		ug/L			09/12/22 18:50	1
Trichloroethene	ND		5.0		ug/L			09/12/22 18:50	1
o-Chlorotoluene	ND		5.0		ug/L			09/12/22 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*68 - 130*		*09/12/22 18:50*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/12/22 18:50*	*1*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*09/12/22 18:50*	*1*
Toluene-d8 (Surr)	*99*		*77 - 120*		*09/12/22 18:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		09/14/22 08:58	09/14/22 19:16	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			09/16/22 11:05	1
pH	**7.8**	**HF**	0.1		SU			09/14/22 12:00	1
Temperature	**21.2**	**HF**	0.001		Degrees C			09/14/22 12:00	1

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

Job ID: 480-201517-1

Client Sample ID: Influent

Date Collected: 09/12/22 10:05
Date Received: 09/12/22 11:00

Lab Sample ID: 480-201517-2

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			09/12/22 19:14	40
1,1-Dichloroethane	ND		24		ug/L			09/12/22 19:14	40
1,1-Dichloroethene	ND		34		ug/L			09/12/22 19:14	40
Benzene	ND		24		ug/L			09/12/22 19:14	40
Chlorobenzene	ND		19		ug/L			09/12/22 19:14	40
Chloroethane	ND		35		ug/L			09/12/22 19:14	40
cis-1,2-Dichloroethene	ND		23		ug/L			09/12/22 19:14	40
Toluene	ND		18		ug/L			09/12/22 19:14	40
Trichloroethene	ND		24		ug/L			09/12/22 19:14	40
o-Chlorotoluene	**2000**		13		ug/L			09/12/22 19:14	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*68 - 130*		*09/12/22 19:14*	*40*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/12/22 19:14*	*40*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*09/12/22 19:14*	*40*
Toluene-d8 (Surr)	*98*		*77 - 120*		*09/12/22 19:14*	*40*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2820**		50.0		ug/L		09/14/22 08:58	09/14/22 19:20	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			09/16/22 11:05	1
pH	**6.9**	**HF**	0.1		SU			09/14/22 12:00	1
Temperature	**21.2**	**HF**	0.001		Degrees C			09/14/22 12:00	1

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

Job ID: 480-201517-1

Client Sample ID: Trip Blank
Date Collected: 09/12/22 00:00
Date Received: 09/12/22 11:00

Lab Sample ID: 480-201517-3
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			09/12/22 19:39	1
1,1-Dichloroethane	ND		5.0		ug/L			09/12/22 19:39	1
1,1-Dichloroethene	ND		5.0		ug/L			09/12/22 19:39	1
Benzene	ND		5.0		ug/L			09/12/22 19:39	1
Chlorobenzene	ND		5.0		ug/L			09/12/22 19:39	1
Chloroethane	ND		5.0		ug/L			09/12/22 19:39	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/12/22 19:39	1
Toluene	ND		5.0		ug/L			09/12/22 19:39	1
Trichloroethene	ND		5.0		ug/L			09/12/22 19:39	1
o-Chlorotoluene	ND		5.0		ug/L			09/12/22 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*68 - 130*		*09/12/22 19:39*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/12/22 19:39*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*09/12/22 19:39*	*1*
Toluene-d8 (Surr)	*99*		*77 - 120*		*09/12/22 19:39*	*1*

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

Lab Sample ID: MB 480-641042/8
Matrix: Water
Analysis Batch: 641042

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			09/12/22 16:52	1
1,1-Dichloroethane	ND		5.0		ug/L			09/12/22 16:52	1
1,1-Dichloroethene	ND		5.0		ug/L			09/12/22 16:52	1
Benzene	ND		5.0		ug/L			09/12/22 16:52	1
Chlorobenzene	ND		5.0		ug/L			09/12/22 16:52	1
Chloroethane	ND		5.0		ug/L			09/12/22 16:52	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/12/22 16:52	1
Toluene	ND		5.0		ug/L			09/12/22 16:52	1
Trichloroethene	ND		5.0		ug/L			09/12/22 16:52	1
o-Chlorotoluene	ND		5.0		ug/L			09/12/22 16:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*68 - 130*		*09/12/22 16:52*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/12/22 16:52*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*09/12/22 16:52*	*1*
Toluene-d8 (Surr)	*98*		*77 - 120*		*09/12/22 16:52*	*1*

Lab Sample ID: LCS 480-641042/6
Matrix: Water
Analysis Batch: 641042

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	22.4		ug/L		112	52 - 162
1,1-Dichloroethane	20.0	20.8		ug/L		104	59 - 155
1,1-Dichloroethene	20.0	20.6		ug/L		103	1 - 234
Benzene	20.0	20.0		ug/L		100	37 - 151
Chlorobenzene	20.0	19.7		ug/L		98	37 - 160
Chloroethane	20.0	21.8		ug/L		109	14 - 230
Toluene	20.0	20.1		ug/L		100	47 - 150
Trichloroethene	20.0	20.7		ug/L		104	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*68 - 130*
Dibromofluoromethane (Surr)	*107*		*75 - 123*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*
Toluene-d8 (Surr)	*98*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-641276/1-A
Matrix: Water
Analysis Batch: 641541

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 641276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		09/14/22 08:58	09/14/22 18:53	1

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

Lab Sample ID: LCS 480-641276/2-A
Matrix: Water
Analysis Batch: 641541

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 641276

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			10000	10340		ug/L		103	85 - 115		

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

Lab Sample ID: MB 480-641739/1
Matrix: Water
Analysis Batch: 641739

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			09/16/22 11:05	1

Lab Sample ID: LCS 480-641739/2
Matrix: Water
Analysis Batch: 641739

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			317	312.0		mg/L		98	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-641384/1
Matrix: Water
Analysis Batch: 641384

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		101	99 - 101		

QC Association Summary

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

Job ID: 480-201517-1

GC/MS VOA

Analysis Batch: 641042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201517-1	Effluent	Total/NA	Water	624.1	
480-201517-2	Influent	Total/NA	Water	624.1	
480-201517-3	Trip Blank	Total/NA	Water	624.1	
MB 480-641042/8	Method Blank	Total/NA	Water	624.1	
LCS 480-641042/6	Lab Control Sample	Total/NA	Water	624.1	

Metals

Prep Batch: 641276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201517-1	Effluent	Total Recoverable	Water	200.7	
480-201517-2	Influent	Total Recoverable	Water	200.7	
MB 480-641276/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-641276/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 641541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201517-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	641276
480-201517-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	641276
MB 480-641276/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	641276
LCS 480-641276/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	641276

General Chemistry

Analysis Batch: 641384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201517-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-201517-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-641384/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 641739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201517-1	Effluent	Total/NA	Water	SM 2540D	
480-201517-2	Influent	Total/NA	Water	SM 2540D	
MB 480-641739/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-641739/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

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

Job ID: 480-201517-1

Client Sample ID: Effluent

Lab Sample ID: 480-201517-1

Date Collected: 09/12/22 09:40
Matrix: Water
Date Received: 09/12/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	641042	ATG	EET BUF	09/12/22 18:50
Total Recoverable	Prep	200.7			641276	VAK	EET BUF	09/14/22 08:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	641541	LMH	EET BUF	09/14/22 19:16
Total/NA	Analysis	SM 2540D		1	641739	SAK	EET BUF	09/16/22 11:05
Total/NA	Analysis	SM 4500 H+ B		1	641384	ARR	EET BUF	09/14/22 12:00

Client Sample ID: Influent

Lab Sample ID: 480-201517-2

Date Collected: 09/12/22 10:05
Matrix: Water
Date Received: 09/12/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		40	641042	ATG	EET BUF	09/12/22 19:14
Total Recoverable	Prep	200.7			641276	VAK	EET BUF	09/14/22 08:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	641541	LMH	EET BUF	09/14/22 19:20
Total/NA	Analysis	SM 2540D		1	641739	SAK	EET BUF	09/16/22 11:05
Total/NA	Analysis	SM 4500 H+ B		1	641384	ARR	EET BUF	09/14/22 12:00

Client Sample ID: Trip Blank

Lab Sample ID: 480-201517-3

Date Collected: 09/12/22 00:00
Matrix: Water
Date Received: 09/12/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	641042	ATG	EET BUF	09/12/22 19:39

Laboratory References:

EET 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: 480-201517-1

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: 480-201517-1

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

EET 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: 480-201517-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-201517-1	Effluent	Water	09/12/22 09:40	09/12/22 11:00
480-201517-2	Influent	Water	09/12/22 10:05	09/12/22 11:00
480-201517-3	Trip Blank	Water	09/12/22 00:00	09/12/22 11:00

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: Emily Au	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-176190-28522.1
Client Contact: Chad Moose	Phone: 716-531-3312	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):			
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, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, 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	9/12/22	940	G	Water	N	N	1	3	1	1		
Influent	9/12/22	1005	G	Water	N	N	1	3	1	1		
Trip Blank	9/12/22	—	TRIP	Water	N	N		1				

480-201517 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	Emily Au	9/12/22 1100	AECOM			
2						
3					9-12-22 1100	TAS

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.6 #1

Ver: 04/08/2021